



GS SOLAR ROOF MOUNT SOLUTIONS



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Xiamen Grace Solar Technology Co., Ltd.



XIAMEN GRACE SOLAR TECHNOLOGY CO., LTD.

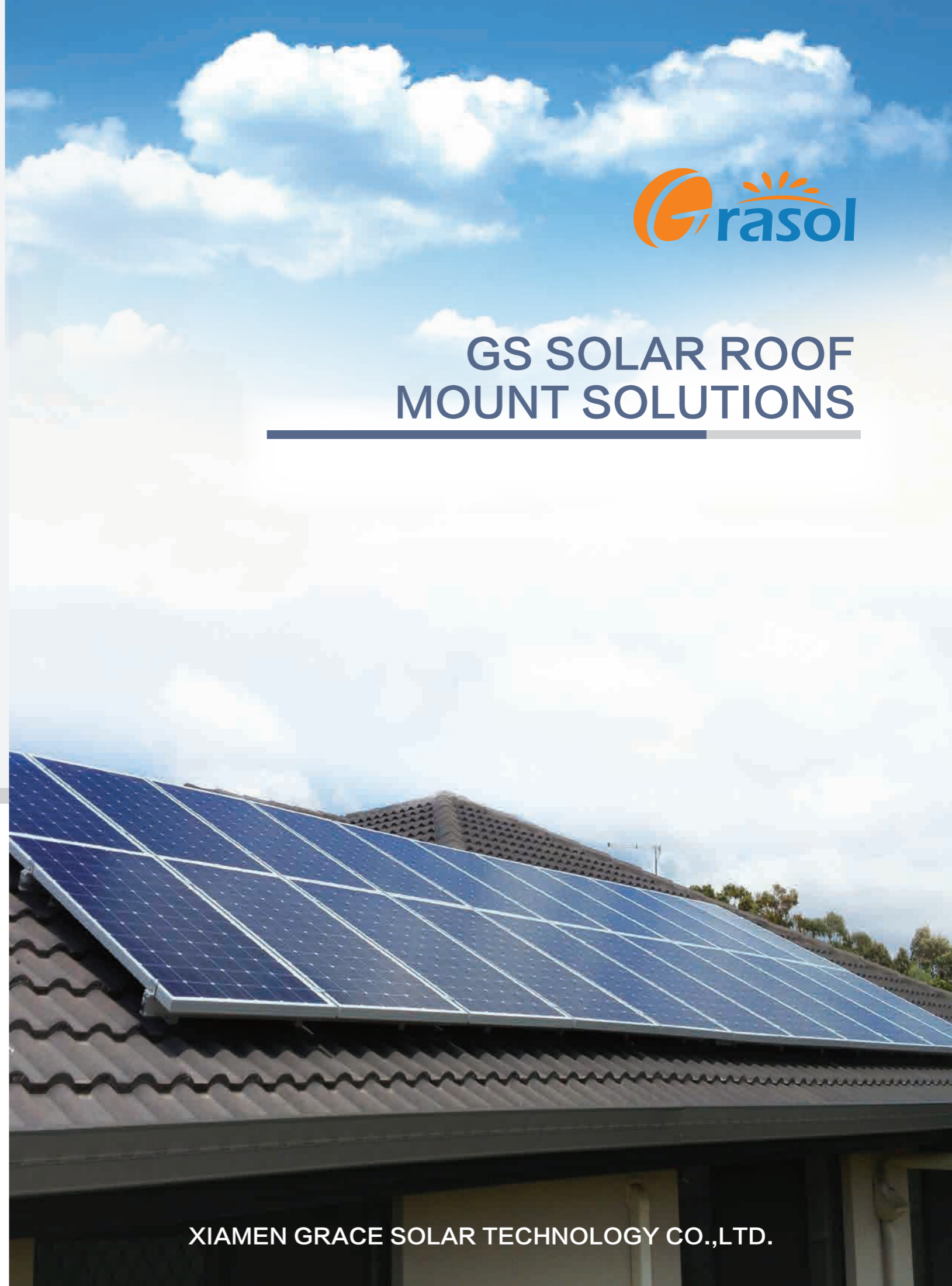
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XIAMEN GRACE SOLAR TECHNOLOGY CO.,LTD.



ABOUT GRACE SOLAR

Xiamen Grace Solar Technology Co., Ltd. is a leading manufacturer of photovoltaic mounting system and a big supplier of PV products. High-tech and innovation always help Grace Solar keep pace with the whole industry and the world market. We devote to manufacturing and marketing the steadiest, most trustable and cost-effective solar mounting system solutions to our customers and faith in the belief of “best service” . As one of the largest PV solar products exporters in China, the industrial pioneer – Grace Solar has already installed its products in more than 100 countries and regions since its foundation.



MANAGEMENT CONCEPTS

Grace Solar brought forward the standardized and internationalized management concept at the very beginning of its establishment. It positively introduces the international management systems such as APQP , FMEA , ISO 9001:2015 , CP Control Plan , MSA , SPC and applies them strictly in R&D, manufacturing, marketing, service etc.

Furthermore, Grace Solar strives to acquire international authority certification for the products and actively studies with international and domestic certification institutions such as TUV , CE , CQC , SAA, AS/NZS 1170 and Golden Sun.

SERVICE NETWORKS

Due to long term quick feedbacks for the reliable and qualified products and services, Grace Solar wins trust from system integration companies, installers and distributors worldwide. Cooperating with several strong facilitators in different areas, Grace Solar creates global service networks to offer superior and efficient services.

RESEARCH AND DEVELOPMENT

Grace Solar emphasizes specialty and innovation on its products and offers good guarantee and professional support to customers.

Grace Solar values talent people a lot. A professional research and development team that is led by qualified and experienced elite is set up in the birth of the company. The application of the most advanced equipments turns the company to an industrial leader of the structural design and system performance. Grace Solar cherishes its intellectual property and software copyrights of high-tech products including Ground Mounting System, Roof Mounting System etc.

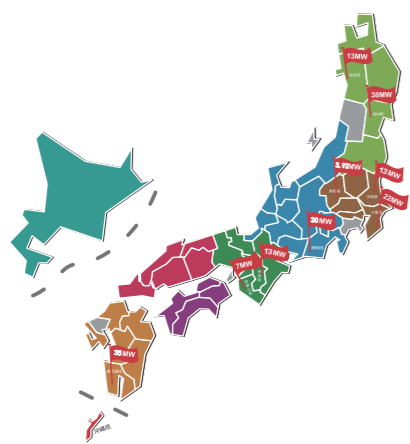


Marketing Network

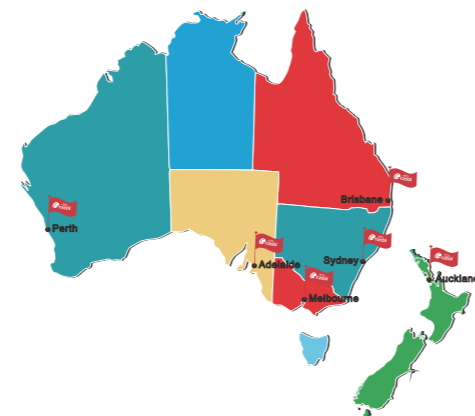
This is our favorite part of the site, our showcase!



Finished about **15GW** till now



Projects installed in Japan



Distributors in Australia

Content



PITCHED ROOF RACKING SYSTEM 07-18



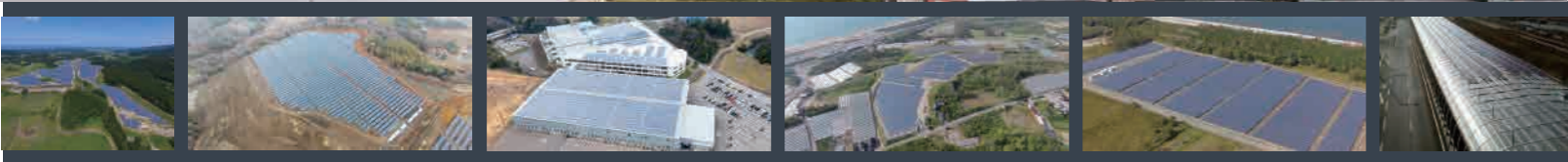
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COMPONENTS LIST 27-36



PROJECT SHOW

Install Site	Capacity	Product Solution
Australia	500,000 roofs	Tile/Tin by kits
USA	150MW	Water-proof Hook
Japan	150MW	Klip Lock Hook
Korea	2.7MW	Triangle Bracket System
India	507KW	NT System
Singapore	660KW	Trapezoid Tin Roof
Australia	1MW	Adjustable Tilt System
Philippines	550KW	Klip Lock Hook
Maldives	450KW	Ballasted System

* For more products detail ,please visit — www.gracesolar.com

If you are looking for PV mounting system, you can surely trust us. The mounting system from Grace Solar enjoys **6** advantages:

- ### 1、Competence

We serve more than 500 clients and our mounting system has already been installed around the world especially in Japan and Australia. 10GW projects have been implemented since 2009.


- ### 2、Wide Applicability

Design of the mounting system is based on the international standards that can fit all kinds of solar module types in the world.


- ### 3、Manufacture

We apply the high strength aluminum alloy 6005-T5 to ensure the mounting system durable and in supreme quality. High capacity and fluent production line makes it possible to massively manufacture. Monthly capacity is up to 120MW-150MW; for project less than 5MW, the system can be shipped out within two weeks.


- ### 4、Best Value for Money

We offer one stop business from design, manufacture to sell; this lowers the cost of our product and makes our price competitive compared with other brands in the same quality.


- ### 5、Shipment

We are in a seaport city and can deliver the mounting system to almost any corner in the world upon request.


- ### 6、Quality Warranty

We promise 10 years warranty. Duration more than 20 years.



GS PITCHED ROOF RACKING SYSTEM

Benefits

❖ **Pre-assembled for easy installation**

D-module can be put into GD Rail from any position. This makes installation earlier and can save you time on site.

❖ **Various Solution for the different conditions**

GD Rail and its accessories can be installed with the most solar panels on the commercial and residential Roof.

❖ **Safety and Reliability**

The racking systems designed by skilled engineers can stand up to the extreme weather complying with the AS/NZS 1170 and other international structure load standards. The main support components have also been tested to guarantee its structure and load-carrying capacity.



Technical Information

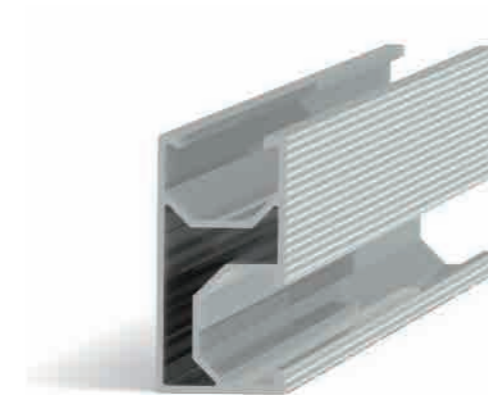
Installation Site	Commercial and Residential Roof		
Tilt Angle	Flushed with the roof, up to 60deg	Material	Aluminum & Stainless steel
Building Height	up to 20m	Color	Natural & Black
Max Wind Speed	up to 60m/s	Anti-corrosive	Anodized
Snow Load	1.4KN/m2	Warranty	10 years warranty
Standards	AS/NZS 1170& DIN 1055	Duration	More than 20 years



MAIN PARTS

Rails And Splice

D-module can be put into GD Rail from any position via simple installation.



GS-DR-Length(Classical)

·Description : GS Rail 1#
·Spec : 55x28mm



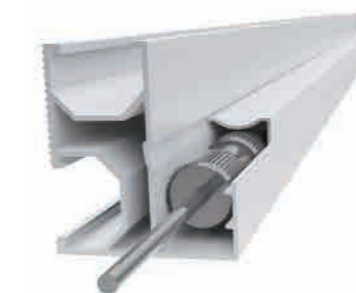
GS-10R-Length(Economy)

·Description : GS 10# Rail
·Spec : 46x28mm



GS-DR5-Length

·Description : GS 5# Rail
·Spec : 55x49mm



Mount with the cable



Cable can be mounted into the 5# Rail

GS-CRC-Length

·Description : Rail Cap I
·Spec : 24x10mm

Rail Connection



GS-DR-SP

·Description : Rail Splice
·Spec : 150mm



Rail Connection



Grounding Washer/ Washer

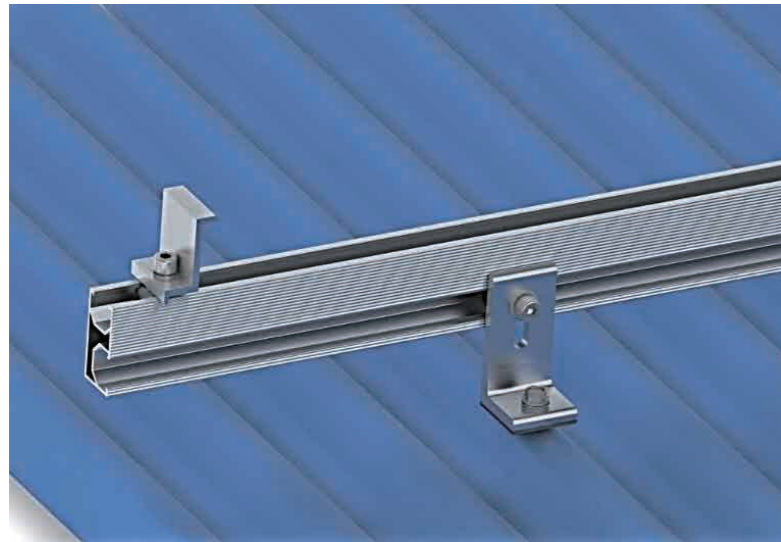
GS-DR-SP-GW

·Description : Rail Splice with grounding washer/ washer
·Spec : 150mm

APPLICATION

Tin Roof (L Feet)

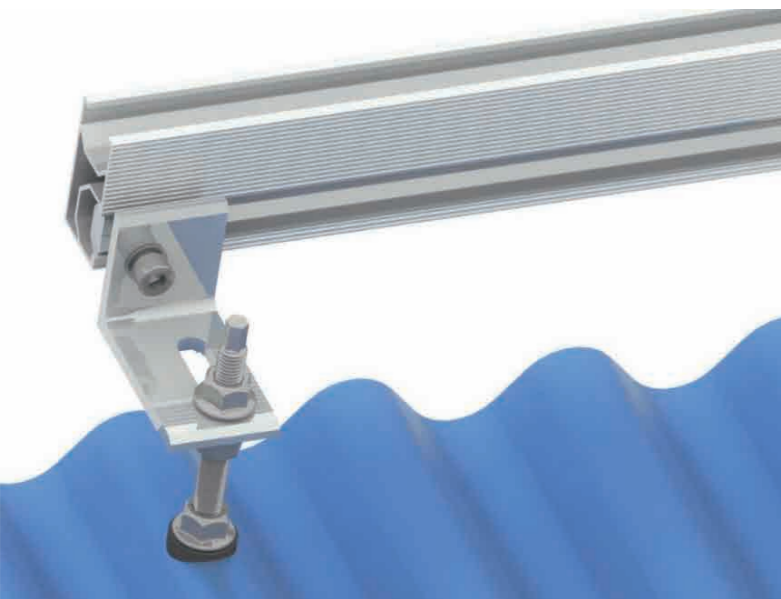
L feet can be mounted on the corrugated roof or other tin roofs. It can be used with the hanger bolts M10x200 for the enough space with the roof. The arc-rubber pad is designed specially for the corrugated roof.



GS-IK-LD05
 ·Description : GS L feet
 ·Accessories : Wood screw 6.3x80



GS-A-AR01
 ·Description : Arc-Rubber Pad

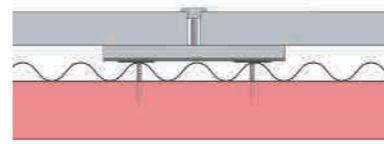
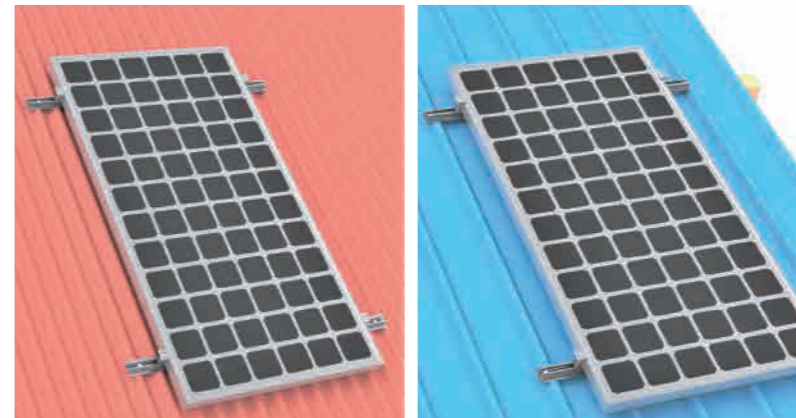


GS-IK-H01-AL
 ·Description :
 Hanger bolt hook with L feet
 ·Accessories :
 Hanger bolt M10x200

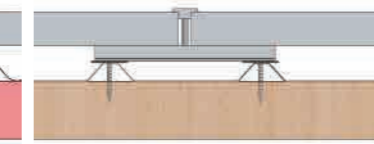
APPLICATION

Tin Roof (Flat Rail)

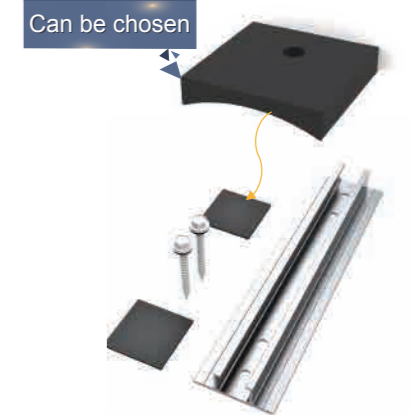
Flat Rail is the combination of the L feet and the rail. It also can be used on the tin roof, specially on the shingle roof.



Corrugated roof

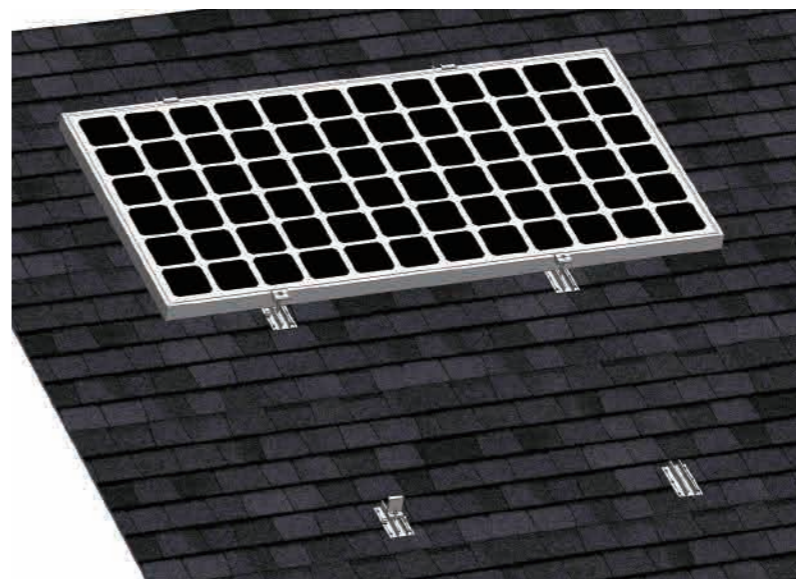


Trapezoid roof



GS-IK-FR-02
 ·Description : Flat Rail Hook 2#
 ·Accessories : Wood screw 6.3x80
 ·Spec : 250mm

Shingle Roof (Flat Rail)

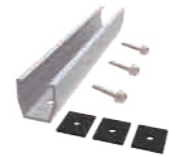
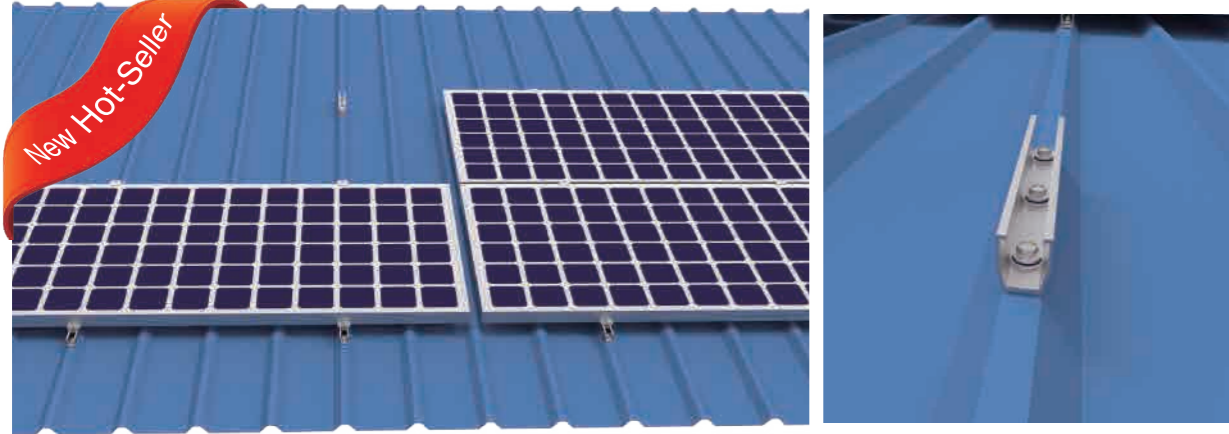


GS-IK-FR
 ·Description : Flat Rail Hook 1#
 ·Accessories : Wood screw 6.3x80
 ·Spec : 120mm

APPLICATION

Trapezoid Tin Roof (Flat Rail)

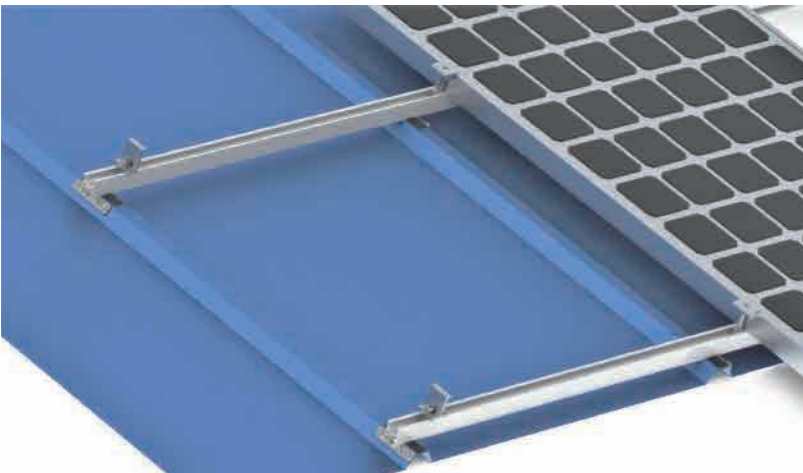
Without rail, UR Flat Hook is the most economic solution.



GS-IK-UR-01
 ·Description: UR Flat Hook
 ·Accessories : Self-tapping Screw

Trapezoid Tin Roof (Universal)

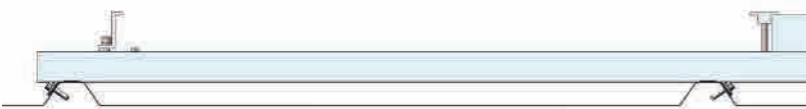
IDH-Rail with the patent stainless steel clamp can be used on the most of trapezoid tin roof.



GS01-IHR-Length
 ·Description : IDH Rail
 ·Spec : 38x29mm



GS01-UTK-02
 ·Description : UTK Stainless Steel Clamp
 ·Accessories : Self-tapping screw 6.3x25
 ·Spec : 90x31mm



APPLICATION

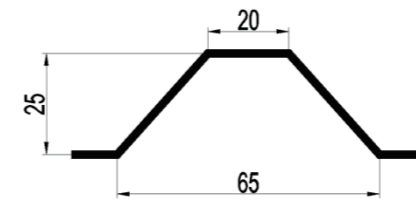
Trapezoid Tin Roof (Customized)

The customized trapezoid tin roof hook is made for the certain size roof. It can be mounted with the rail clamp or the L feet.



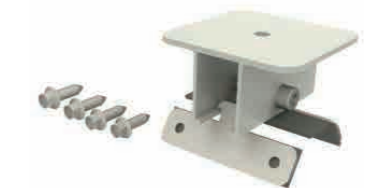
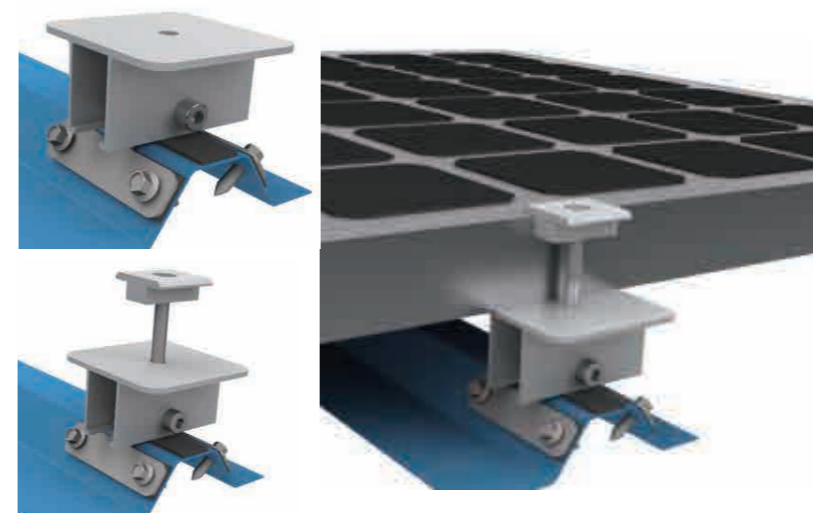
Roof Type

Roof Hook



GS-IK-A07

Universal trapezoid roof hook is another solution to the trapezoid roof.



Mount without rail
GS-UTK-01

·Description : UTK Roof Hook
 ·Accessories : Self-tapping screw 6.3x25
 ·Spec : 80mm

APPLICATION

Standing Seam Roof Hook for Klip-lok Roof

GS-IK-S08 / S09 is a hook used by Klip-lok Roof to provide a non-penetrating roofing surface. It increases or decreases through the middle part to replace the function of two products.



IK-S08 removes the middle part is IK-S09

GS-IK-S08

- Description : Standing Seam Roof Hook 8#
- Roof Type : Klip-Lok 700
- Accessories : screw M8x25
- Spec : 60mm

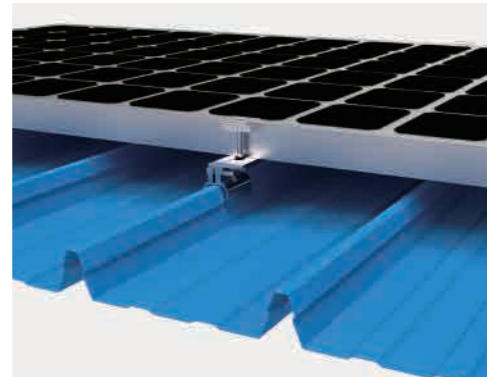
GS-IK-S09

- Description : Standing Seam Roof Hook 9#
- Roof Type : Klip-Lok 406
- Accessories : screw M8x25
- Spec : 60mm

Klip-Lok Application



Klip-Lok hook with end clamp



Klip-Lok hook with middle clamp



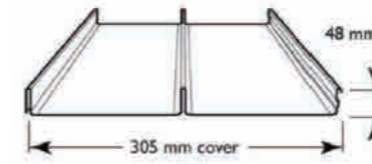
Klip-Lok hook with rail



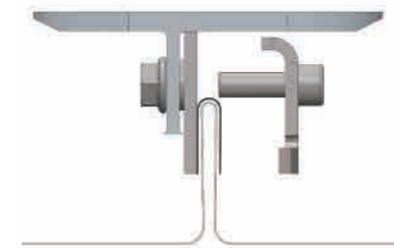
Klip-Lok with adjustable tilt system

APPLICATION

Standing Seam Roof Hook(Long line 305 and Butler-roof)



Long line 305



GS-IK-S01-A

- Description : Standing Seam Roof Hook 1# A Type
- Roof Type : Long line roof 305
- Accessories : screw M8x35
- Spec : 110mm

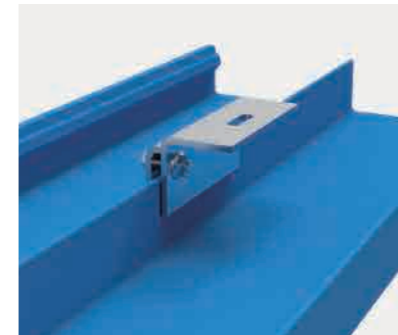


Butler-roof



GS-IK-S04

- Description : Standing Seam Roof Hook 4#
- Roof Type : Butler Roof
- Accessories : screw M8x35
- Spec : 90x31mm



Butler-roof

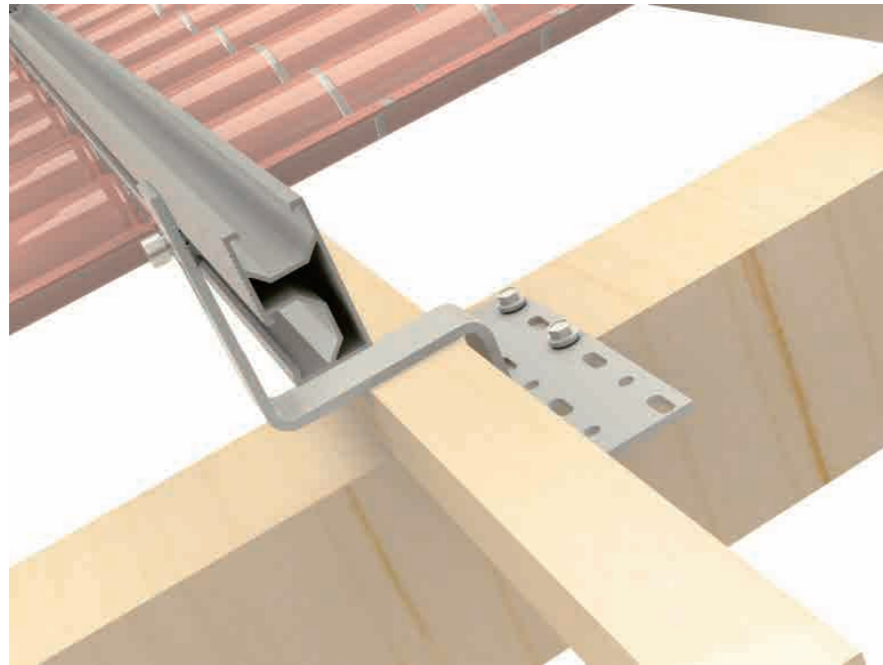


GS-IK-S01

- Description : Standing Seam Roof Hook 1#
- Roof Type : Butler Roof
- Accessories : screw M8x35
- Spec : 80mm

APPLICATION

Roman Tile Roof -(GD Rail)



GS-IK-01



GS-IK-06



GS-IK-14



Feature

·Main Material: Stainless Steel 304

Item No.	Description	Dimension (mm)			Package
		a	b	c	
GS-IK-01	Stainless Steel Hook 1# Kit	101	46	5	10pcs/box, 4 boxes/CTN
GS-IK-06	Stainless Steel Hook 6# Kit	101	46	5	
GS-IK-14	Stainless Steel Hook 14# Kit	101	-----	5	



Adjust the Height



GS-IK-HP



GS-IK-12

Item No.	Description	Dimension (mm)			Package
		a	b	c	
GS-IK-12	Adjustable Stainless Steel Hook 12# Kit	156~176	38~50	5	10pcs/box, 4 boxes/CTN
GS-IK-HP	Height Adjust Plate for Roof Hook	150	-----	5	100pcs/box, 4 boxes/CTN

APPLICATION

Flat Tile Roof Hook

Feature

·Main Material: Stainless Steel 304.



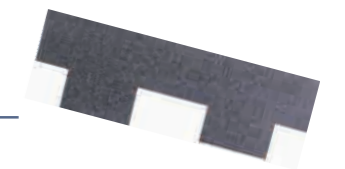
GS-IK-02



GS-IK-02-A

Item No.	Description	Dimension (mm)			Package
		a	b	Thickness	
GS-IK-02	Stainless Steel Hook 2#	190	30	5	30pcs/box II, 2 boxes II/CTN
GS-IK-02-A	Stainless Steel Hook 2# A type	190	30	5	10pcs/box II, 2 boxes II/CTN

Shingle Tile Roof Hook



GS-IK-04



GS-IK-04-A

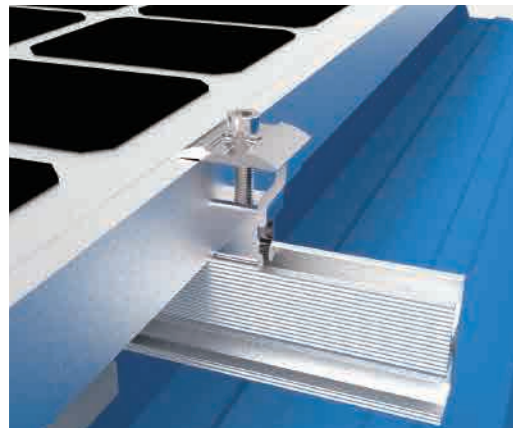
Item No.	Description	Dimension (mm)			Package
		Length	Width	Thickness	
GS-IK-04	Stainless Steel Hook 4#	200	30	5	20pcs/box, 4 boxes/CTN
GS-IK-04-A	Stainless Steel Hook 4# A type	200	30	5	10pcs/box, 4 boxes/CTN

COMPONENTS

Framed Module Clamp

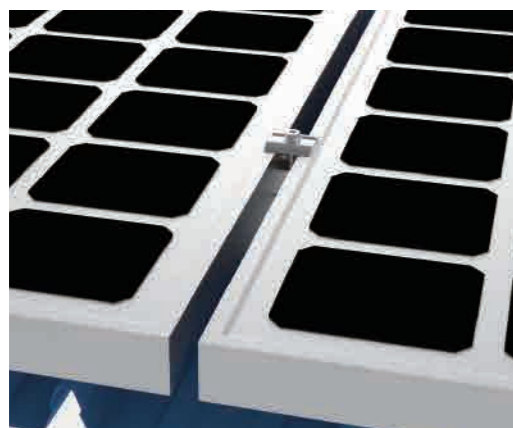
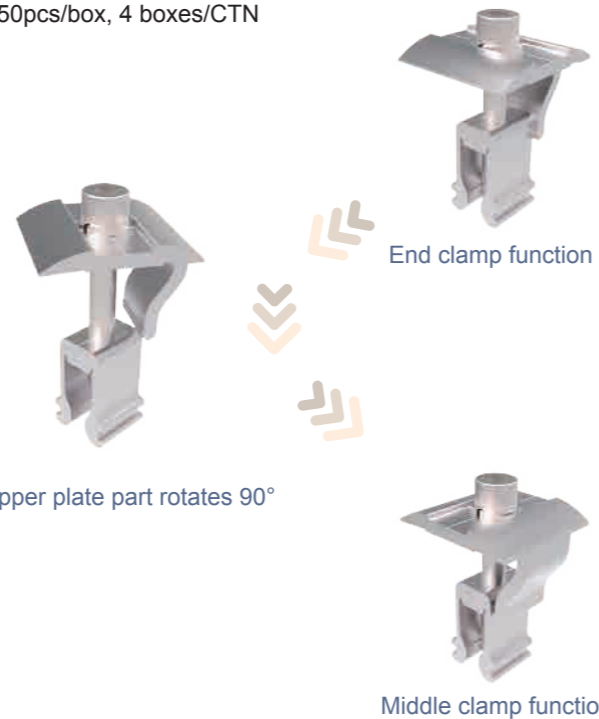
Feature

·Material is Anodized Al6005-T5, Fasten is A2-70
 The GS-AC is an all-in-one clamp assembly that delivers middle and end clamp function by rotating the upper plate part, has a flexibly adjustable range and is suitable for 30-46mm module thickness. Bolt at the bottom of the clamp to ensures fastness.



GS-AC

·Description : GS Adjustable Clamp Kit 30-46mm
 ·Package : 50pcs/box, 4 boxes/CTN



GS01-EC-F35/40 is a adjustable clamp assembly. Adjusting the position of the bolt, this item can be applied to 35mm or 40mm thickness module.



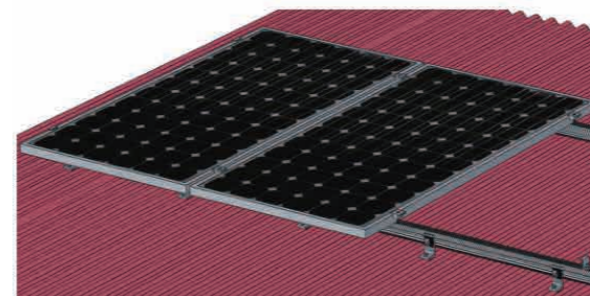
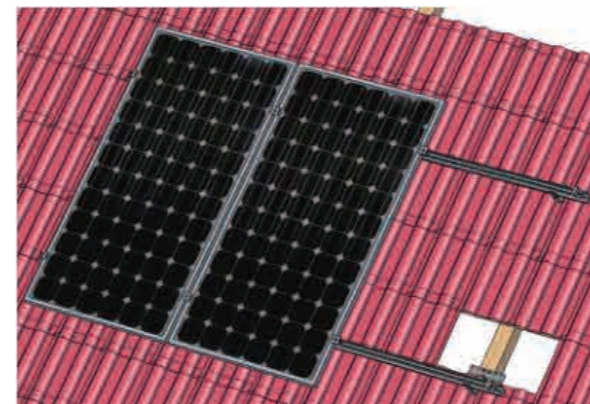
GS01-EC-F35/F40-F35
 ·Description : GS End Clamp Kit 35mm
 ·Package : 100pcs/box, 4 boxes/CTN



GS01-EC-F35/F40-F40
 ·Description : GS End Clamp Kit 40mm
 ·Package : 100pcs/Box, 4 boxes/CTN

PROJECT EXAMPLE

Framed Module Project



Solar Panels Size 1650x992x40mm	
Tile Roof 4 Panels	Tin Roof 4 Panels
Rail GS-DR-	
4200mm 2pcs	4200mm 2pcs
Roof Hook	
GS-IK-01 (Tile)	GS-IK-LD05
6	10
Inter Clamp GS-IC-F40	
6	6
End Clamp GS-EC-F40	
4	4
Rail Splice GS-DR-SP/GS-DR-SP-GW	
2	2

Note: The above planning is applicable to the low snow loads and normal wind loads.

Frameless Module Project



Solar Panels Size	GS Rail Top Layer GS-DR-2560	GS Rail Bottom Layer GS-DR-2560	Thin Film Inter Clamp GS-IC-L80	Thin Film End Clamp GS-EC-L80	GD Rail Clamp GS-RC-D	Roof Hook 1# GS-IK-01
1200x600x6.8mm						
Tile Roof 8 Panels Array 4x2	2560 mm 4 pcs	2560 mm 4 pcs	80mm 12 pcs	80mm 8 pcs	40mm 8 pcs	Thickness 5mm 6 pcs

FLAT ROOF RACKING SYSTEM

Benefits

- ❖ **Pre-assembled for easy installation**
D-module can be put into GD Rail from any position. So the parts can be pre-assembled in the factory to save your install time on site.
- ❖ **Various Solution to the different conditions**
GD Rail and its accessories can be installed with most of solar panels on the commercial and residential roof.
- ❖ **Safety and Reliability**
The racking systems can stand up extremely bad weather complying with the AS/NZS 1170 and other international structure load standards. The main support components have also been tested to guarantee its structure performance and load-carrying capacity.

Technical Information

Installation Site	Low profile roof or open field		
Tilt Angle	10deg ~ 60deg	Material	Aluminum & Stainless steel
Building Height	up to 20m	Color	Natural
Max Wind Speed	up to 60m/s	Anti-corrosive	Anodized
Snow Load	1.4KN/m ²	Warranty	10 years warranty
Standards	AS/NZS 1170 & DIN 1055 & Other	Duration	More than 20 years



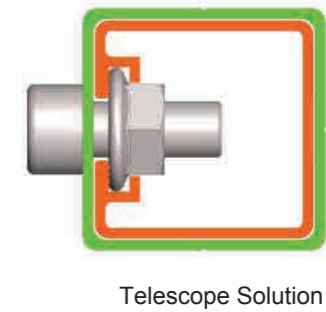
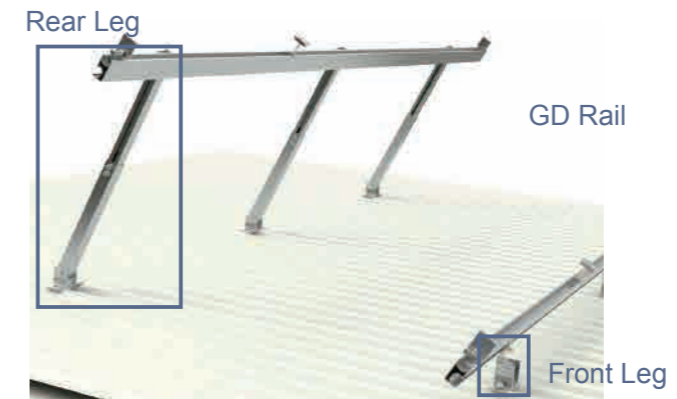
Adjustable System



Fixed System

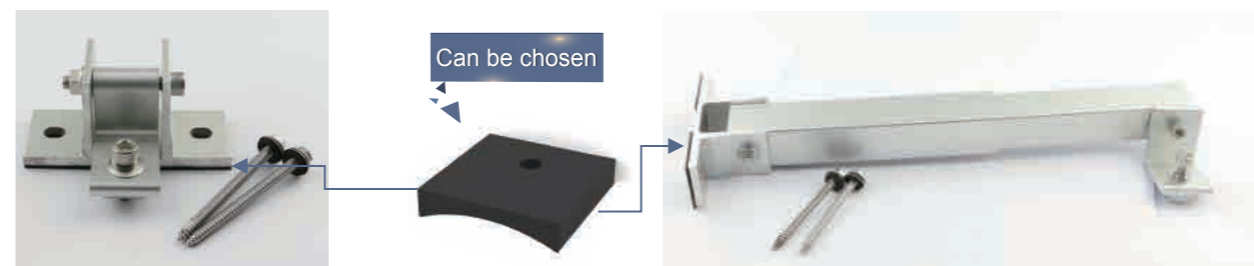
COMPONENTS

Adjustable Tilt System



Legs

- Feature**
- Main Material: Anodized Al6005-T5
 - Fasten Material: SUS A2-40
 - Wood Screw: 2pcs M6x80
 - Patent Telescope solution can adjust the angle
 - Anti-Slip and Anti-out design



GS-AD-FL-LD

GS-AD-RL_

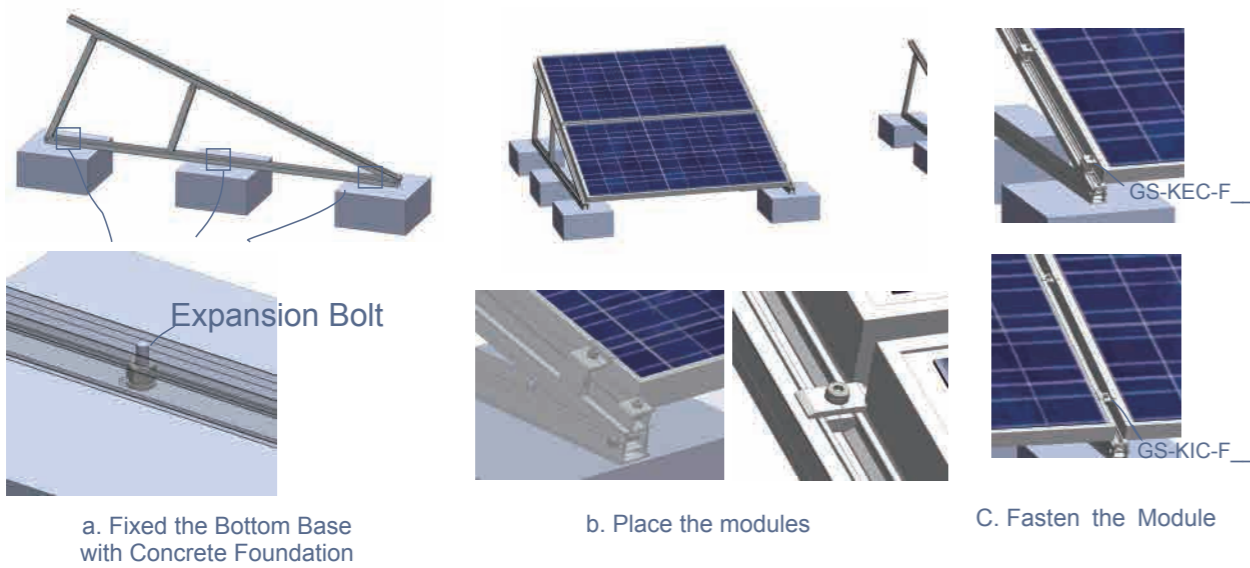
Item No.	Description	Leg Length	Package
GS-AD-FL-LD	AD Front Leg	— — — —	50pcs/box, 4 boxes/CTN
GS-AD-RL10/15-LD	AD Rear Leg 10/15 deg	240~360mm	30pcs/CTN
GS-AD-RL15/30-LD	AD Rear Leg 15/30 deg	340~680mm	25pcs/CTN
GS-AD-RL30/60-LD	AD Rear Leg 30/60 deg	700~1200mm	25pcs/CTN III

COMPONENTS

KNT Triangle Bracket



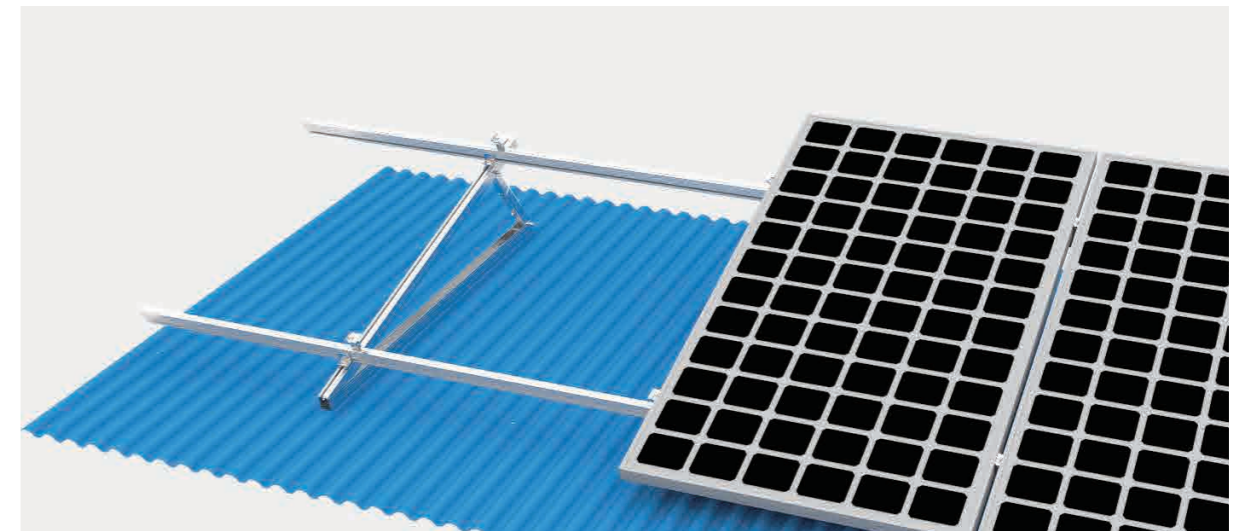
Installation Guide



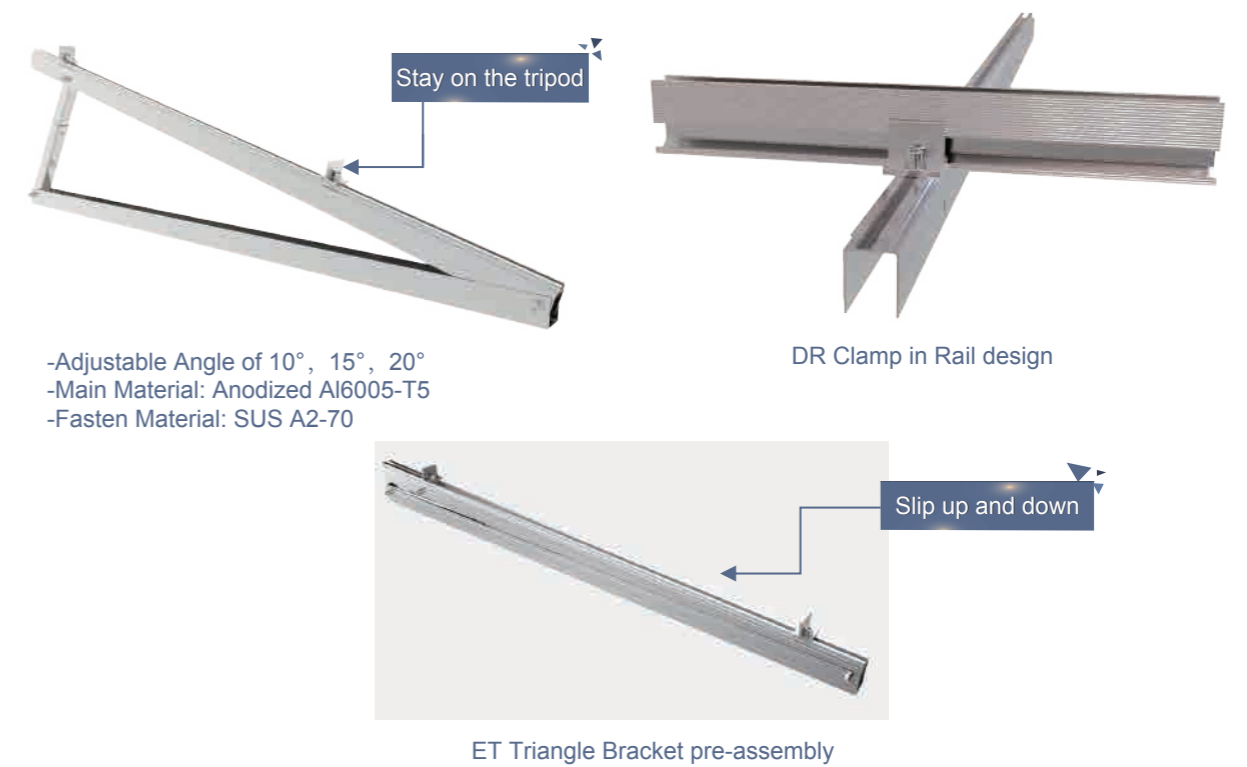
Item No.	Description	Placement	Angle
GS-KNT2000-10	KNT Bracket 2000-10deg	2x2, landscape	Fixed 10deg

COMPONENTS

ET Triangle Bracket



Adjustable Angle



Item No.	Description	Adjustable Angle	Package
GS-ET02-10/20	AD ET Triangle Bracket 02	10-20deg	Package on request
GS-ET02-20/30	AD ET Triangle Bracket 02	20-30deg	Package on request
GS-RC-D	GD Rail Clamp	----	----

PROJECT EXAMPLE

Adjustable Tilt System

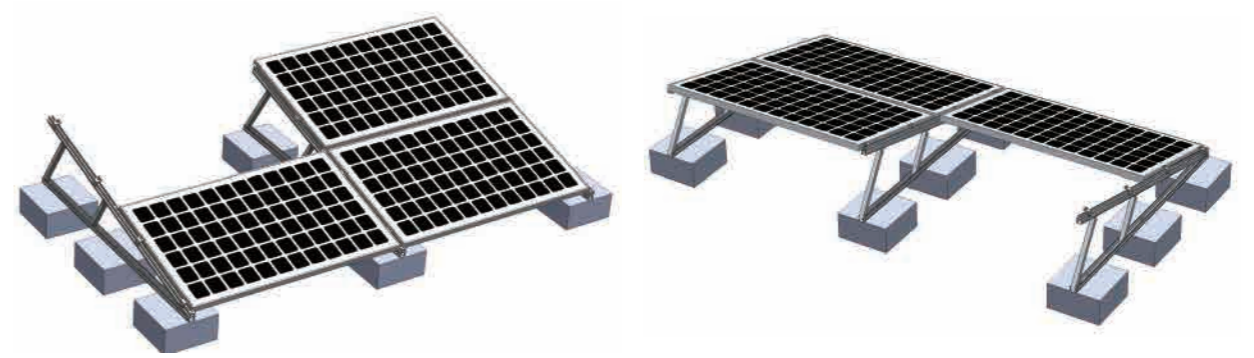


Solar Panels Size 1650x992x40mm	Rail GS-DR-	Front Leg GS-AD-FL	Rear Leg GS-AD-RL_	Inter Clamp GS-IC-F40	End Clamp GS-EC-F40	Rail Splice GS-DR-SP
Adjustable 10/15 4Panels installation	4200mm 2 pcs	4	4	6	4	2
Adjustable 15/30 4Panels installation	4200mm 2 pcs	4	4	6	4	2
Adjustable 30/60 4Panels installation	4200mm 2 pcs	4	4	6	4	2



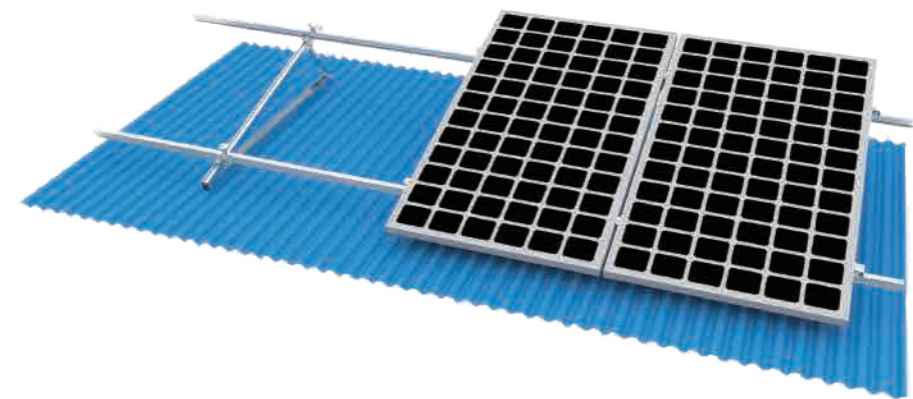
PROJECT EXAMPLE

KNT Triangle Bracket



Solar Panels Size 1650x992x40mm	Bracket GS-KNT2000-10	Inter Clamp GS-KIC-F35/40	End Clamp GS-KEC-F40
Angle:10deg Array: 2x2	3 pcs	4 pcs	8 pcs

ET Triangle Bracket



Solar Panels Size 1650x992x40mm	Rail GS-DR-4200	Bracket GS-ET02-10/20	Inter Clamp GS-IC-F40	End Clamp GS-EC-F40
Angle:10deg Array: 1x4	2 pcs	3 pcs	6 pcs	4 pcs

BALLASTED MOUNTING SYSTEM II

Benefits

❖ **Easy Installation**

The parts can be pre-assembled in the factory to save your installation time on site.

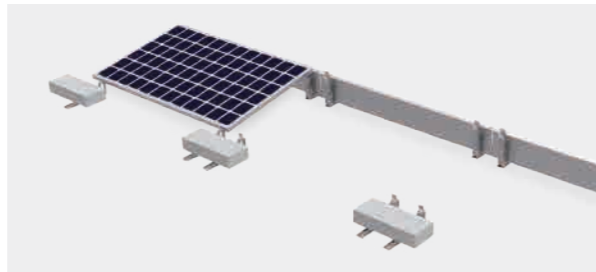
❖ **Flexibility and Compatibility**

Can be installed with most of solar panels under or in the different condition.

❖ **Standard**

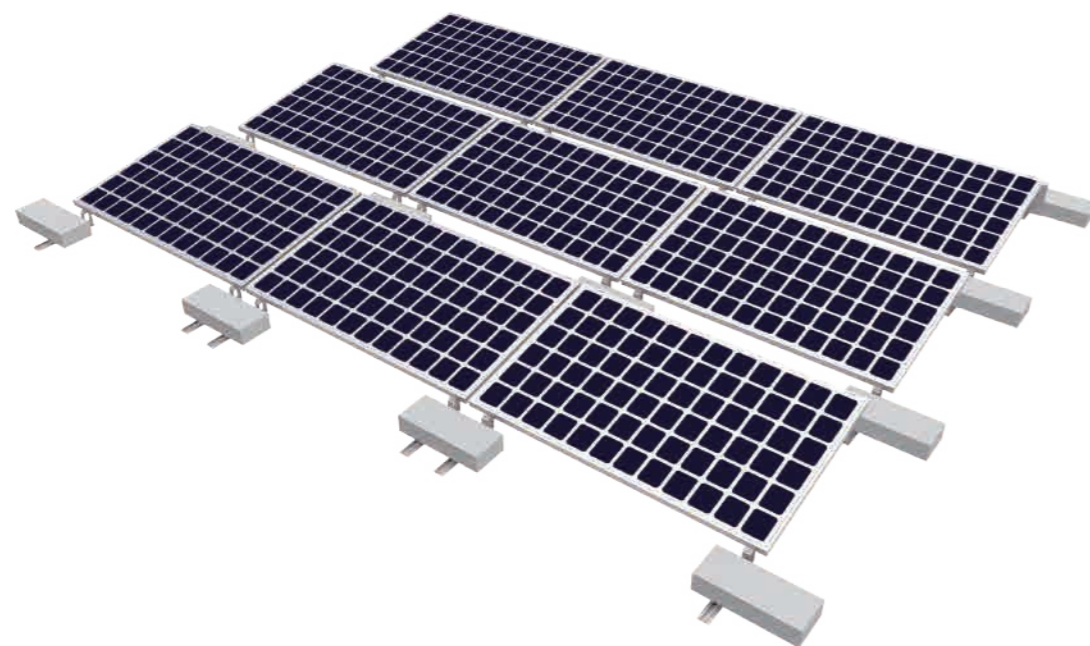
The racking systems can stand up to the extremely bad weather complying with the AS/NZS 1170 and other international structure load standards.

The main support components have also been tested to guarantee its structure performance and load-carrying capacity.



Technical Information

Installation Site	Low profile roof or open field		
Tilt Angle	10deg, 15deg, 20deg	Material	Aluminum alloy & Stainless Steel
Building Height	up to 20m	Color	Natural
Max Wind Speed	up to 60m/s	Anti-corrosive	Anodized
Snow Load	up to 1.4KN/m ²	Warranty	10 years warranty
Standards	AS/NZS 1170 & DIN 1055 & Other	Duration	More than 20 years



COMPONENTS

Installation Steps



Set 1
Install the Front Leg



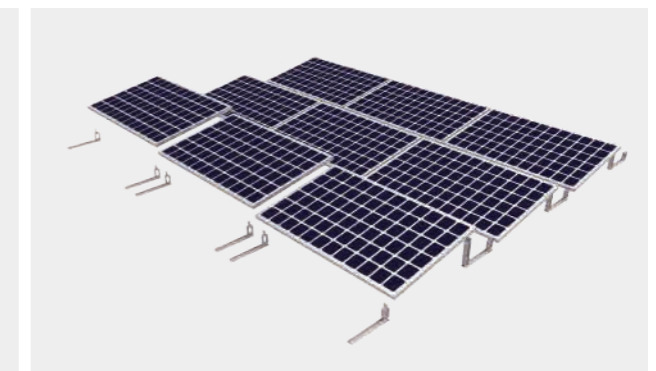
Set 2
Install the Rear Leg



Set 3
Install the Middle Support Part



Set 4
Arrange the Support Part



Set 5
Install the Panel



Set 6
Place the Concrete Part



Set 7
Install the Wind Plate

Project Example

Solar Panels Size	Angle	Array	Install Site	Design Wind Speed
1650x992x40mm	10deg	3x3 (9 pcs)	Flat Roof	60m/s

COMPONENTS LIST

Rail and Splice

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package	
	GS-DR-(length) Classical	GD Rail	Spec: 55x28mm Customized length	8pcs/bundle, 512pcs/pallet
	GS-10R-(length) Economy	GS 10# Rail	Spec: 46x28mm Customized length	8pcs/bundle, 512pcs/pallet
	GS-HR-(length)	GH Rail Have top & bottom channel	Spec: 55x28mm Customized length Back connect	8pcs/bundle, 340pcs/pallet
	GS-DR4-(length)	GD 4# Rail	Spec:57x33mm Customized length Clean Anodized	8pcs/bundle, 336pcs/pallet
	GS-DR5-(length)	GD 5# Rail	Spec: 55x49mm Customized length Cable Rail	8pcs/bundle, 336pcs/pallet
	GS-CRC-(length)	Cable Rail Cap	Customized length Cap of Cable Rail	8pcs/bundle
	GS-DR-SP	GD Rail Splice Kit	Connect two pcs GD Rail Pre-assembly	50 kits/box 4 boxes/CTN
	GS-DR-SP-GW	GD Rail Splice with Ground Washer	Connect two pcs GD Rail with ground washer Pre-assembly	50 kits/box 4 boxes/CTN
	GS-DR4-SP	GD 4# Rail Splice Kit	Connect two pcs GD 4# Rail Pre-assembly	15 kits/box 4 boxes/CTN
7# Rail Serial				
	GS-7R-(length)	GD 7# Rail	Spec: 38x36mm Customized length	8pcs/bundle, 560pcs/pallet
	GS-7R-SP	GD 7# Rail Splice Kit	Connect two pcs GD 7# Rail Pre-assembly	50 kits/box 4 boxes/CTN

COMPONENTS LIST

Accessories

Feature: There are various accessories for the Rail to manage the wires and the DC Isolator as bellows shown.

Item No	Name	Description	Package	
	GS-A-PC01	Plastic Cable Clip	Nylon 66, black connection 2 wires with GS Rail by side	1000 kits/box 4 boxes/CTN
	GS-A-DRC-SG	GD Rail Cap	Nylon 66, Silver Gray End Cap for GD Rail	1000 kits/box 4 boxes/CTN
	GS-SSCC-03	SS Cable Clip 3#	Stainless Steel connection 4 wires with the bottom of Frame Module	2000 kits/box 4 boxes/CTN
	GS-SSCC-05	SS Cable Clip 5#	Stainless Steel connection 2 wires with the bottom of Frame Module	1000 kits/box 4 boxes/CTN
	GS-CT-01	Cable Tie 1# 4.6x300	SUS304 with PVC Coat Tie the cable with Rail	1000 kits/box 4 boxes/CTN
	GS-DC-330-240	GS DC Isolator Box	AL5052,330x240mm With 2x D module Kits Enclosure for fixing the DC Isolator onto GS rail	20 kits/box 2 boxes/CTN



COMPONENTS LIST

Module Clamp

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package
Mid Clamp Kit			
GS-IC-F30	Inter Clamp Kit 30-32mm	Inter Clamp D- Module Socket Head Screw M8 Pre-assembly	100 kits/box 4 boxes/CTN
GS-IC-F35	Inter Clamp Kit 35mm		
GS-IC-F40	Inter Clamp Kit 40mm		
GS-IC-F46	Inter Clamp Kit 46mm		
GS-IC-F50	Inter Clamp Kit 50mm		



End Clamp Kit

GS-EC-F30	End Clamp Kit 30mm	End Clamp D- Module Socket Head Screw M8 Washer Pre-assembly	100 kits/box 4 boxes/CTN
GS-EC-F35	End Clamp Kit 35mm		
GS-EC-F40	End Clamp Kit 40mm		
GS-EC-F46	End Clamp Kit 46mm		
GS-EC-F50	End Clamp Kit 50mm		



Adjustable Clamp Kit

GS-EC-A02	GS Adjustable End Clamp 2#, 30~46mm	End Clamp D- Module Socket Head Screw M8 Washer Pre-assembly	100 kits/box 4 boxes/CTN
GS01-EC-F35/F40	GS End Clamp Kit for 35 or 40mm		100 kits/box 4 boxes/CTN
GS-AC	GS Universal modules Clamp Kit, 30~46mm	Clamp T- Module Socket Head Screw M8 Washer Pre-assembly. can be as the inter or end clamp	50 kits/box 4 boxes/CTN



COMPONENTS LIST

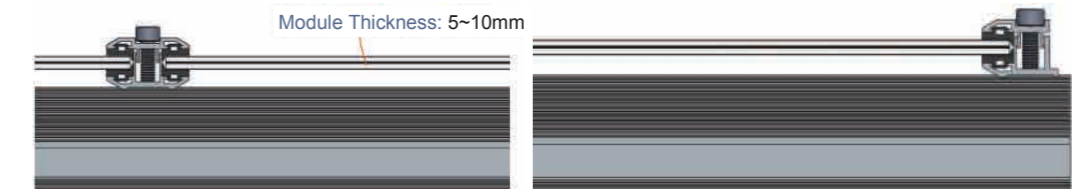
Module Clamp

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

GS-IC-L80 and GS-EC-L80 is approved by Canadian Solar.

GS-IC-L80-A and GS-EC-L80-A is approved by First Solar.

Item No	Name	Description	Package
GS-IC-L80	TF Inter Clamp Kit	Top and Bottom Clamp D- Module Socket Head Screw M8 Pre-assembly	40 kits/box 4 boxes/CTN
GS-EC-L80	TF End Clamp Kit		50 kits/box 4 boxes/CTN



Rail Clamp

GS-RC-D	GD Rail Clamp	Clamp D- Module Socket Head Screw M8 Washer Pre-assembly.	100 kits/box 4 boxes/CTN
GS-7RC-D	7# Rail Clamp		100 kits/box 4 boxes/CTN



Framed Module Clamp Accessories

GS-A-IC	Inter Clamps	Aluminum 6005-T5 Clean Anodized black can be chosen	200 kits/box 4 boxes/CTN
GS-A-EC30	End Clamp 30		200 kits/box 4 boxes/CTN
GS-A-EC35	End Clamp 35		
GS-A-EC40	End Clamp 40		
GS-A-EC46	End Clamp 46		
GS-A-EC50	End Clamp 50		
GS-A-DM	D-Module	Aluminum 6005-T5 Clean Anodized M8 Threaded Hole	1000 kits/box 4 boxes/CTN



COMPONENTS LIST

Tin roof Hook




Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package
 GS-IK-LD05	Tin Interface kit 5#	L feet & Rubber Pad D-Module Socket Head Screw Wood Screw St6.3x80 Pre-assembly	50 kits/box 4 boxes/CTN
 GS-IK-H01-AL	Hanger Bolt Hook 1#	Hanger Bolt M10x200 Kit L fee 2# with D-Module kit Pre-assembly	20 kits/box 4 boxes/CTN
 GS-IK-H04	Hanger Bolt Hook 4#	Hanger Bolt M10x200 Kit L feet with D-Module kit Pre-assembly	20 kits/box 4 boxes/CTN
 GS-IK-H06	Hanger Bolt Hook 6#	Hanger Bolt M10x200 Kit Steel Plate 7R clamp Kit Pre-assembly Mount with 7# Rail	20 kits/box 4 boxes/CTN
 GS-IK-FR	FB Rail Hook Kit 1#	FB Rail 2 x Wood Screw St6.3x80 Slate Tile Roof & Tin Roof	40 kits/box 4 boxes/CTN
 GS-IK-FR-02	FB Rail Hook Kit 2#	FB Rail 2# 2 x Wood Screw St6.3x80 Slate Tile Roof & Tin Roof	28 kits/box 4 boxes/CTN
 GS-A-AR01	Arc-Rubber Pad	For the corrugated roof	350 kits/box 4 boxes/CTN






COMPONENTS LIST

Trapezoid Roof

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package
 GS-IK-A07	AL 7# Roof hook 7#	Al-Roof Hook Rubber Pad 4xSt Screw 6.3x25	30 kits/box 4 boxes/CTN
 GS01-IHR-Length	IDH Rail	Spec: 38x29mm Customized length	8pcs/bundle, 560pcs/pallet
 GS01-UTK-02	UTK SS Clamp	Stainless Steel plate Rubber pad	100 kits/box
 GS-UTK-01	Universal Trapezoid Roof Hook 1#	Stainless Steel and Aluminum Parts & Socket Head Screw St Screw 6.3x2.5 Pre-assembly	30 kits/box 4 boxes/CTN

Stand Seam Roof

Item No	Name	Description	Package
 GS-IK-S01	Standing Seam Roof Hook 1#	SS clamp Socket Head Screw M8 Butler Roof	15 kits/box 4 boxes/CTN
 GS-IK-S04	Standing Seam Roof Hook 4#	Length 110mm Pre-assembly Butler Roof	15 kits/box 4 boxes/CTN
 GS-IK-S08	Standing Seam Roof Hook 8#	Length 60mm Pre-assembly Klip-Lok 700	20 kits/box 4 boxes/CTN
 GS-IK-S09	Standing Seam Roof Hook 9#	Length 60mm Pre-assembly Klip-Lok 406	20 kits/box 4 boxes/CTN
 GS-IK-S02-A	Standing Seam Roof Hook 2#-A	Length 80mm Pre-assembly Round Head Roof	20 kits/box 4 boxes/CTN

COMPONENTS LIST

Tile Roof

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package	
 GS-IK-01	Stainless Steel Hook 1# Kit	Stainless Steel Hook D-Module Socket Head Screw M8 3 x Wood Screw St6.3x80 Roman Tile Roof	10 kits/box 4 boxes/CTN	
 GS-IK-06	Stainless Steel Hook 6# Kit		10 kits/box 4 boxes/CTN	
 GS-IK-12	Adjustable Stainless Steel Hook 12# Kit		10 kits/box 4 boxes/CTN	
 GS-IK-14	Stainless Steel Hook 14# Kit		10 kits/box 4 boxes/CTN	
 GS-IK-02	Stainless Steel Hook 2# Kit		30 kits/box II 2 boxes/CTN	
 GS-IK-02-A	Stainless Steel Hook 2# A type Kit		10 kits/box 4 boxes/CTN	
 GS-IK-04	Stainless Steel Hook 4# Kit		20 kits/box 4 boxes/CTN	
 GS-IK-04-A	Stainless Steel Hook 4# A type		10 kits/box 4 boxes/CTN	
 GS-IK-HP	Height adjust plate		Stainless Steel plate Socket Head Screw	50 kits/box


COMPONENTS LIST

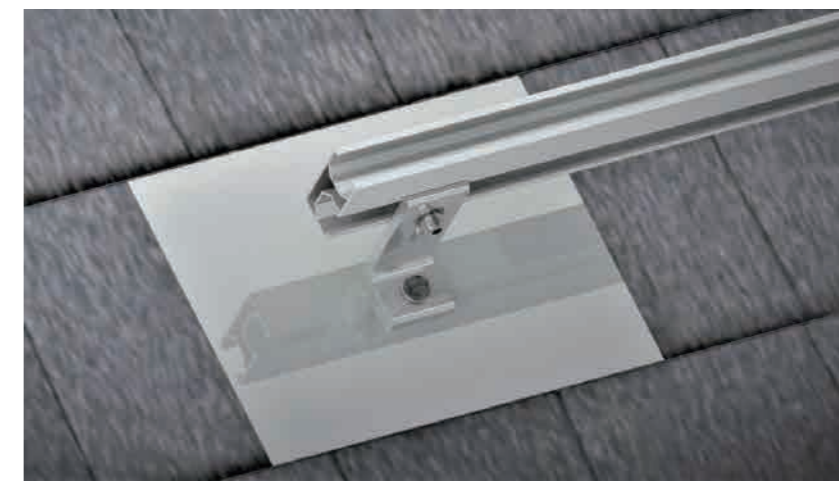
Tile Roof (7# Rail Serials)

Feature: Material is AL6005-T5, Surface finish is ordinary anodize- clear, and black can be chosen. Fasten is A2-70.

Item No	Name	Description	Package
 GS-IK-17	Stainless Steel Hook 17# Kit	Stainless Steel Hook Rail Clamp Socket Head Screw M8 3 x Wood Screw St6.3x80 Roman Tile Roof Mount with 7# Rail	10 kits/box
 GS-IK-02-C	Stainless Steel Hook 2#-C Kit	Stainless Steel Hook Rail Clamp Socket Head Screw 2 x Wood Screw St6.3x80 Flat Tile Roof Mount with 7# Rail	30 kits/box II
 GS-IK-04-C	Stainless Steel Hook 2#-4 Kit	Stainless Steel Hook Rail Clamp Socket Head Screw 2 x Wood Screw St6.3x80 Slate Tile Roof Mount with 7# Rail	10 kits/box

Slate Tile Roof, Water Proof Solution

Item No	Name	Description	Package
 GS-FK-01	Flashing Hook 1#	L feet Kit Wood Screw St6.3x80 Flashing Plate : 1#:305x305mm 2#: 205x305mm	25 kits/box
GS-FK-02	Flashing Hook 2#		25 kits/box



COMPONENTS LIST

Fasten

Feature: Material is A2-70, standard is DIN

Item No	Name	Description	Package
GS-F-S820	Socket Head Screw	Stainless Steel A2-70, M8x20	Package on request
GS-F-S825	Socket Head Screw	Stainless Steel A2-70, M8x25	
GS-F-S828	Socket Head Screw	Stainless Steel A2-70, M8x28	
GS-F-S830	Socket Head Screw	Stainless Steel A2-70, M8x30	
GS-F-S835	Socket Head Screw	Stainless Steel A2-70, M8x35	
GS-F-S840	Socket Head Screw	Stainless Steel A2-70, M8x40	
GS-F-S845	Socket Head Screw	Stainless Steel A2-70, M8x45	
GS-F-S850	Socket Head Screw	Stainless Steel A2-70, M8x50	
GS-F-S855	Socket Head Screw	Stainless Steel A2-70, M8x55	
GS-F-S860	Socket Head Screw	Stainless Steel A2-70, M8x60	
GS-F-S865	Socket Head Screw	Stainless Steel A2-70, M8x65	
GS-F-AS820	Anti-Thief Screw	Stainless Steel A2-70, M8x20	
GS-F-AS825	Anti-Thief Screw	Stainless Steel A2-70, M8x25	
GS-F-AS828	Anti-Thief Screw	Stainless Steel A2-70, M8x28	
GS-F-AS830	Anti-Thief Screw	Stainless Steel A2-70, M8x30	
GS-F-AS835	Anti-Thief Screw	Stainless Steel A2-70, M8x35	
GS-F-AS840	Anti-Thief Screw	Stainless Steel A2-70, M8x40	
GS-F-AS845	Anti-Thief Screw	Stainless Steel A2-70, M8x45	
GS-F-AS850	Anti-Thief Screw	Stainless Steel A2-70, M8x50	
GS-F-AS855	Anti-Thief Screw	Stainless Steel A2-70, M8x55	
GS-F-AS860	Anti-Thief Screw	Stainless Steel A2-70, M8x60	
GS-F-AS865	Anti-Thief Screw	Stainless Steel A2-70, M8x65	
GS-F-AB08	Anti-Thief Screw Bit	Tool for the anti-thief screw M8	
GS-F-N108	Hexagon Nut, M8	Stainless Steel A2-70, M8	

COMPONENTS LIST

Fasten

Feature: Material is A2-70, standard is DIN

Item No	Name	Description	Package	
GS-F-W108	Spring Washer, M8	Stainless Steel A2-70 M8	Package on request	
GS-F-W208	Lock Washer, M8, OD13	Stainless Steel A2-70, M8, OD13		
GS-F-W308	Lock Washer, M8, OD18	Stainless Steel A2-70, M8, OD18		
GS-F-T625	Self-tapping Screw	Stainless Steel 410 St6.3x25		
GS-FS-W660	Wood Screw,	Stainless Steel 410 St6.3x60 With Pad		
GS-FS-W680	Wood Screw	Stainless Steel 410 St6.3x80 With Pad		
GS-F-H020	Hanger Bolt	Stainless Steel A2-70 M10x200		60 kits/box 4 boxes/CTN
GS-FA-H020	Hanger Bolt Assembly	Stainless Steel Hanger Bolt & 3xFlange Nuts & Rubber Pad M10x200		50 kits/box 4 boxes/CTN

Grounding System

Item No	Name	Description	Package
GS-G-GC	Grounding Clip	Stainless Steel Plate	1000 kits/box 4 boxes/CTN
GS-G-GL	Grounding Lug	Stainless Steel Plate Aluminum Lay-in Lug Fastens Pre-assembly	200 kits/box 2 boxes/ CTN II
GS-G-BJ-A	Bonding Jumper	Braider copper wire Stainless Steel Plate Socket Head Screw Pre-assembly	100 kits/box 2 boxes/CTN II

ROOF MOUNTING PROJECT IMAGE



Roman Tile Roof System

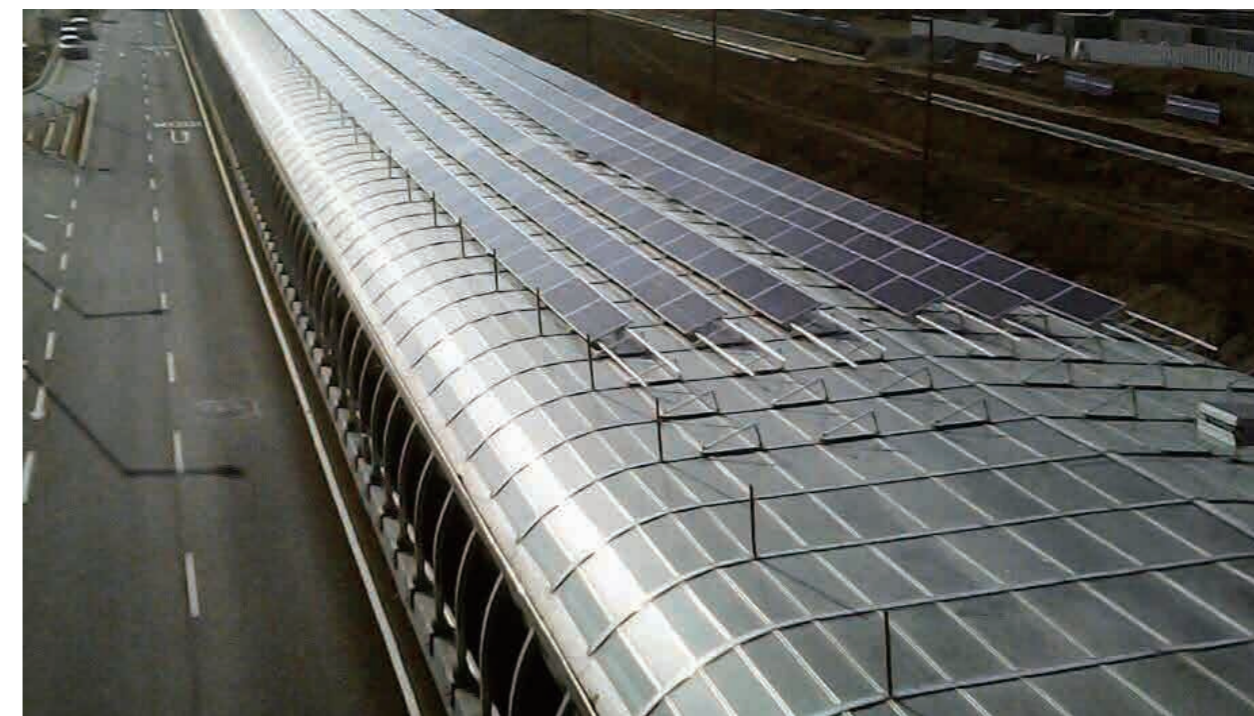


Triangle System (NT)

ROOF MOUNTING PROJECT IMAGE



Tin Roof System(L feet)



Triangle System

ROOF MOUNTING PROJECT IMAGE



Standing Seam Tin Roof System



Trapezoid Tin Roof System (Custom-made)

ROOF MOUNTING PROJECT IMAGE



Adjustable Tile System



Ballasted System

ROOF MOUNTING PROJECT IMAGE



Flat Rail System(Without Rail)

ROOF MOUNTING PROJECT IMAGE



Water-proof System



Shingle Tile Roof System



Triangle System (NT)

APPROVAL AND CERTIFICATE



SGS Aluminum Alloy Quality Report



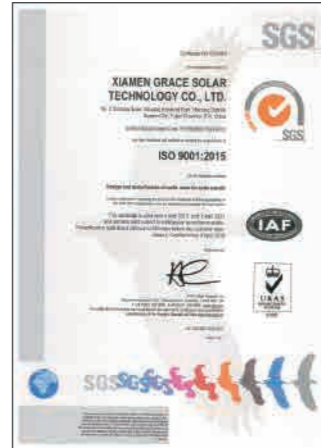
SGS Salt Spray Test Report



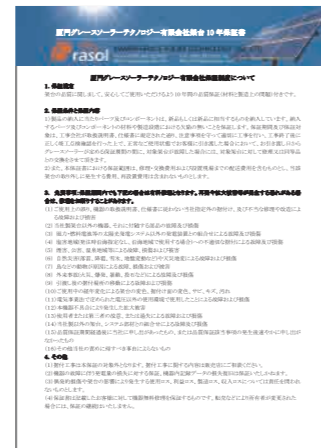
Screw Product Inspection Result Report



UL



ISO 9001:2015



Quality Warranty



TUV Certificate



UK MCS Certificate



Australia AS1170.2 Certificate

GROUND MOUNTING SYSTEM

Dear friends, we also have Ground Mounting System as below:



AL GROUND MOUNTING SYSTEM IV



DOUBLE-POST MOUNTING SYSTEM



PILE GROUND MOUNTING SYSTEM



UB GROUND MOUNTING SYSTEM



AL FARM PV MOUNTING SYSTEM



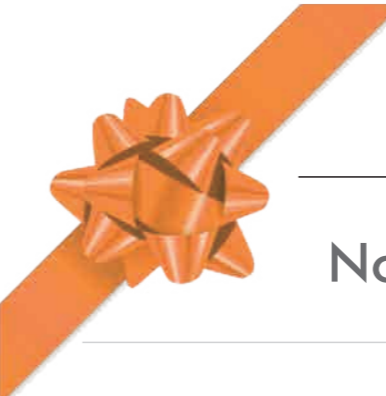
CARPORT PV MOUNTING SYSTEM



FLOATING PV PLANT



FENCE & GROUND SCREW



Note

Date: _____



OEM & ODM



➤ Factory Area

60,000m²

➤ Staff Number

500

➤ Grace Solar

- Capacity : 2GW/Year
- Product Line : 15 Lines
- Machines : About 50 Sets



Grasol 格瑞士

Marketing Performance

More than **15GW**

