

Trapezoid Metallic Roof Solution

Technical Sheet



Clamping solution for Trapezoidal Metal Roofs

GIPL clamp based solution for Trapezoidal metal sheet rooftops is among the best & innovative products to mount solar PV modules.

The modules can be mounted quickly and safely directly on to the roof membrane using self-tapping fasteners. This clamping solution will help reduce your project capital expenditure by improving the stability with lower material usage. Fewer clamps will help in reducing transport costs and warehouse space too. The complete substructure for 1 Kwp of PV capacity can fit into a shoe box.

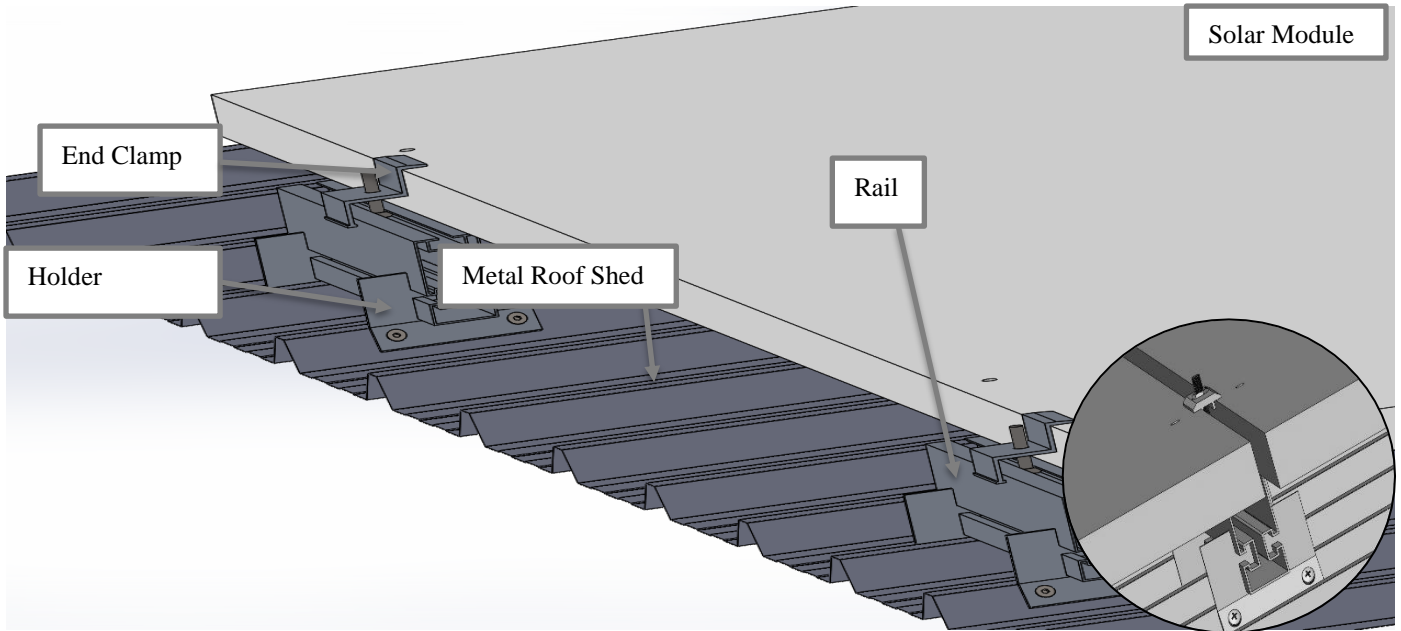
For roofs, which do not allow for the direct mounting of modules, the clamp for sheet metal can be used in combination with the rails.

Advantages of the GIPL's Clamp

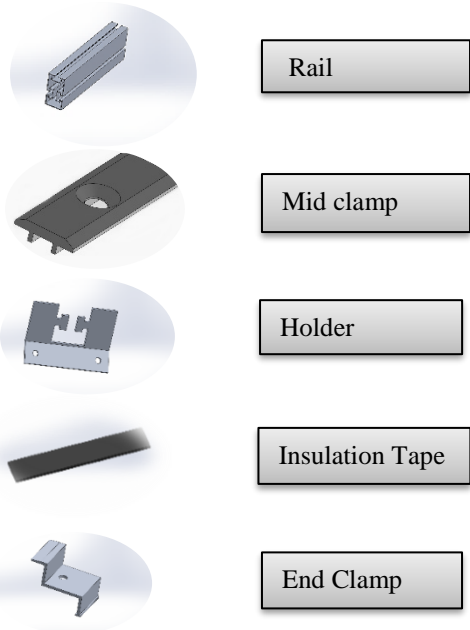
- Helps in quick PV installation on the site
- Fastening the modules directly on to the metal roof
- Minimal roof penetration – low risk of leakage
- Adjustable for all framed modules
- Wide clamp style ensures the distributed application of force
- Manufactured from weatherproof aluminium and stainless steel
- Proven load bearing capacity
- Lower logistics costs due to use of few components and compact construction without lengthy items



Technical Layout



Key Components



Application: Trapezoidal sheet Roof (Industrial Shed)

Fastening: Self-Tapping screws / Rivets

Roof pitch: Flushed with Roof

Module type: 60/72 cells of modules

Module orientation: Portrait/Landscape

Advantages:

- Wind Speed – Upto 240 Km/hr.
- Height compensation- 80 mm in the rail zone
- For all common Metal roof pitches

Technical Specifications	
Description	Specification
TILT ANGLE	Flushed with Roof
ORIENTATION OF PANEL	Portrait/Landscape
WIND SPEED	240 KM/HR
MATERIAL	Aluminium 6063 T6
SECTIONS USED	Aluminium RAIL 80 mm Height, Mid Clamp, End Clamp and SS fasteners
WEIGHT OF STRUCTURE	1KG /Module
STANDARDS	IS8147, IS875-1987, AL-6063-T6, Fasteners-SS304,

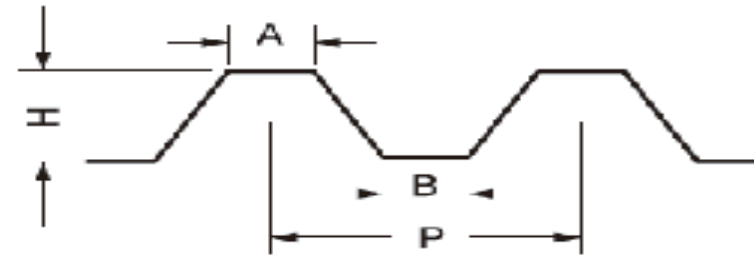
CHIKO PV MODULE MOUNTING STRUCTURES

Product Presentation on available models with REDINGTON

Check Points

- Mid Clamps and End Clamps are supplied for 40MM PV Panel Frame Thickness, If your panel frame thickness is different, please revert back for suitable solution.
- Please check suitability of Clamp/Mount based on your metal sheet roof.

Points to be considered: 1)

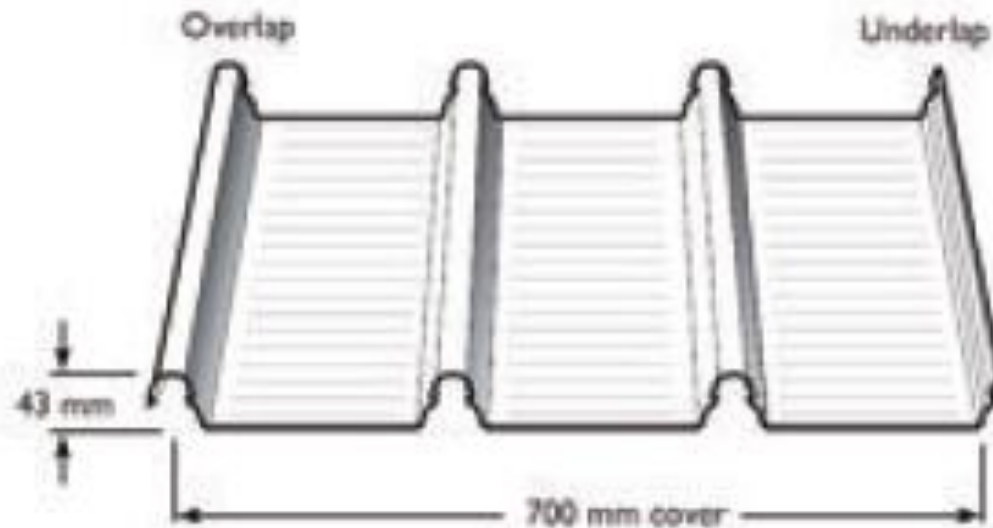


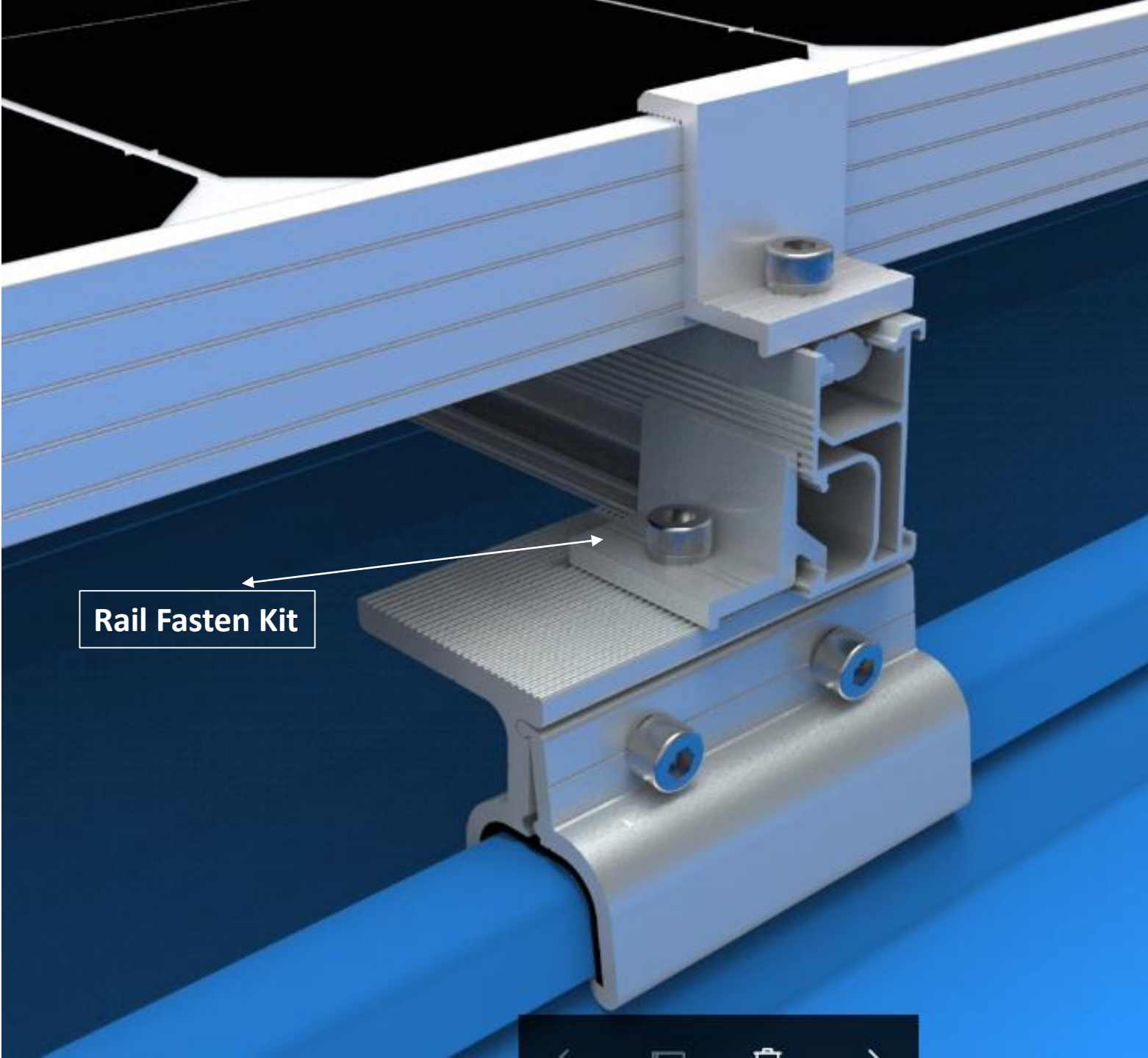
2) Purlin to Purlin distance to suit your module dimension

3) Support Structure of Metal Sheet Roof should take weight of Panels and Mounts

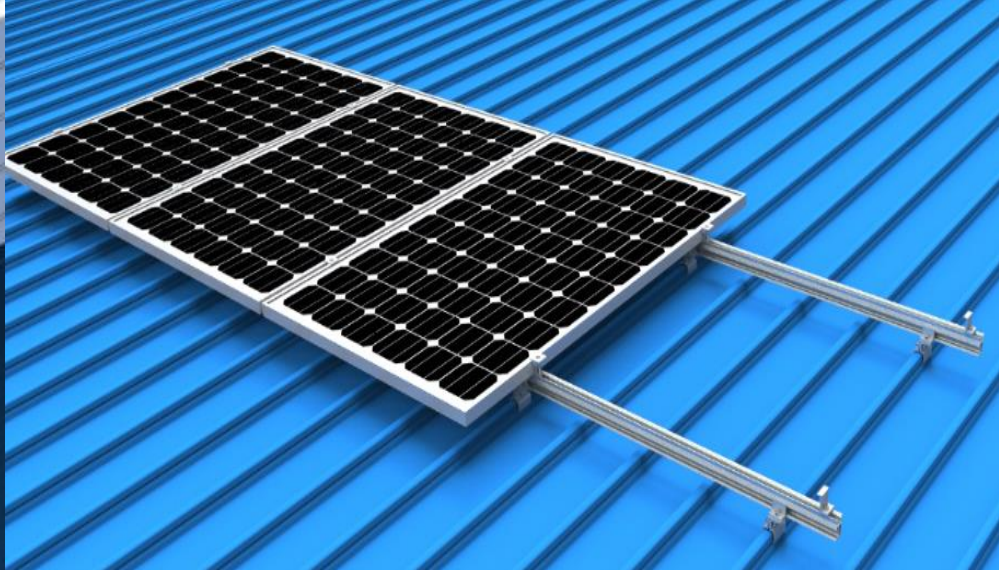
CHIKO 700 CLAMP- CK-FTH-TC700-3N

- Designed for LYSAGHT KILP-LOK 700 Metal Sheet Roof
- Al6005-T5 High Class Aluminum
- Integrated EPDM Rubber for Waterproof
- Suitable with metal sheds with Rib: 43mm, cover 700mm.





Rail Fasten Kit



4200MM Rail



Rail Splice Kit



40MM MID CLAMP



40MM END CLAMP



Scope of Supply (MOQ)

Description	BOQ	Modules/Package
CHIKO Solar Standard Rail 7R 4200 mm	8	For 16 Modules in Portrait (Approx 5.2 KW)
CHIKO Solar Standard 7R Rail Splice Kit, small Rail Splice Kit	6	
CHIKO Solar Mid Clamp Kit 40mm-4MM	24	
CHIKO Solar End Clamp Kit 40mm-4MM	16	
CHIKO TIN ROOF AL CLAMP 700	40	
CHIKO Solar Rail Fasten Kit	40	

ADJUSTABLE TILT MOUNT

- Designed to increase tilt angle of solar modules on metal roofs
- Al6005-T5 High Class Aluminum
- Adjustable Tilt angles: (10 to 15 Deg.) and (15 to 30 Deg.)
- Integrated EPDM Rubber for Waterproof
- Suitable for:



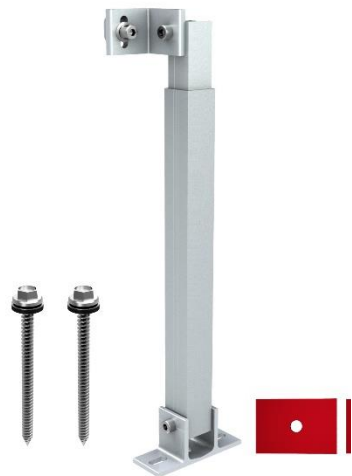
Rail Splice Kit



FRONT LEG



BACK LEG



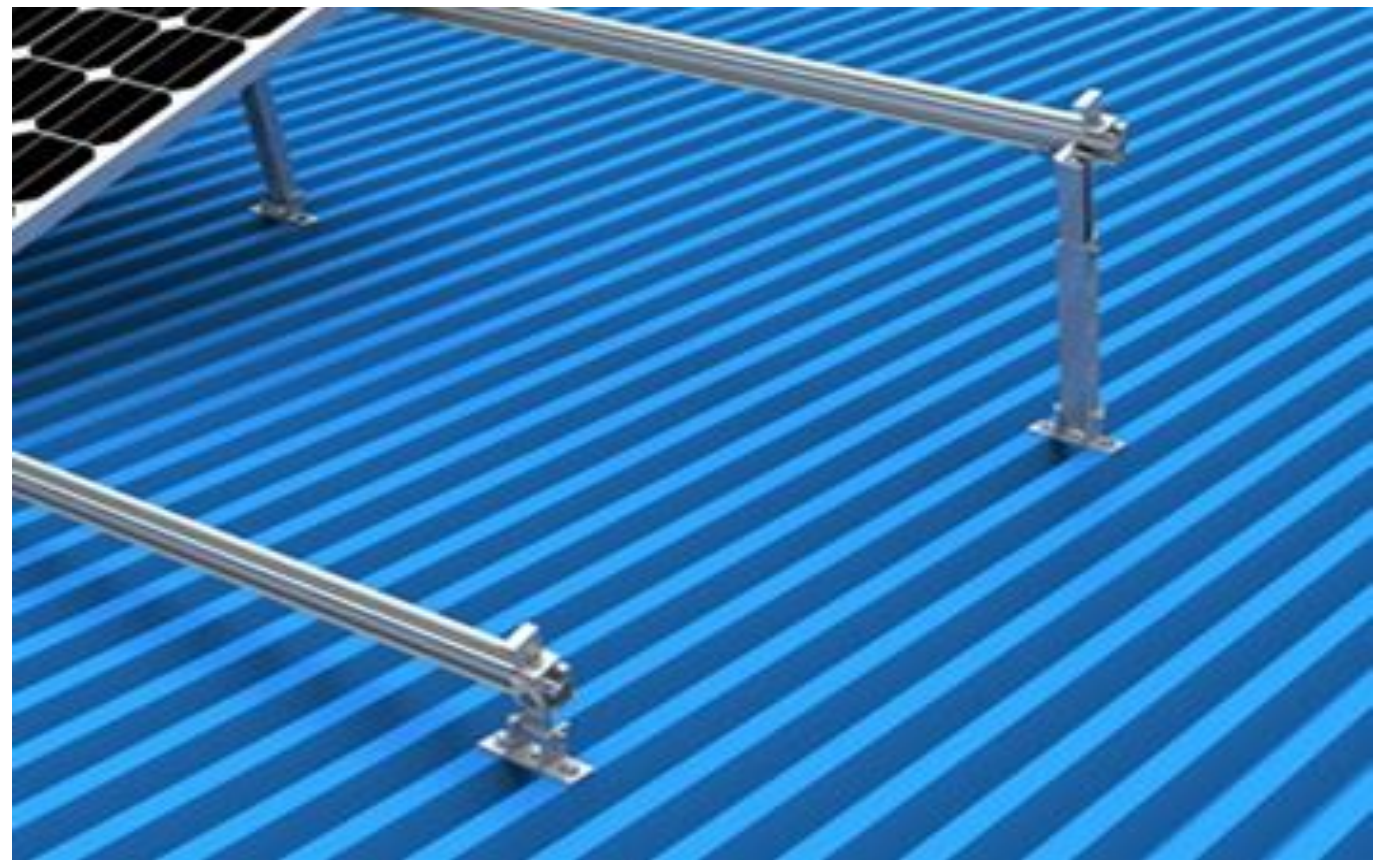
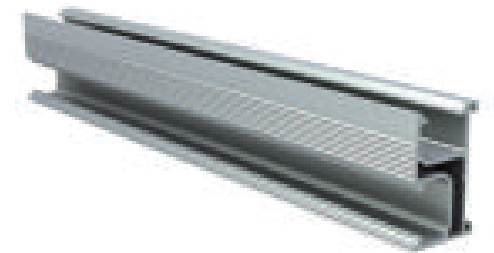
40MM MID CLAMP



40MM END CLAMP



4200MM Rail



SCOPE OF SUPPLY (MOQ)

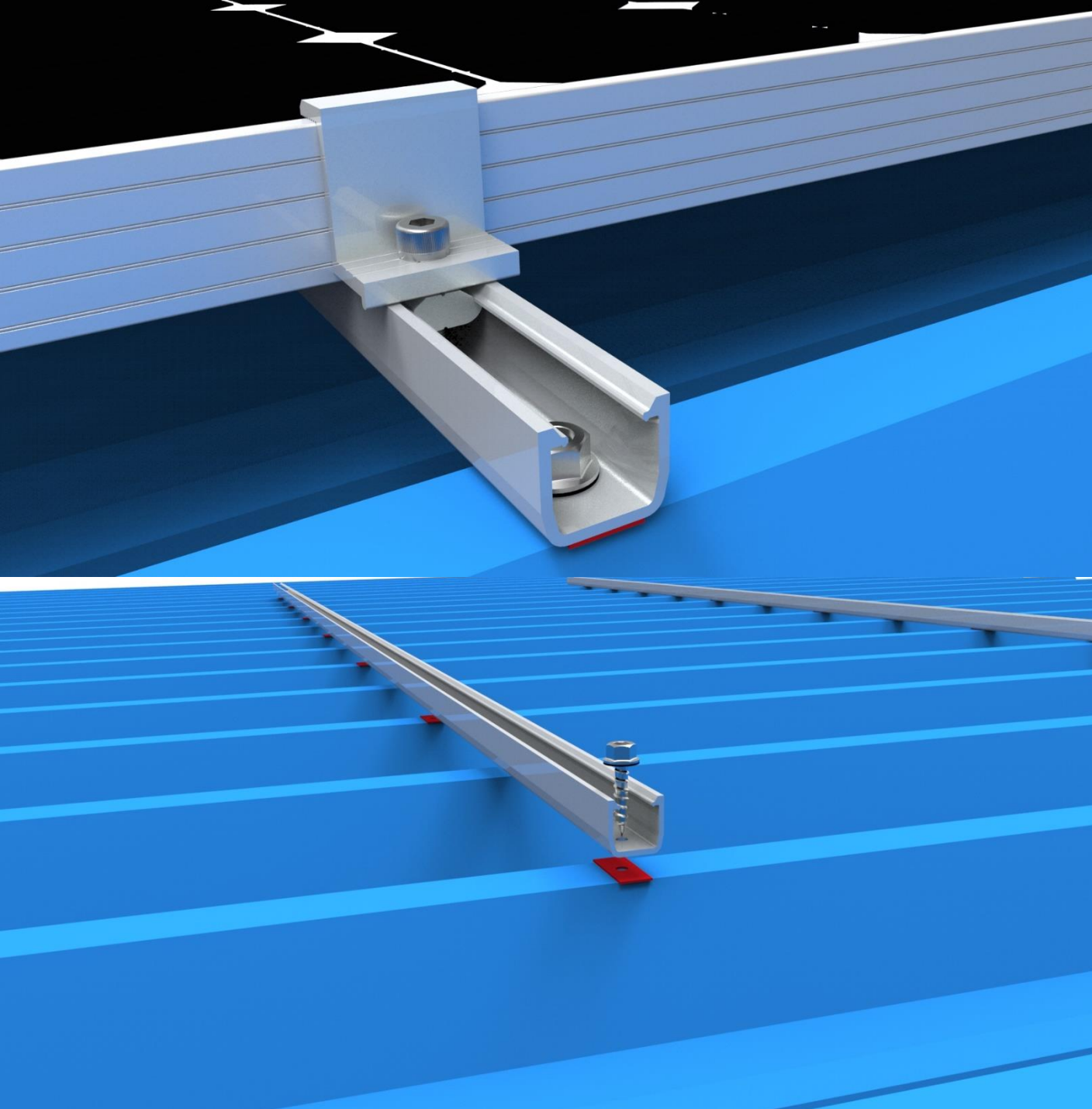
Description	BOQ	Modules/Package
CHIKO Solar Standard Rail 7R 4200 mm	48	For 96 Modules in Portrait (Approx. 31KW)
CHIKO Solar Standard 7R Rail Splice Kit, small Rail Splice Kit	36	
CHIKO Solar Mid Clamp Kit 40mm-4MM	144	
CHIKO Solar End Clamp Kit 40mm-4MM	96	
CHIKO Solar Adjustable Al Front Leg	50	
CHIKO Solar Adjustable Back Leg (10-15 Deg. or 15-30 Deg.)	50	

MINI RAIL MOUNT

- 4200 MM Standard Rail, can also be cut to required size on site
- Al6005-T5 High Class Aluminum
- Integrated EPDM Rubber for Waterproof
- Suitable for:

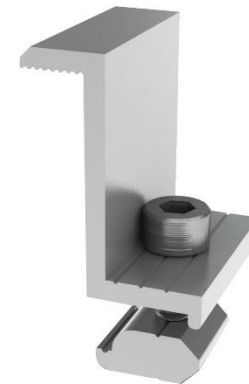


Scope of Supply		
Description	BOQ	Modules /Package
CHIKO Solar Aluminum 022 rail 4200MM	8	For 16 Modules in Portrait (Approx 5.2 KW)
CHIKO Solar Mid Clamp Kit 40mm-4MM	24	
CHIKO Solar End Clamp Kit 40mm-4MM	16	



40MM END CLAMP

40MM MID CLAMP



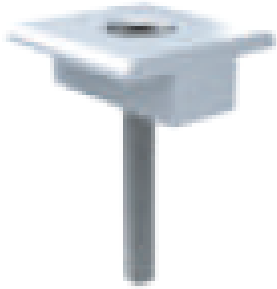
BALLAST MOUNT- I

- Material: Aluminum
- Ideal for Commercial Flat Roofs
- Tilt Angle: 10, 15, 20, 30 Deg.
- Max Wind Load: 60m/s
- Module Orientation: Landscape
- Designed to provide durability and flexibility.
- Ballast Weight: Approx. 2 times the module weight
- Ballast weights not in scope of supply

40MM END CLAMP



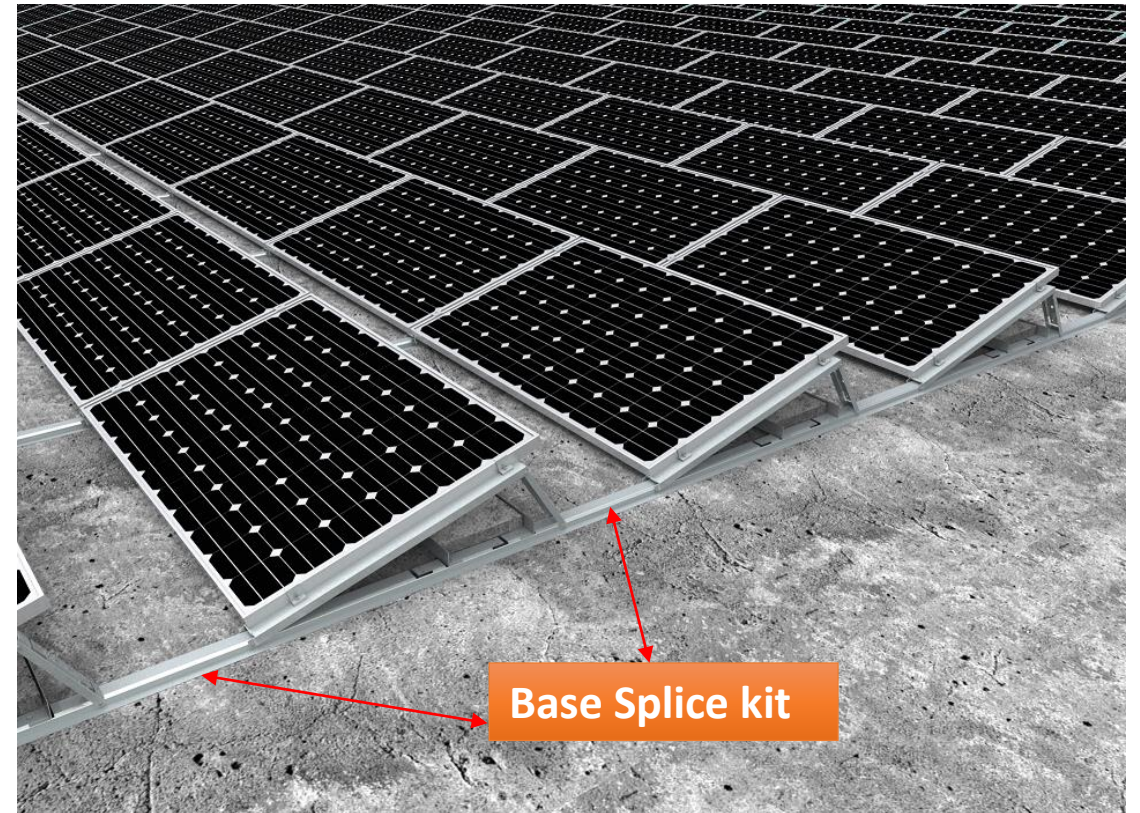
40MM MID CLAMP



Ballast Support (4Mtrs) & Support Splice Kit



Ballast Racking



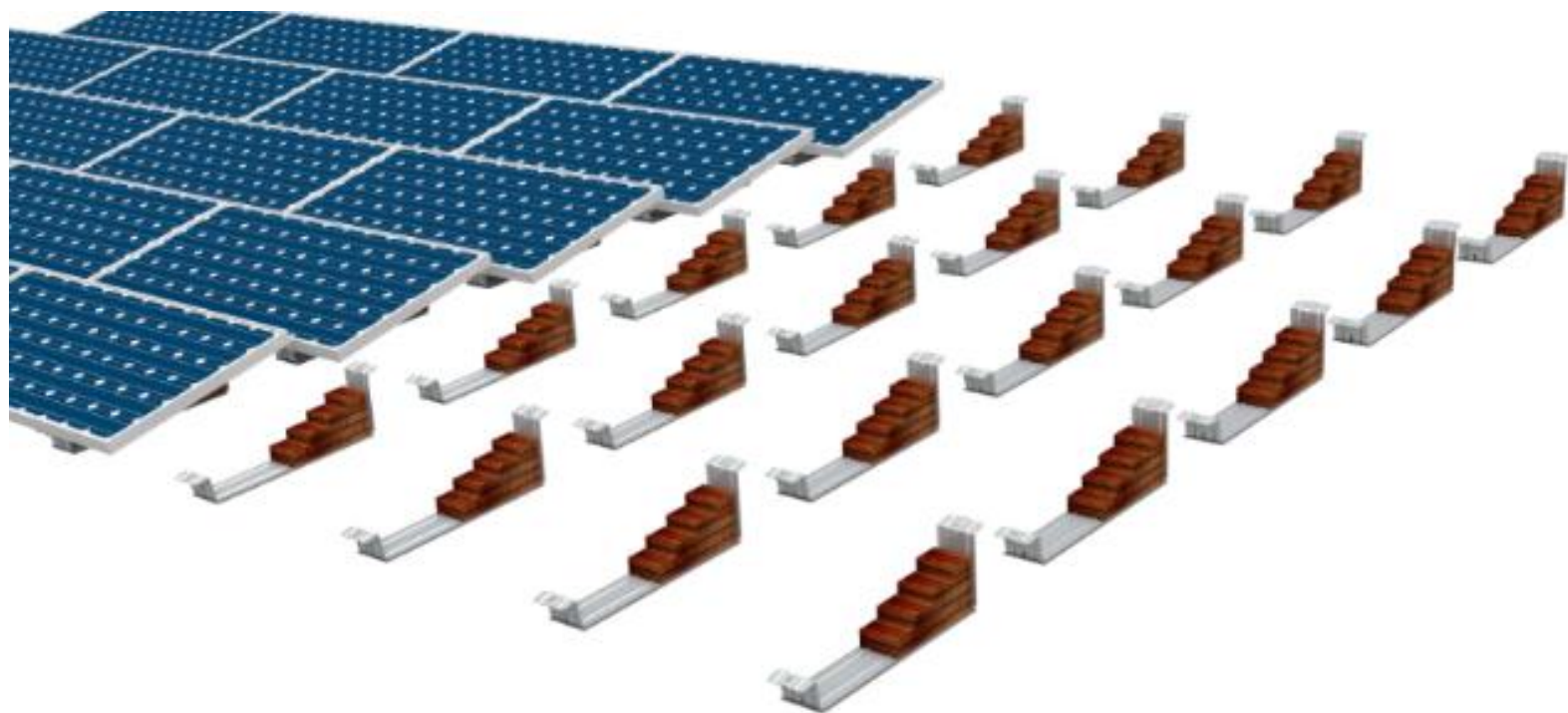
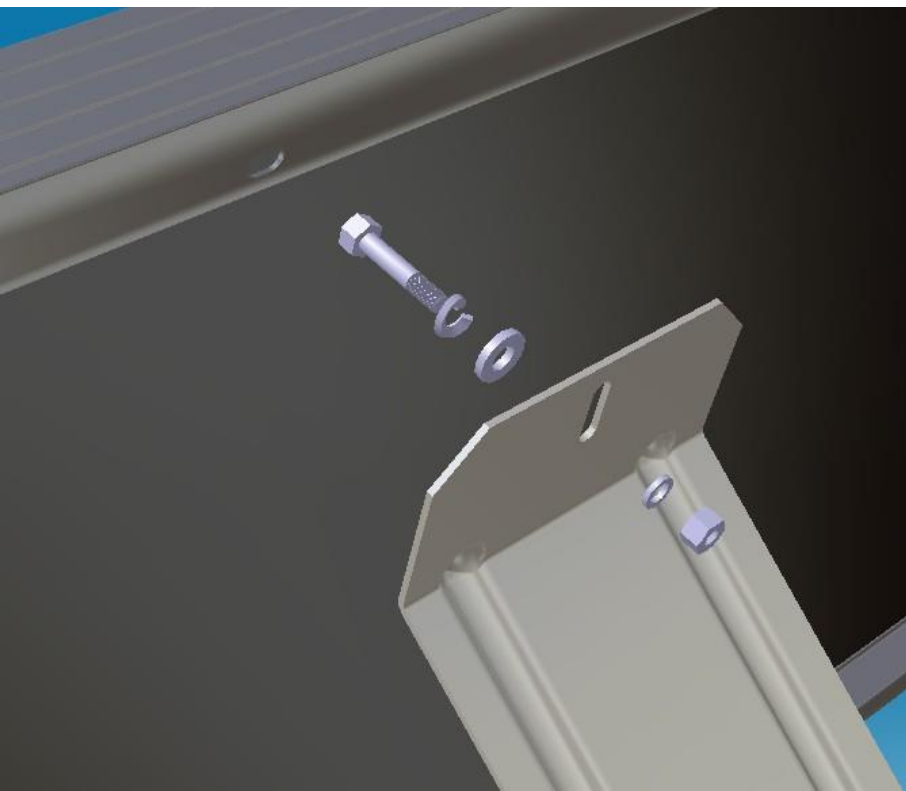
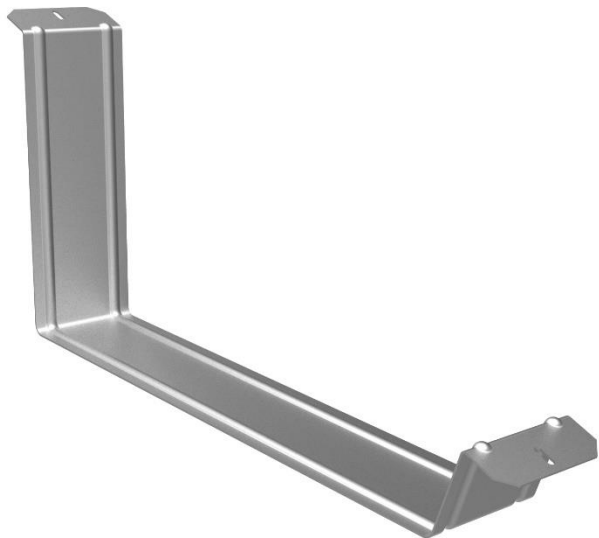
Base Splice kit

SCOPE OF SUPPLY (MOQ)

Description	BOQ	Modules/Package
CHIKO Ballast Racking I 4000*50*50 ballast support 4000mm	16	For 16 Modules in Landscape (Approx 5.2 KW)
CHIKO Ballast support structure I 50*50 ballast support splice kit	6	
CHIKO Mid clamp no nut for Ballast I 40mm	18	
CHIKO End clamp no nut for Ballast I 40mm	12	
CHIKO Ballast Racking - 15 deg	20	
CHIKO Ballast base splice kit 700mm	10	

BALLAST MOUNT III

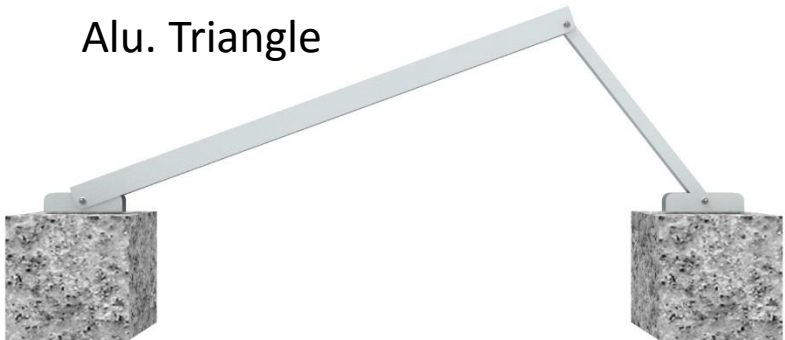
- Al6005-T5 High Class Aluminum
- Ideal for Residential & Commercial Flat Roofs
- Tilt Angle: 15 Deg.
- Max Wind Load: 60m/s
- Module Orientation: Landscape
- Designed to provide durability and flexibility.
- 10 Per Pack. Suitable for 5 Modules.
- Ballast Weight: Approx. 2 times the module weight
- Ballast weights not in scope of supply



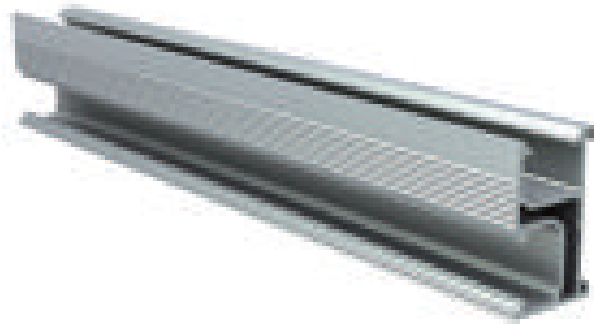
Adjustable Aluminum Triangle Structure

- Al6005-T5 High Class Aluminum
- Ideal for Residential & Commercial Flat Roofs
- Tilt Angle: Adjustable 15 to 20 Deg.
- Max Wind Load: 60m/s
- Module Orientation: Portrait
- Designed to provide durability and flexibility.

Alu. Triangle



4200MM Rail



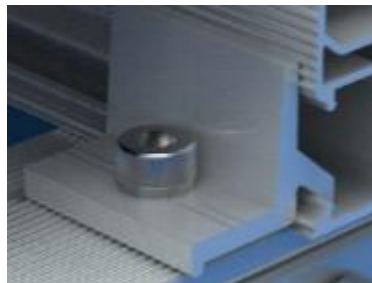
40MM END CLAMP



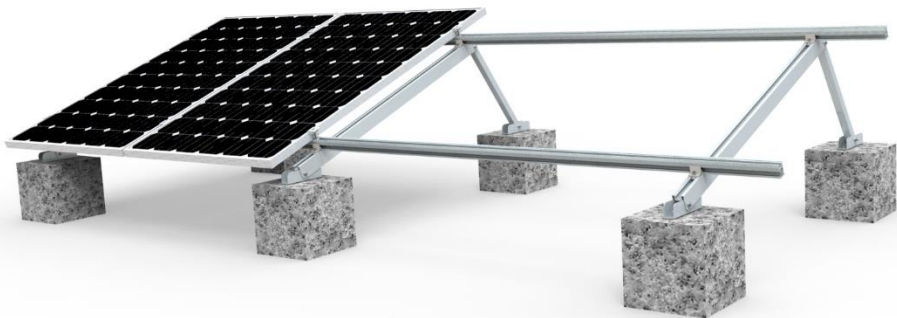
Rail Splice Kit



Rail Fasten Kit



40MM MID CLAMP



SCOPE OF SUPPLY (MOQ)

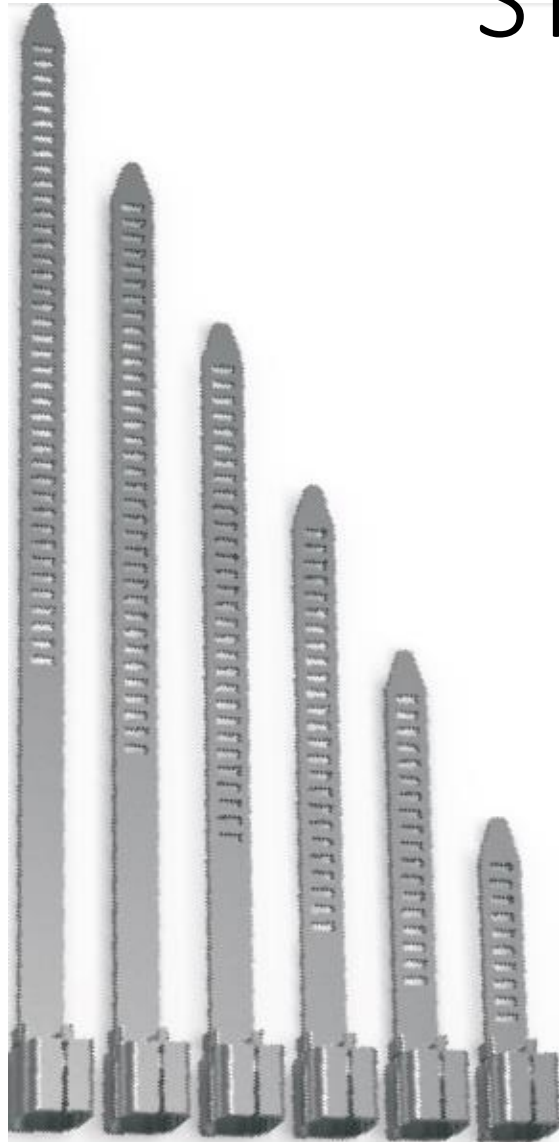
Description	BOQ	Modules /Package
CHIKO Solar Standard Rail 7R 4200 mm	8	For 16 Modules in Portrait (Approx 5.2 KW)
CHIKO Solar Standard 7R Rail Splice Kit, small Rail Splice Kit	6	
CHIKO Solar Mid Clamp Kit 40mm-4MM	24	
CHIKO Solar End Clamp Kit 40mm-4MM	16	
CHIKO Alu triangle structure 15-20deg adjustable	12	
CHIKO Solar rail fasten kit	24	
CHIKO Solar Standard Expansion Bolt M8*80	24	

STAINLESS STEEL CABLE CLIPS

- Made from Stainless Steel SUS304
- Suits all Solar Modules
- Clips for 4 Sqmm and 6 Sqmm available in pack of 100.



STAINLESS STEEL CABLE TIE



- Stainless Steel SUS 304
- Unique Buckle Locking Mechanism

Material in high quality SUS304			
Item	Width	Length	Package
	(mm)	(mm)	(pcs/pkg)
CK-FSC-TA-250	4.6	250	100
CK-FSC-TA-300	4.6	300	100
CK-FSC-TA-350	4.6	350	100



Largest Solar PV Distribution Company in India

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