

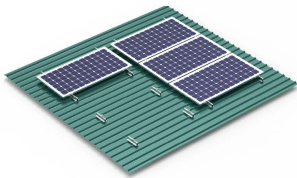
SOLAR MOUNTING SOLUTIONS

ROOF

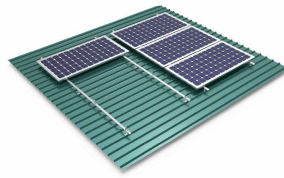
www.structurametal.in

PRODUCTS GUIDE

With mounting systems, the two priority consideration points are ease of installation and quality. For pitched roof mounting, there's an added emphasis on flexibility due to the diverse range of roof types, each having its own specific mounting requirements. That's why our product range for pitched roofs is well-planned and comprehensive, offering the following basic systems that caters to most roof requirements in India. With our solutions, you can rest assured that they are field-tested and best in class.



MONO RAIL SYSTEM



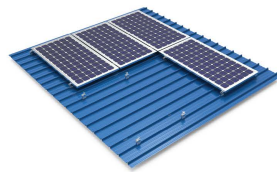
LONG RAIL SYSTEM



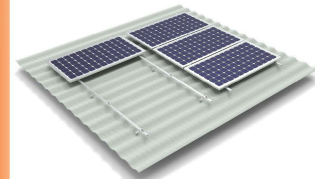
TRAPEZOIDAL RAIL SYSTEM



TILTED MOUNT SYSTEM



SEAM CLAMP SYSTEM



HANGER BOLT SYSTEM

PRODUCT PHILOSOPHY

Our roof mounting systems are designed with your needs in mind. With a focus on Quality, our expertly crafted systems utilize premium materials and undergo rigorous testing to ensure optimal performance and longevity. We take pride in offering Value, making solar energy accessible with competitive pricing and easy installation, providing a cost-effective investment.

QUALITY:

1. Premium Materials
2. Rigorous Testing
3. Expert Craftsmanship

AFFORDABILITY

1. Competitive Pricing
2. Fast Easy Installation
3. Long-Term Warranties



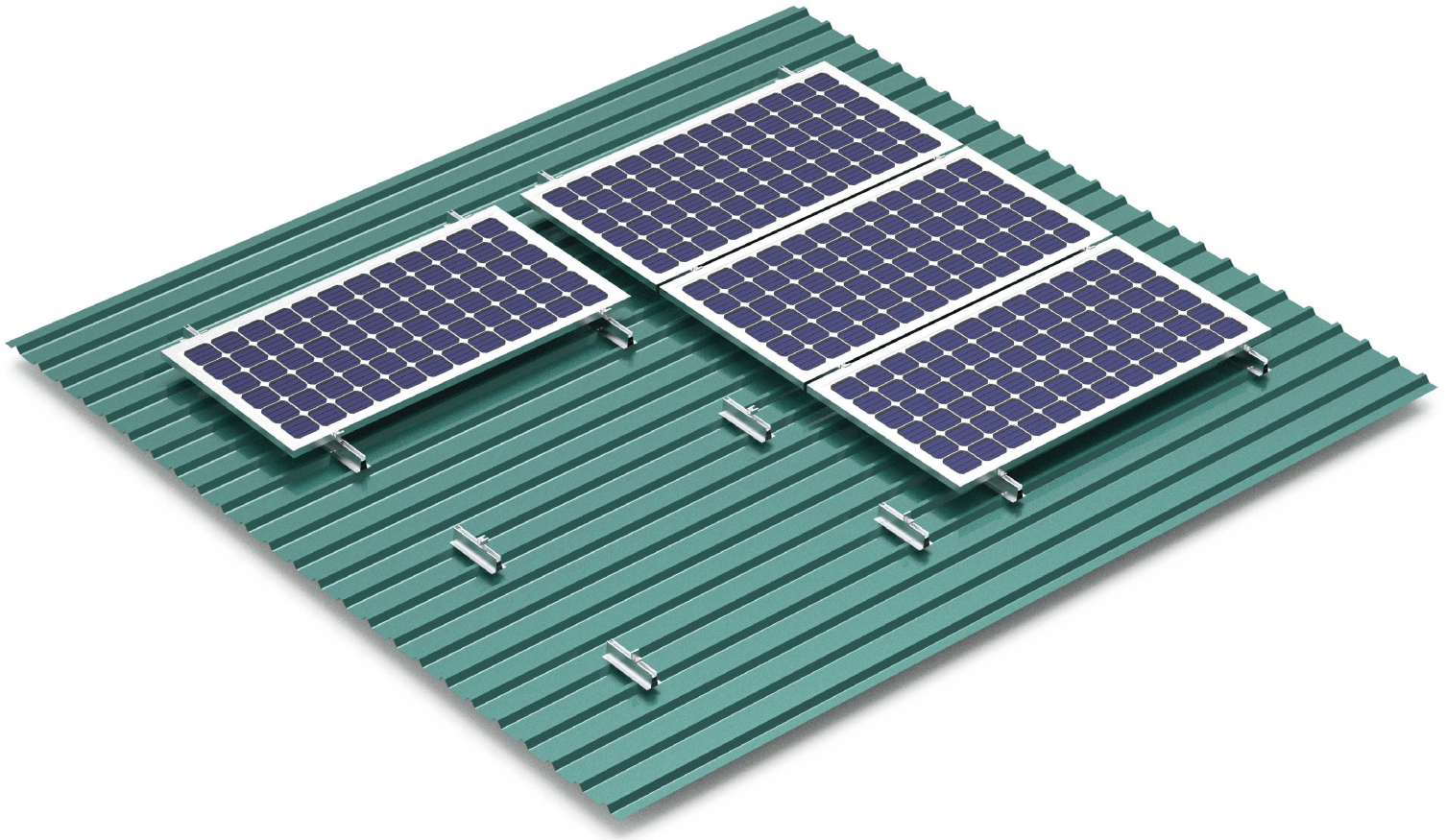
SUSTAINABILITY:

1. Sustainable Materials & Approach
2. Lifecycle Consideration
3. Energy Efficiency

MONO RAIL SYSTEM



Discover the convenience of solar mounting with our range of mono rail solutions. Mono rails are the most preferred system for trapezoidal and corrugated sheet metal, owing to their hassle-free installation process, without the need for time-consuming fixing in the roof substructure. Our range can comfortably be installed on pitched roofs ranging from 5 to 75°. Rails are available in customized lengths to accommodate various load and insulation requirements.

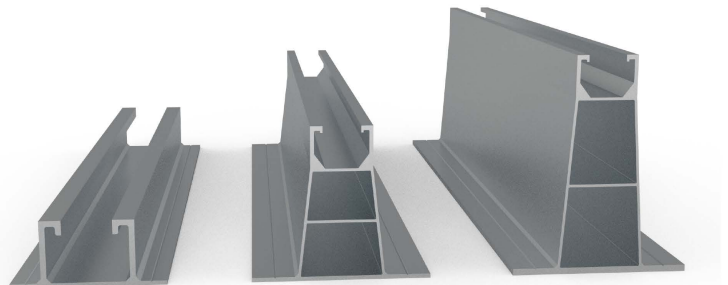


Highlights:

- Optimum load distribution on trapezoidal sheet
- Fewer components - quick & easy installation
- Compatible with all PV module
- Efficient space utilization

General Guidelines:

- Suitable for sheet thickness $\geq 0.4\text{mm}$ (Steel)
 $\geq 0.5\text{mm}$ (Aluminium)
- Suitable crest length $\geq 22\text{mm}$
 $\leq 300\text{mm}$ (customizable)
- Flush area surrounding the bore hole: $\geq 20\text{mm}$
- Use EPDM for leakage & electrostatic prevention

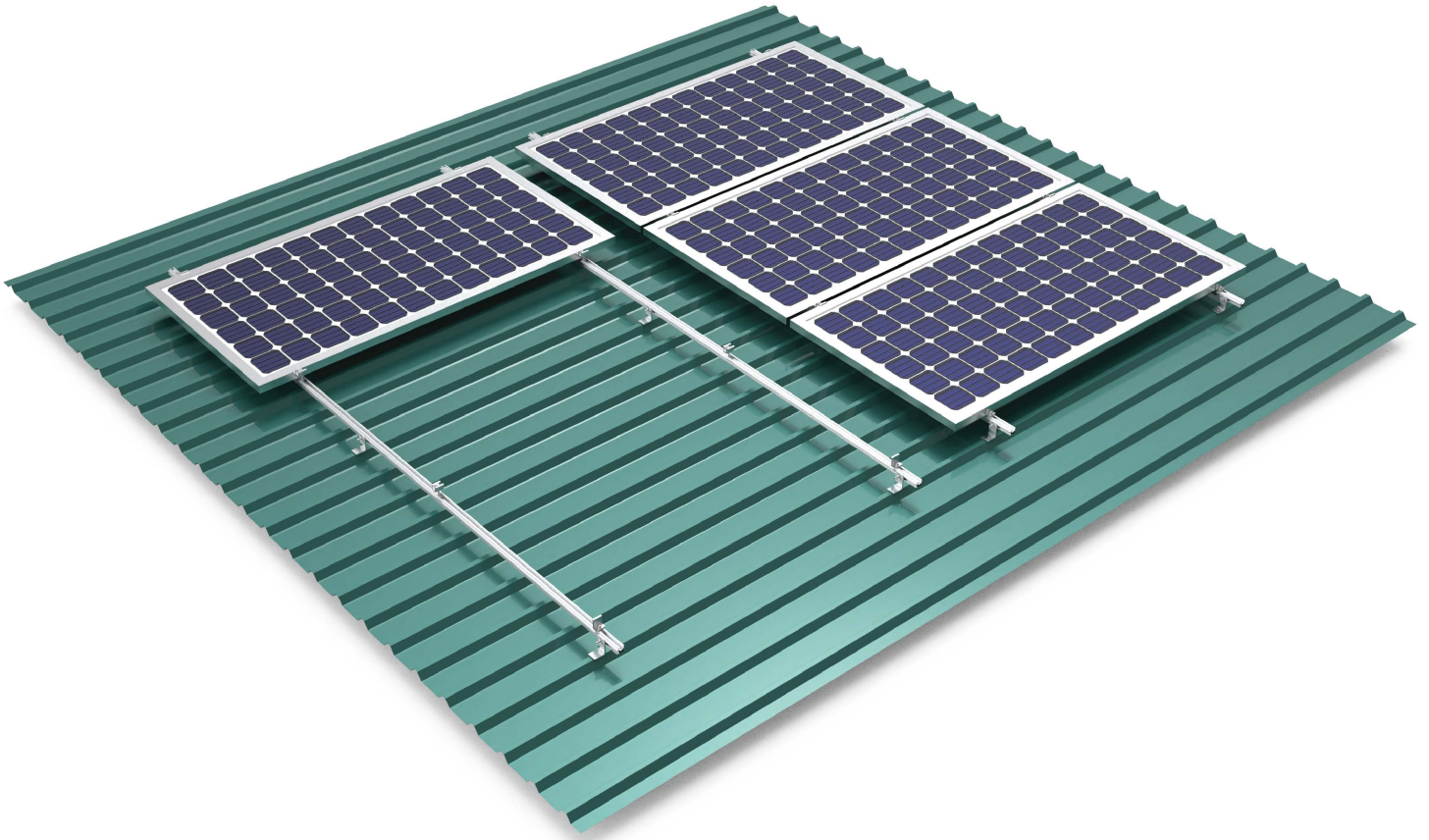


| | |
|---|--|
| Mono Rail Dimensions: Height: 30, 70 & 100 mm Length: Customizable | Raw Material Used: Aluminium 6063-T6 SS 304 |
| Available in Anodized/Non-Anodized finishes | |

LONG RAIL SYSTEM



Introducing our highly versatile roof mounting system, engineered to seamlessly function on any metal roof type or pitch. Our Long Rail mounting system is designed for greater spans between supports, thereby minimizing roof penetrations, minimizing components required, reducing installation time, and optimizing overall costs.

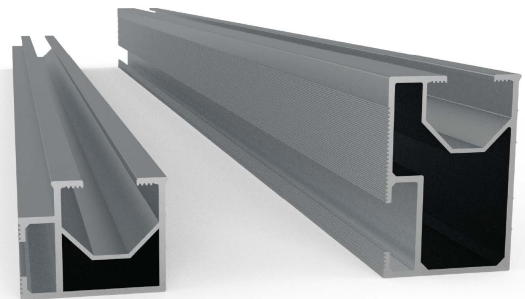


Highlights:

- Engineered for maximum weight to strength ratio
- Lightweight, Easy to handle & install
- Optimal span-to-cost ratio - minimize penetration
- Suitable for all roof types and applications
- Compatible with all PV module

General Guidelines:

- Suitable for sheet thickness $\geq 0.45\text{mm}$ (Steel)
 $\geq 0.55\text{mm}$ (Aluminium)
- Avoid stepping/climb-assisting on rail spans
- Min mounting distance from end/rail-joint : 50mm
- Thermal separation after 18 m recommended.



Long Rail Dimensions:

Height: 30 & 50 mm
Length: Customizable

Raw Material Used:

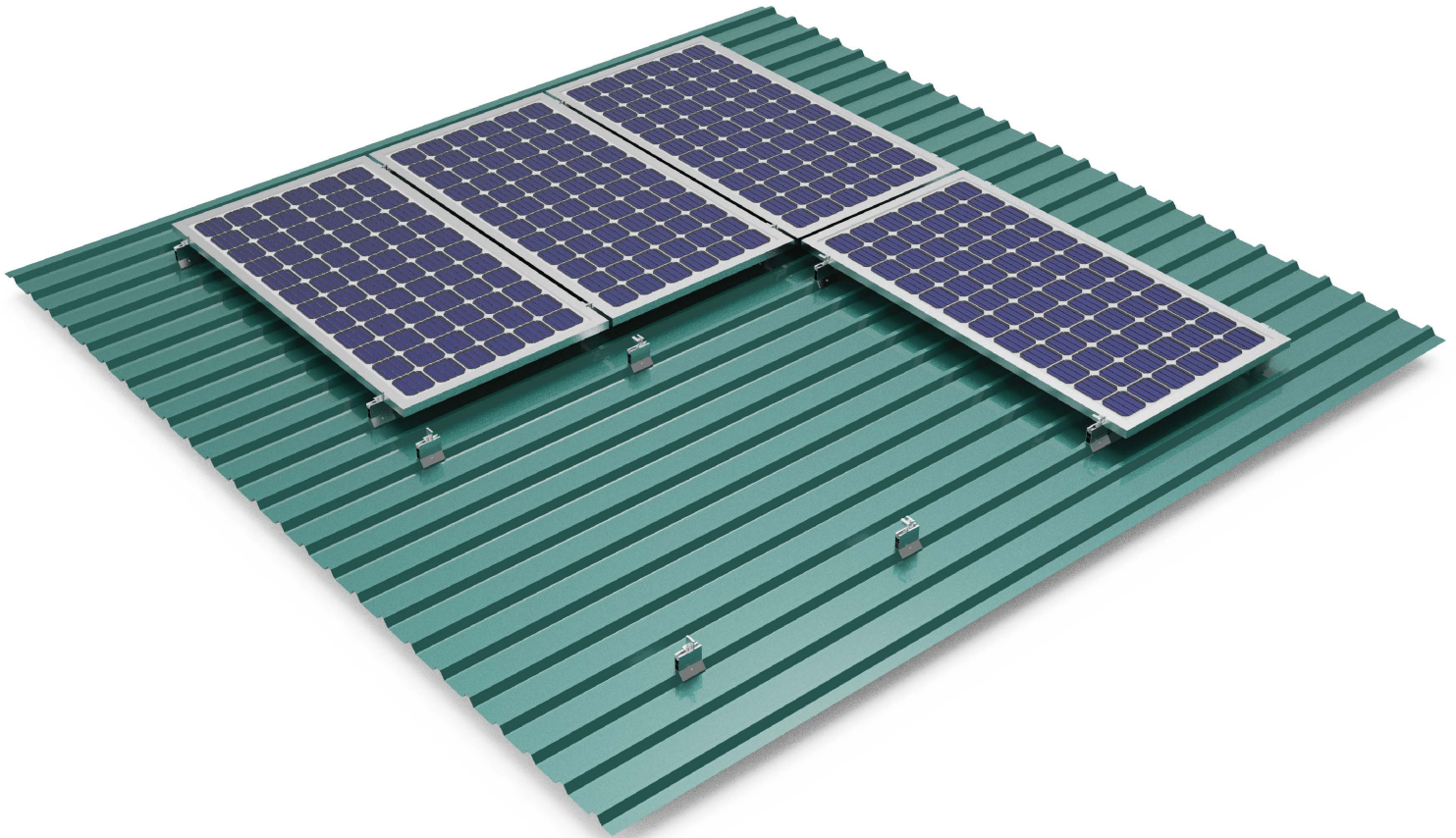
Aluminium 6063 T6
SS 304

Available in Anodized/Non-Anodized finishes

TRAPEZOIDAL MINI-RAIL SYSTEM



This robust solution is the perfect answer to your trapezoidal sheet mounting needs. The unique clamping on the crown mechanism effectively converts pull-out forces into shear forces, granting it exceptional clamping strength compared to top-down attachments, making it highly resistant against wind uplifts. Additionally, the side clamping feature ensures superior thread engagement and stripping torque capacity, further enhancing the system's strength and stability. We are in the process of developing an even more optimised version for enhanced usability and convenience.



Highlights:

- 5x more pull-out capacity than top-down joints
- No swarf generation, minimal sheet damage
- Optimum load distribution on trapezoidal sheet
- Fewer components - quick & easy installation
- Efficient space utilization

General Guidelines:

- Suitable for sheet thickness $\geq 0.45\text{mm}$ (Steel)
 $\geq 0.55\text{mm}$ (Aluminium)
- Suitable crown angle $\geq 75^\circ$
 $\leq 85^\circ$
- Flush area surrounding the bore hole: $\geq 20\text{mm}$
- Use EPDM for leakage & electrostatic prevention



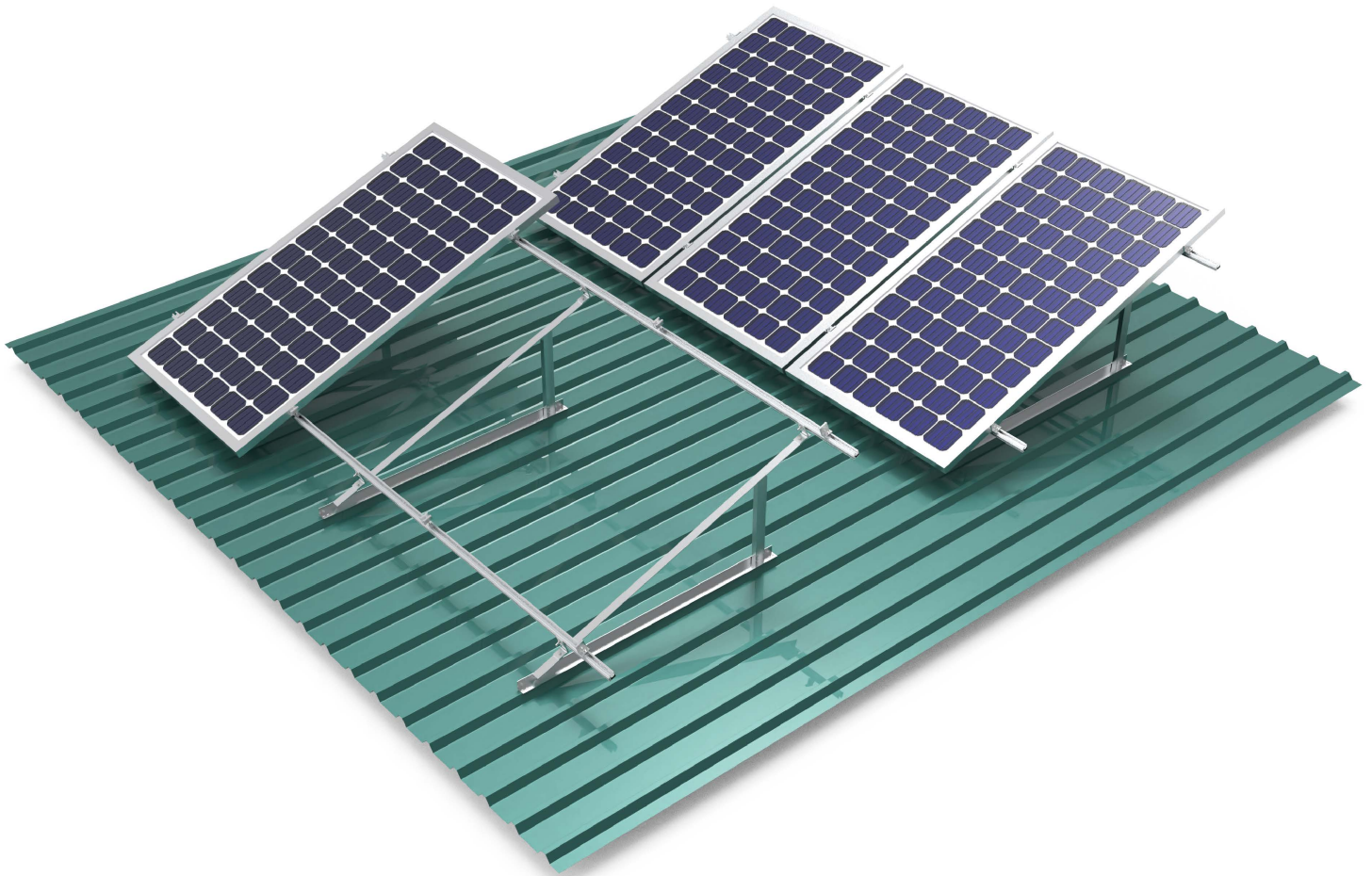
Adjustable Clamp*

| | |
|---|--|
| Mini Rail Dimensions: Height: 70 mm (crest) Length: 100 mm | Raw Material Used: Aluminium 6063 T6 SS 304 |
| Available in Anodized/Non-Anodized finishes | |

TILTED MOUNT SYSTEM



Our tilted mounting solution addresses the common challenge of economic viability on roofs not originally designed for solar systems. By angling the panels, our system captures more sunlight throughout the day, boosting productivity and maximizing ROI. Say goodbye to limitations and embrace the full potential of solar energy on your roof.



Highlights

- Tilt it to your need - customizable angle
- Improved rear ventilation & easy cleaning
- Built to last - durable & reliable
- Lightweight, Easy to handle & install
- Optimum load distribution on sheet
- Compatible with all PV module

General Guidelines:

- Suitable for sheet thickness $\geq 0.4\text{mm}$ (Steel)
 $\geq 0.5\text{mm}$ (Aluminium)
- System tilt angle $\geq 5^\circ$ & $\leq 25^\circ$
- Designed wind speed limit - 80kmph



Channel Dimensions:

L Profile: 38x38x2.5
C Profile: 50C25x2.5

Raw Material Used:

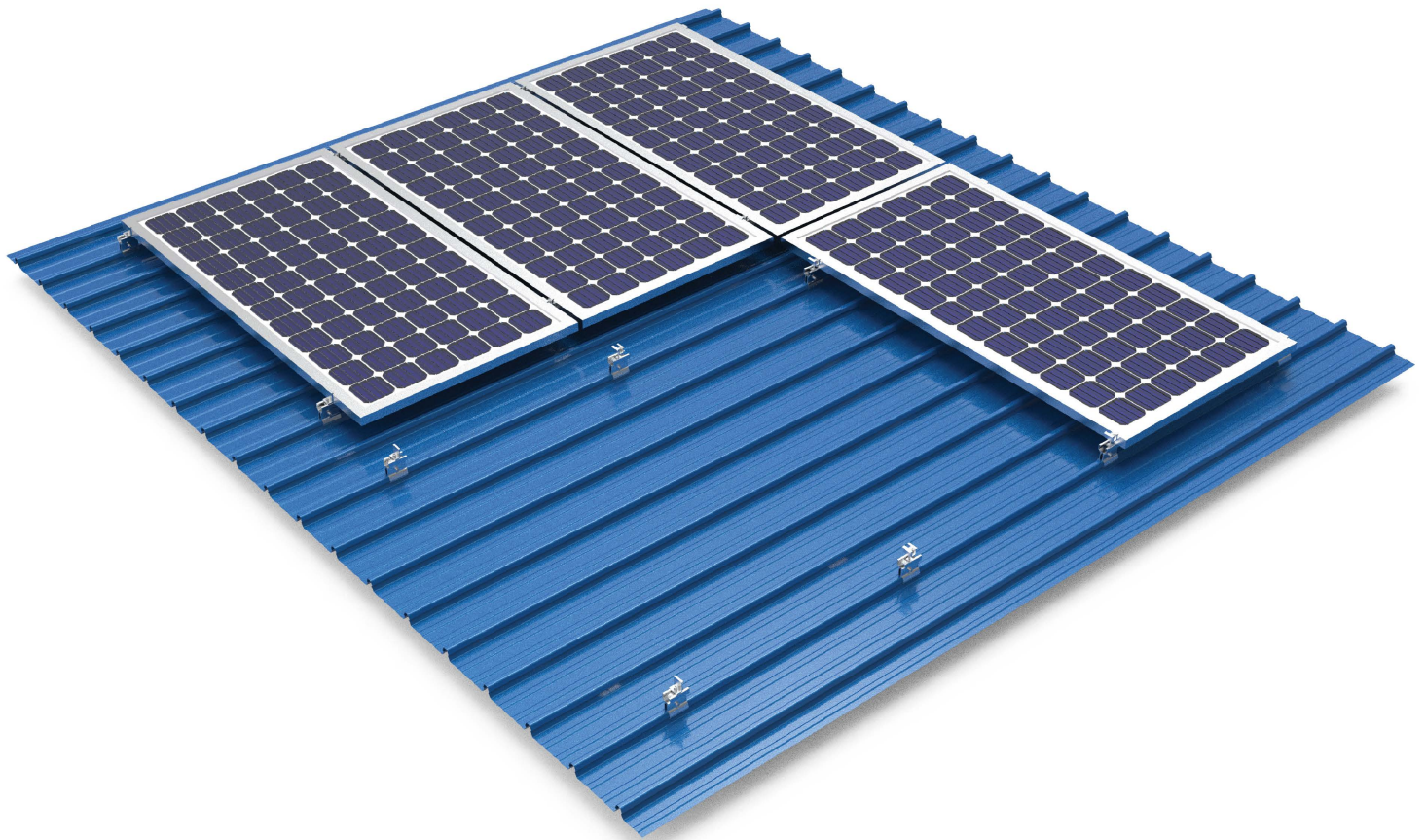
Aluminium 6063 T6
SS 304

Available in Anodized/Non-Anodized finishes

SEAM CLAMP SYSTEM



Unlock the potential of your seam roof with our Universal KlipLok Clamp – an ideal solution crafted for the most common roofs in India. Specifically designed for KlipLok 700 and 400 series, our non-penetrative seam clamp system ensures a sturdy hold and strong pullout capacity. Embrace solar energy confidently with our trusted and versatile solution.

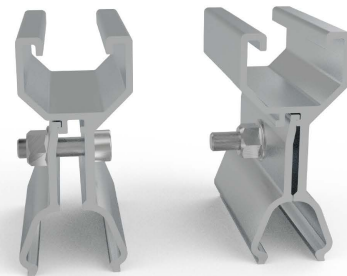


Highlights

- Universal clamp for KlipLok 700 & 400 series
- No swarf generation, minimal sheet damage
- Optimum centric load distribution
- Fewer components - quick & easy installation
- Efficient space utilization
- Compatible with all PV module.

General Guidelines:

- Recommended roof pitch: $\leq 20^\circ$
- Ensure min. 50mm rail-end & module spacing
- Thermal separation after 10 m recommended
- Designed wind speed limit - 120kmph



Mounting Pos 1

Mounting Pos 2

Clamp Dimensions:

Height: 90 mm
Length: 80 mm

Raw Material Used:

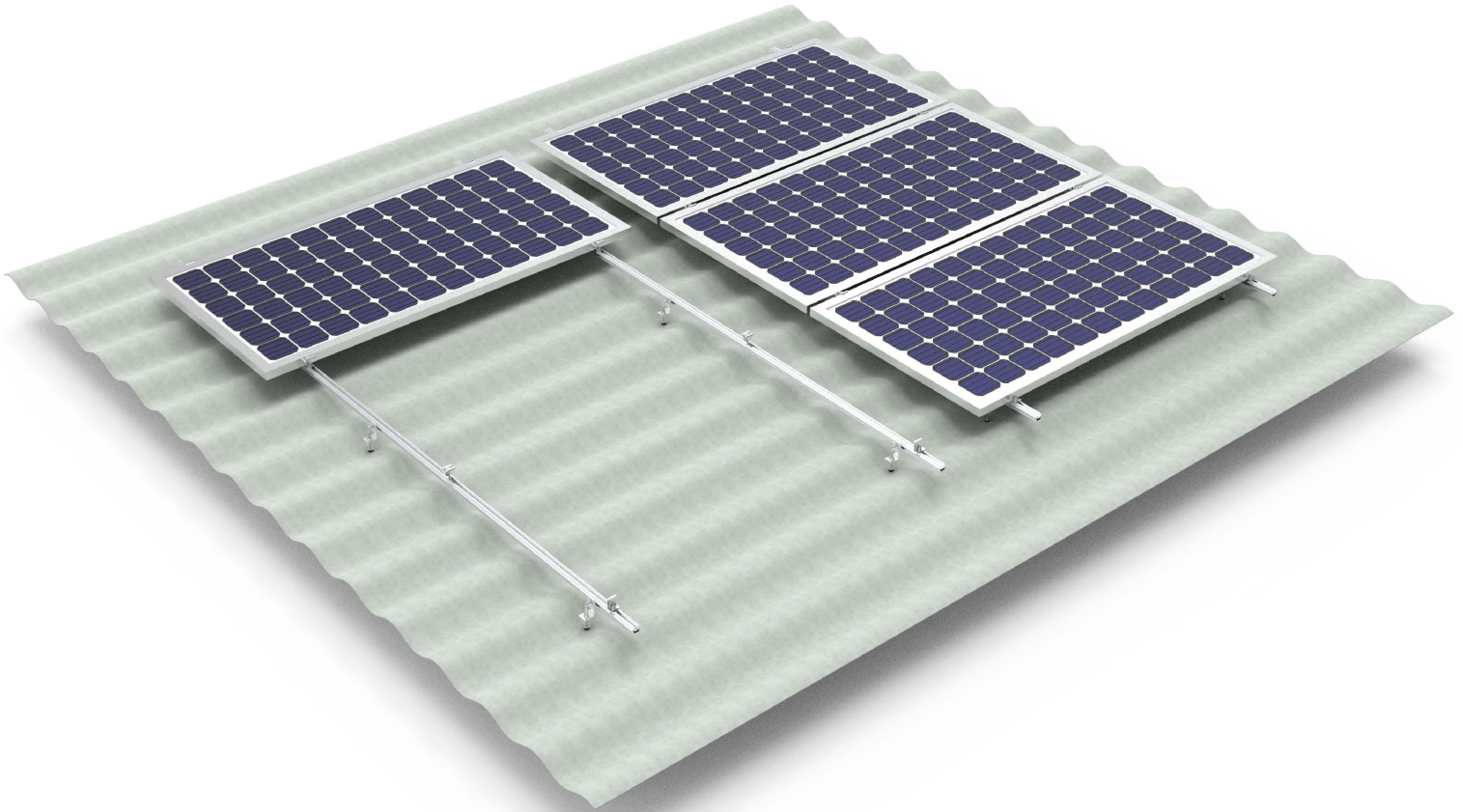
Aluminium 6063 T6
SS 304

Available in Anodized/Non-Anodized finishes

HANGER BOLT SYSTEM



Experience the ease of solar panel installation on various pitched roofs with our all-in-one Hanger Bolt Mounting System. This simple yet effective solution comprises just four components, making it perfect for most roof mount requirements. The hanger bolt comes pre-assembled, and the flexible adapter effortlessly accommodates roof irregularities up to 10 degrees. Our versatile system is suitable for EPDM and bitumen roofs, asbestos tiled roofs, corrugated roofs, and steel roofs. Simplify your solar journey with our efficient Hanger Bolt Mounting System.

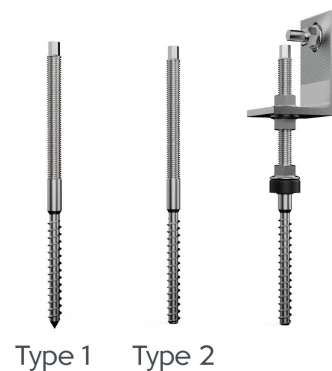


Highlights

- Compensates roof irregularities (up to 10 degrees)
- Preassembled hanger bolt for easy installation
- Hanger bolt available in 2 types - wood & metal mount
- Fewer components - quick & easy installation
- Efficient space utilization

General Guidelines:

- Suitable for sheet thickness $\geq 0.45\text{mm}$ (Steel)
 $\geq 0.55\text{mm}$ (Aluminium)
- Suitable roof pitch $\geq 10^\circ$
 $\leq 70^\circ$
- Selection of hanger bolts depends on roof material, structure, thickness, pitch, and expected loads



| | |
|--|--|
| Hanger Bolt Dimensions: Type 1: M10 x L(150-250) Type 2: M10 x L(150-250) | Raw Material Used: Aluminium 6063 T6 SS 304 |
| Rails available in Anodized/Non-Anodized finishes | |

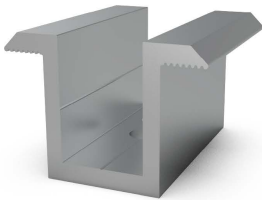
ACCESSORIES



Your solar investment is as solid as its weakest link. Don't jeopardize your investment with sub-par choices for mounting systems and accessories – the risk to your investment is real. Explore our extensive range of premium components and accessories, curated to ensure reliability and performance. Choose Structura for a secure solar future.

Structura manufactures mounting components and accessories in-house or source from genuine & reliable vendors after strict quality checks and incisive scrutiny.

Mid Clamp



Aluminium 6063-T6
Compatible with all PV modules

End Clamp



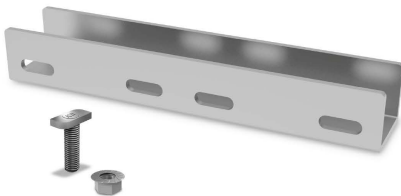
Aluminium 6063-T6
Sizes Available - 30 to 45 mm

L Clamp



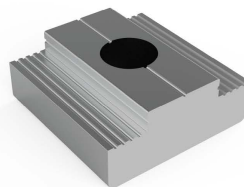
Aluminium 6063-T6
L85 x W50 x T5 mm

Rail Connector



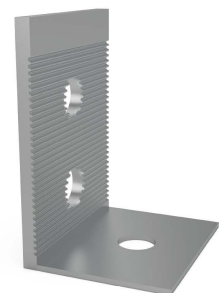
Aluminium 6063-T6
Compatible with all rails

Rail Nut



Aluminium 6063-T6
2 standard sizes: 20 & 28mm

L Brace Plate



Aluminium & GI options
Size & thickness customizable

ACCESSORIES



Allen Key Bolt



T - Bolt



Hex Bolt



Self Driving Screw



Rivets



Adhesive Glue



Spring Washers



Flange Nut



EPDM Tape



Discover our mounting system-specific accessories kit, available without any minimum requirements. Product certification provided upon request.

Our accessories and components are regularly updated; actual products may differ from images.



 **structūra**
**BUILDING THE
FUTURE**

www.structurametal.in

STRUCTURA METAL PRIVATE LIMITED

Off: G No. 132, Karodi Naka
Aurangabad, Maharashtra. 431136
Ph: +91-8005225348