

# Product Catalog Solar Mounting Solutions













#### Disclaimer:

We make every effort to ensure that all the information contained within our catalogue is complete and accurate. Due to continuous product optimization we reserve the right to make any changes or corrections to our products and this catalogue as well as individual product information at any time without prior notice. All previous catalogues and individual product information become invalid upon the release of the later publications.

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## ABOUT US Enerack

Xiamen Enerack Technology Co., Ltd. located in Xiamen city. Specialize in research, design, development, production, and service of solar PV Mounting systems. We are committed to providing customers with stable, reliable and cost-effective solutions of roof mounting system, ground mounting system, and construction of various photovoltaic power stations for civil and commercial use, government departments, power stations projects etc.

Enerack company owns a factory with more than 80 skilled workers, having over 10 years solar products production experience. With a complete R& D processing and high manufacturing capacity, strictly following ISO9001 quality control system. Our products design strictly in accordance with Australia AS/NZS1170.2, JIS C 8955, MCS012, TUV, UL2703, European building codes and other standards. Ensure that every code and regulation is fully complied with all applicable local or national building codes.

Enerack offering innovative design and integrative settlement solution to our customers based on years of experiences on design, production and sale. We achieved good trust from customers because of our stable and excellent products. We will try our best to become a world leading level supplier of solar photovoltaic systems integration solutions .









Global service



Design standard: TUV, AS 1170.2:2011, JIS C 8955:2011, UL 1703/2703



Direct racking supply



Experienced team since 2010



15 Years warranty









# Global Service & Proven Records

Enerack clamps and solar roof mount has been installed worldwide, from South Africa, Tanzania, Kenya of Africa, Netherlands, Hungary, Belgium, Sweden, Norway, Poland, Ukraine, Romania of Europe, Oman, Qatar, Dubai or Middle East, Sri Lanka, India, Indonesia, Malaysia, Thailand, Philippines, Singapore, Japan, Korea, China of Asia, Australia and New Zealand, to Canada, USA, Mexico, Panama, Costa Rica, Guatemala, Honduras, Colombia, Argentina, Brazil, Uruguay or America.

manufactured for Africa, Europe, Middle East, Asia, America, Australia and New Zealand.







East & West Ballasted PRO-Romania

Pole Mount-Australia

**Carport Mount-France** 





Ballasted Mounting-Bulgaria

**Ground Mount-Thailand** 

**Ground Mount-Romania** 



Carport Mount-Hungary

Tile Roof Mount-Slovenia

Metal Roof Mount-Hungary



Metal Roof Mount-Malaysia

**Ballasted PRO-Latvia** 

Tile Roof Mount-Hungary

### **Certificate**



12 December 2018 Project number: U117 FP1

Xiamen Enerack Technology Co. Ltd 203A, Norinco business plaza, NOS, Huli Avenue, Huli District, Xiamen, Fulian China, 361006.

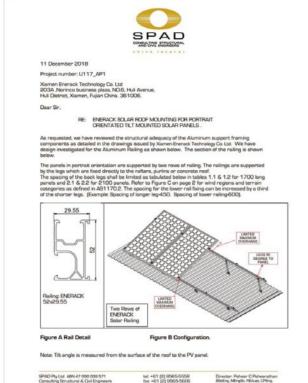
RE: ENERACK SOLAR ROOF MOUNTING FOR PORTRAIT ORIENTATED RUSH MOUNTED SOLAR PANELS

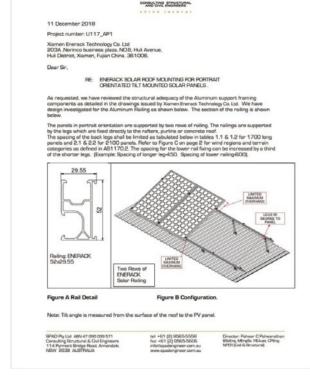
As Requested, we have reviewed the structural adequacy of the Aluminum support framing components as detailed in the drawings issued by Xiomen Enerack Technology Co. Ltd. We have design investigated for the Aluminum Railing as shown below. The section of the railing is shown below.

The panels are supported by two rows of railing. The railings are fixed directly to the rafters or to the

urlins. He spacing of the fixing of the Reling to the rulter/purlin shall be limited as tabulated below in tables 1,1,1,2,2,1,2,2. Refer on 'List of Tables' below to choose the appropriate apon table. Refer to Figure 1,0 m wind regions and torruin categories as defined in AS1170.2. The Central & Edge zones referred o in the tables are depicted in figures B on the following pages











Holder of Certificate: Xiamen Enerack Technology Co., Ltd.
2034, No.6 Huli Avenue
Huli District
381000 Xiamen
PEOPLE'S REPUBLIC OF CHINA

CERTIFICATE

Facility(ies): Certification Mark:



Product: Model(s): Parameters

Production

Photovoltaic (PV) Mounting System

system

onstruction site:
Snow conditions:
Wind zone:
Wind zone:
Max height of building: 18m
Angle of system:

System

Germany, the site altitude above see level is less than 285m.
Snow district: Zone 2
Wind zone 2
Max height of building: 18m
Angle of system:

30'

PPP 59029A-2013 according to:

703002003501-00

2025-05-24

my

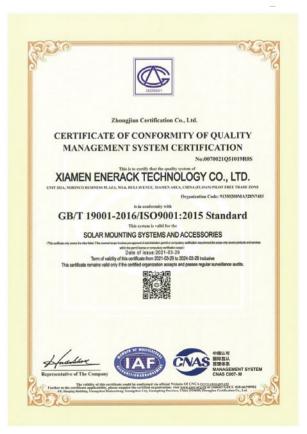








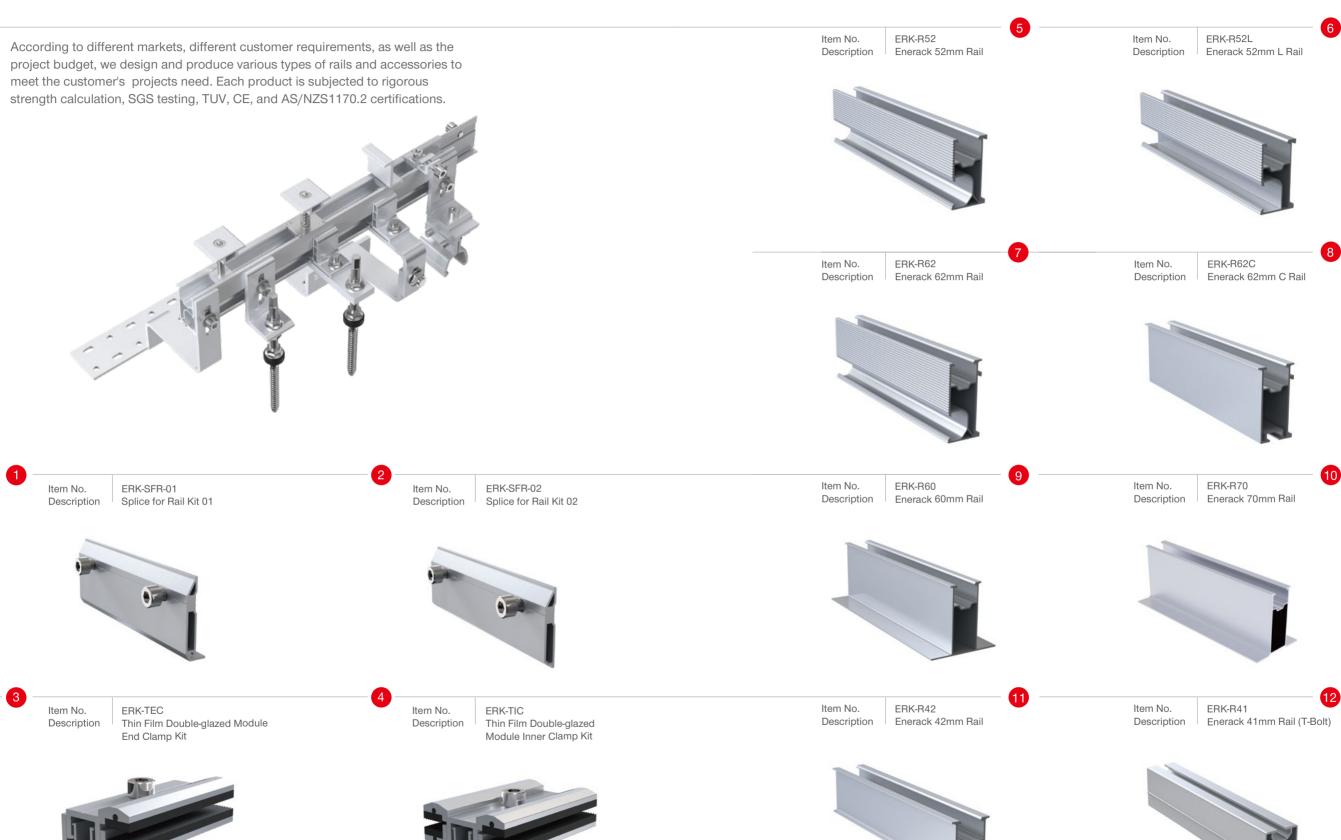




14

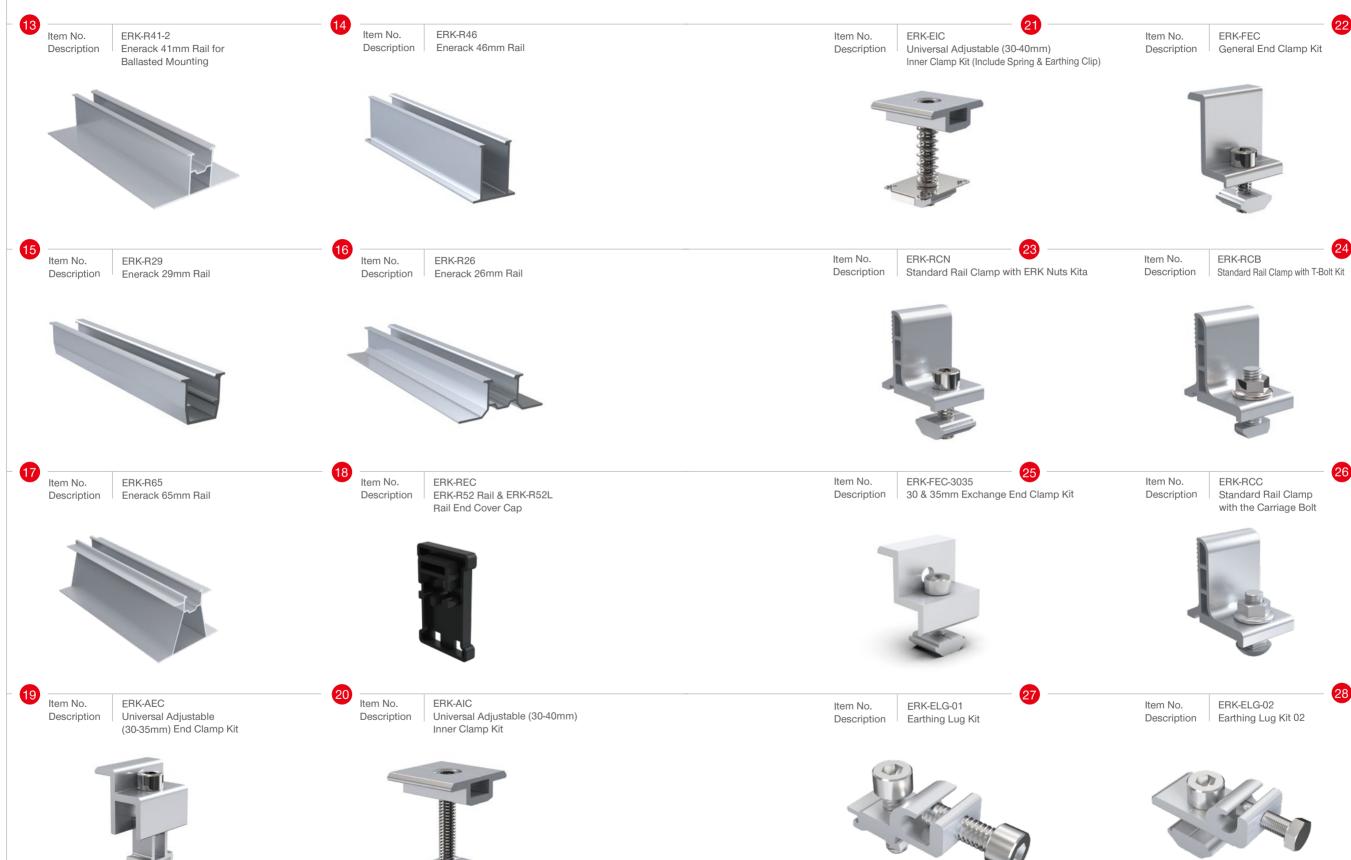
### Rail & Accessories





### Rail & Accessories





### **Rail & Accessories**





Item No.

ERK-ELG-03 Description Earthing Lug Kit 03



Item No. Description





ERK-CCP-03 Cable Clip for PV Panels for Holding 3 Cablesa



ERK-CCP-04 Cable Clip for PV Panels for Holding 2 Cables











Description

ERK-NBW ERK Nuts Assembly with Bolt and Washer Kit



Item No. ERK-TBK Description T-Bolt Kit

Item No. Description

ERK-CCP-05



ERK-CCP-06 Cable Clip for PV Panels for Holding 3 Cables







Cable Clip for PV Panels for Holding 4 Cables





Item No. Description

ERK-REL-A Standard Rail Earthing Plate Type A



ERK-REL-B Standard Rail Earthing Description Plate Type B



ERK-CCP-07 90°Cable Clip for PV Panels for Holding 2 Cables









Description

ERK-CCP-01 Cable Clip for PV Panels for Holding 3 Cables



Description

ERK-CCP-02 Cable Clip for PV Panels for Holding 2 Cables





### **Metal Roof Attachment**



Enerack Tin roof systems divided into two fixing methods:

- 1. Drilling solutions, like bracket L-feet, hanger bolt, T type hook etc.
- 2. Standing seam clamp, direct mounting, no damage to the roof.

A design that includes major specifications saves you inventory cost, quick and easy to install. Innovative design of rail connect base-support can effectively increase the product strength, ensure the safety of the product use. Enerack have a large variety of tin roof brackets for customers' choice Customization allowed according to customers' need to meet special installation requirements.

Technical features:	
Product name	Metal roof mounting system
Application	Metal roof
Inclination	Parallel to the roof
Material	AL 6005-T5, SUS 304, EPDM
Finish	AL 6005-T5 Anodized, SUS 304 Shot blasting
Module orientation	Landscape or Portrait







ERK-TRB-D25 Offset Hole L Feet for Corrugated or Trapezoidal Sheet Metal





Item No. Description

ERK-TRB-D03

Hanger Bolt L Feet for Corrugated Fibre Cement, Corrugated or Trapezoidal Sheet Metal (M10×180, M10×200, M10×250, M10×300)

Item No. Description

ERK-TRB-D26

Hanger Bolt Offset Hole L Feet for Corrugated Fibre Cement, Corrugated or Trapezoidal Sheet Metal (M10×180,

M10×200, M10×250, M10×300)











Item No. Description

ERK-TRB-D27 Height adjust plate for L feet

ERK-TRB-D22 L Feet for Trapezoidal Sheet Metal

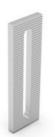
Item No. Description

ERK-TRB-D08 8# Tin Roof Hook for Trapezoidal Sheet Metal

Item No.

ERK-TRB-D07





Description







7# Tin Roof Hook for Trapezoidal Sheet Metal



21

Item No. Description

ERK-TRB-D05 Hanger Bolt for Corrugated Fibre Cement, Corrugated or Trapezoidal Sheet Metal (M10×180, M10×200, M10×250, M10×300)



ERK-TRB-D09 Asphalt Shingles Interface Description



Item No. Description

ERK-TRB-D06 6# Tin Roof Hook for Trapezoidal Sheet Metal



Item No. Description

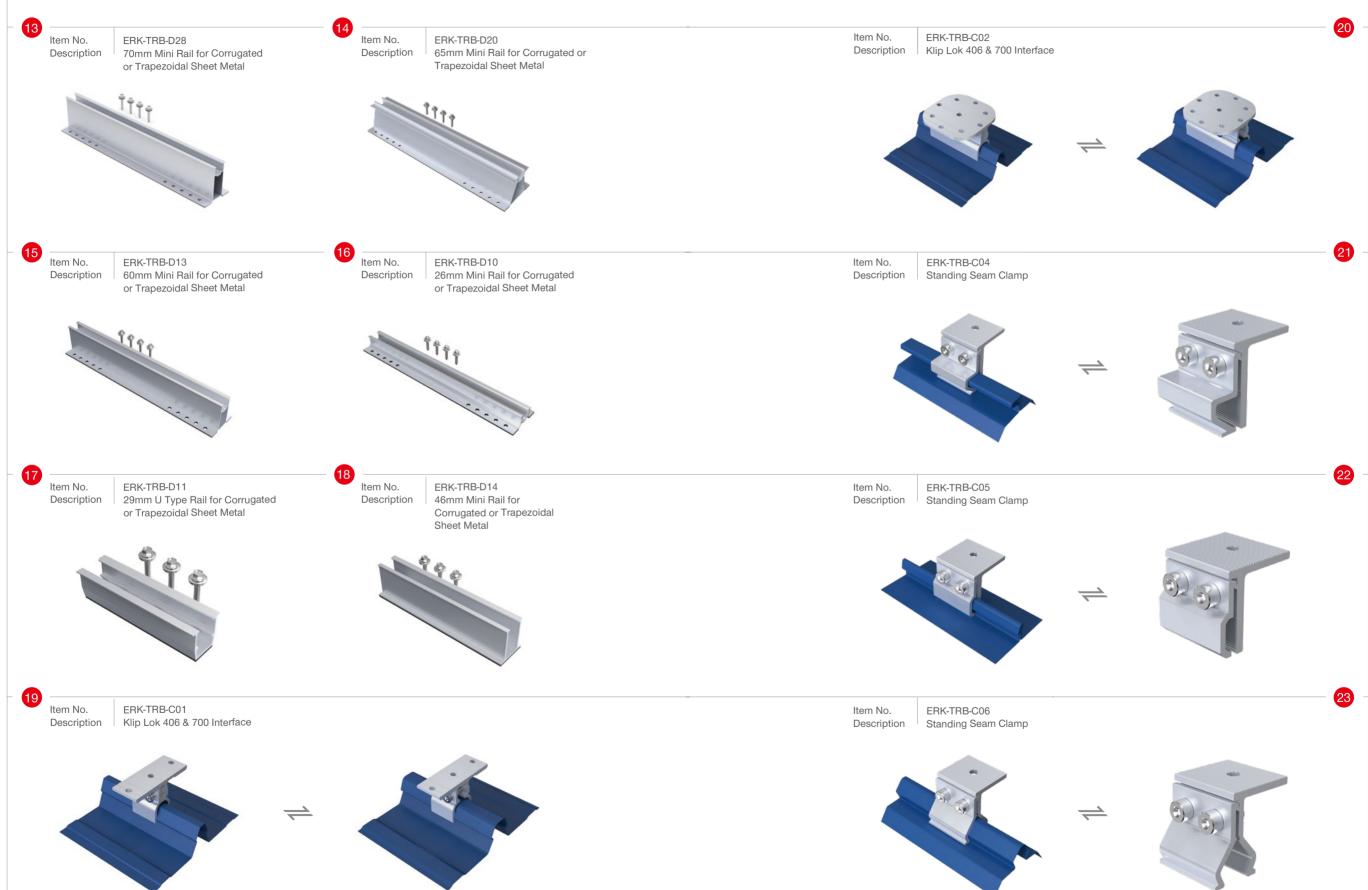
ERK-TRB-D21 21# Tin Roof Hook for Trapezoidal Sheet Metal





### **Metal Roof Attachment**

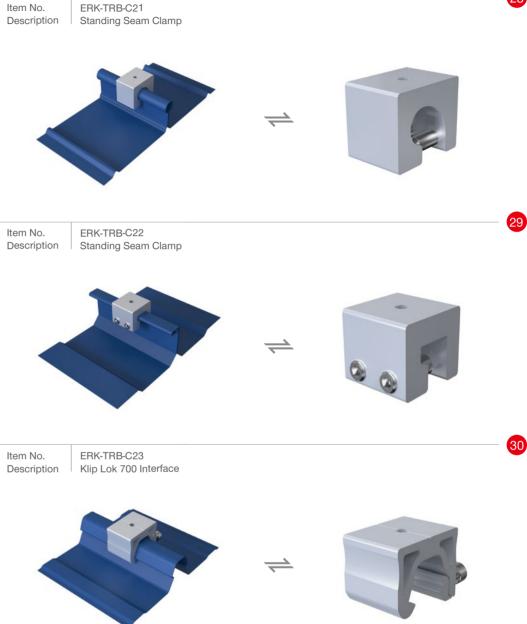








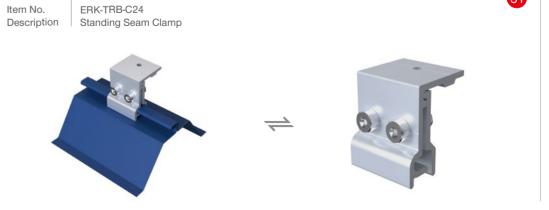












25

Item No.

Description

ERK-TRB-C16

ERK-TRB-C20

Description Lysaght Klip-lok 406 Interface

RiverClack Roofing Profile

### **Metal Roof Attachment**





### **Metal Roof Attachment**





### **Tile Roof Attachment**



ERK-TRH-T01

ERK-TRH-T03

ERK-TRH-T05

Tile Roof Hook

ERK-TRH-T07

Item No.

Enerack has many types of tile roof hooks, suitable for most roof types of tile, flat tile, slate tile, asphalt shingle tile.

A design that includes major specifications saves you

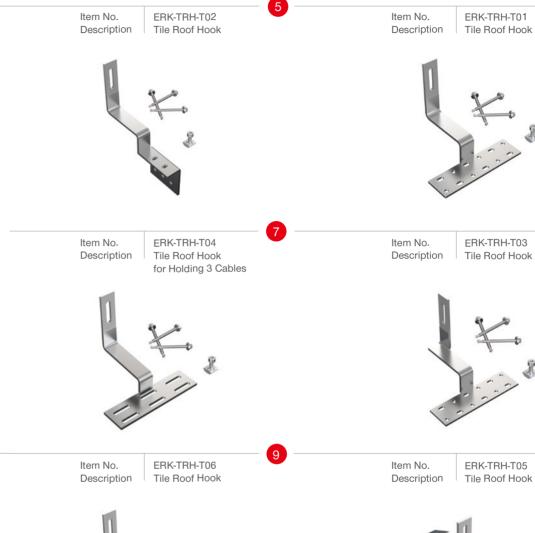
31

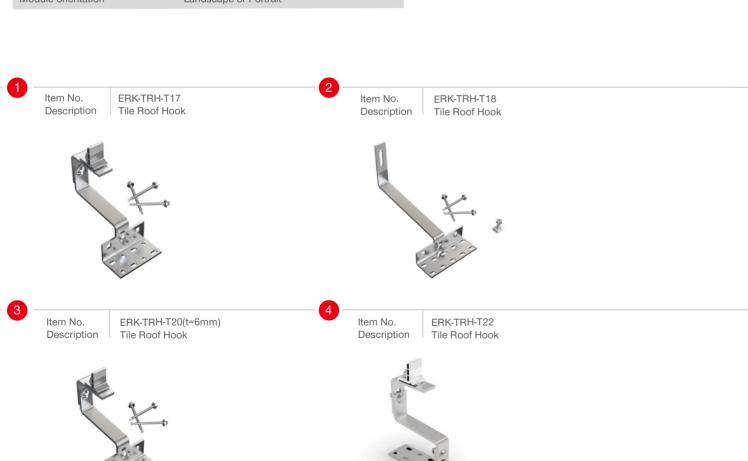
inventory cost, quick and easy to install. Innovative design of rail connect base-support can effectively increase the product strength, ensure the safety of the product use.

Enerack has a large variety of roof hooks provide customers options.

Customization allowed according to customers' need to meet special installation requirements.

Technical features:	
Product name	Tile roof mounting system
Application	Tile roof, Flat tile roof, Slate roof
Inclination	Parallel to the roof
Material	AL 6005-T5, SUS 304
Finish	AL 6005-T5 Anodized, SUS 304 Shot blasting
Module orientation	Landscape or Portrait







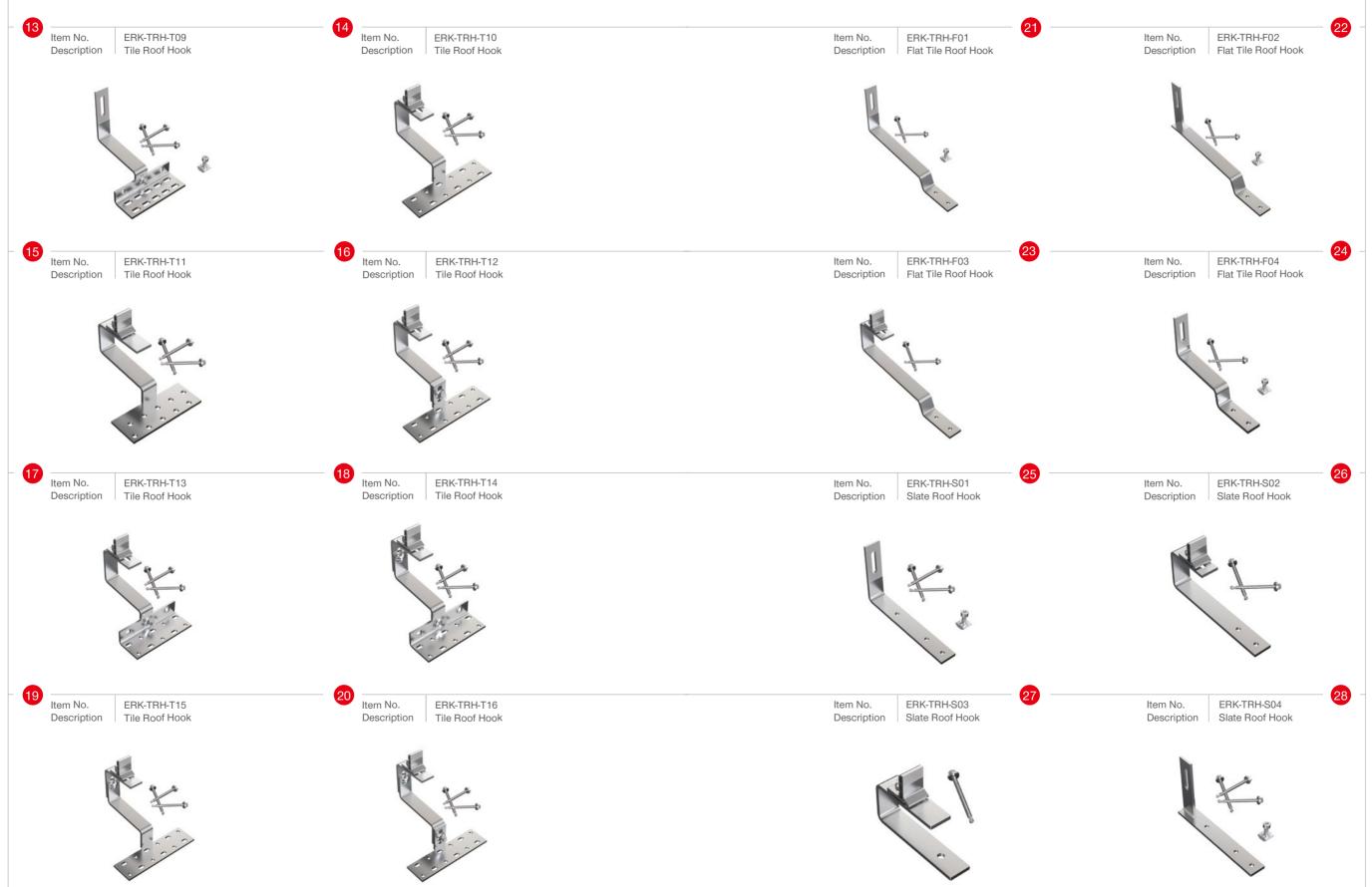
ERK-TRH-T08

Item No.



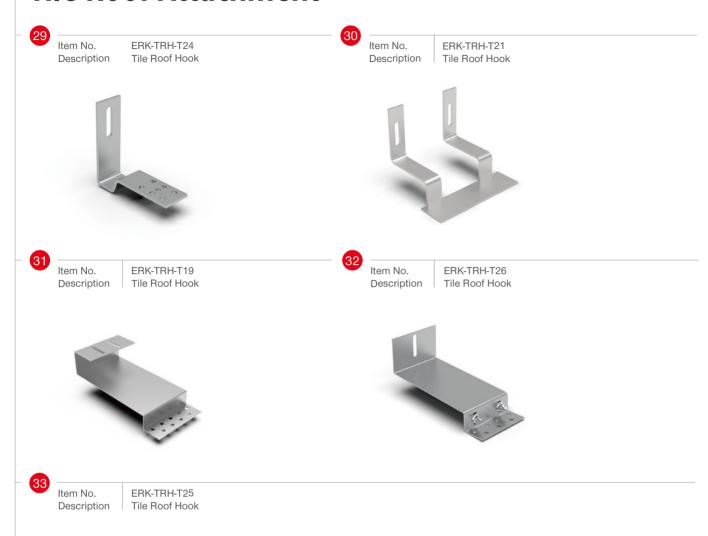
### **Tile Roof Attachment**





### **Tile Roof Attachment**

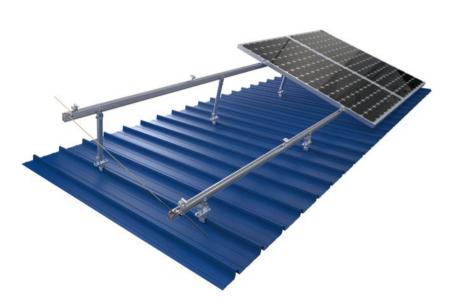




### **Tilt Mounting**



| ERK-FEC-BS



Enerack adjustable tilt system is used for metal roof concrete roof. Fixed or adjustable angles as 10-15 deg, 15-30 deg and 30-60 degree are for your option to maximize energy production.

All Products pre-assembled before shipment, to make the installation easy and quick. Unique

design of inner and outer tube with adjustable joints, makes structure stronger, different from the same type products on the market today, and widely compatible with standing seam clamp.

Technical features:		
Product name	Adjustable tilt mounting system	
Application	Flat concrete roof, metal roof	
Inclination	10-15°, 15-30°, 30-60° or customized	
Material	AL 6005-T5, SUS 304, EPDM	
Finish	AL 6005-T5 Anodized	
Module orientation	Landscape or Portrait	







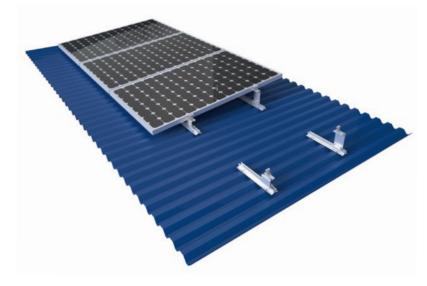
Description Universal Adjustable (30-40mm) Inner Clamp Kit (Include Spring & Earthing Clip)





ERK-ARL-1015 ERK-ARL-1530 ERK-ARL-3060

10-15° Adjustable Rear Leg 15-30° Adjustable Rear Leg 30-60° Adjustable Rear Leg



Mini Rail with 5 degree support base, lift up the height of the solar panel to achieve cooling conditions, thus maximizing power generation. Simple design, easy to install, with good price.

Technical features:	
Product name	Mini Rail Support mounting system
Application	Metal roof
Inclination	5°,10°
Material	AL 6005-T5, SUS 304
Finish	AL 6005-T5 Anodized
Module orientation	Portrait



ERK-MFS-5 Mini Rail 5°

Support Front Leg

Item No. Description



Description

ERK-MRS-5 Mini Rail 5°

Support Rear Leg



ERK-MFS-10

Mini Rail 10°

Support Front Leg





ERK-AIC-BS Universal Adjustable (30-40mm) Inner Clamp Kit



ERK-TRB-D10 Description 26mm Mini Rail for Corrugated or Trapezoidal Sheet Metal



ERK-MRS-10 Description | Mini Rail 10° Support Rear Leg



### **Tilt Mounting**





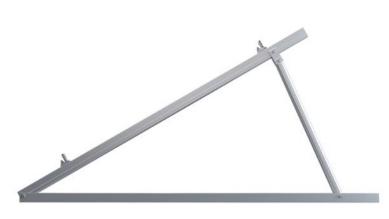
Enerack Tripod system is used for metal roof concrete roof, you can adjust angles as 10-15deg, 15-30deg and 30-60deg options to maximize energy production. All Products pre-assembled before shipment, to make the installation easy and quick for saving your labor cost and time. Customized angle allowed according to customers' need to meet special installation requirements.

Technical features:		
Product name	Tripod mounting system	
Application	Flat concrete roof, metal roof, open terrain	
Inclination	Customized	
Material	AL 6005-T5, SUS 304	
Finish	AL 6005-T5 Anodized	
Module orientation	Landscape or Portrait	

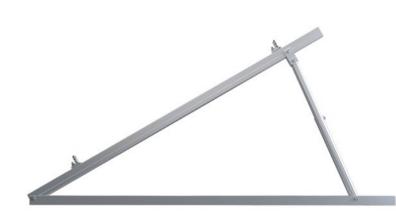




Enerack Tripod systems have fixed angle and adjustable angle design for options.



1.Fixed Angle Tripod system(ERK-FTP-X): According to customers' need ,we customize different sizes and angles to make a fast, easy and lower cost installation, this is Suitable for installation at known building angle.



2.Adjustable Angel Tripod (ERK-ATP-X): According to the site need to adjust the tripod angle for installation demand. It is suitable for multi-angle installation projects.





#### 3 Assembly



### **Ballasted-PRO Mounting**

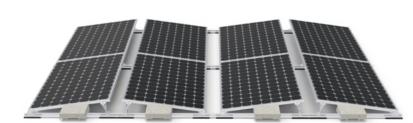




#### 10 or 15 Degree dual tilt

- Maximal area utilized
- Maximal PV quantity installed
- Enerack E-W 10 or 15 is for solar installed on a flat roof, for maximized roof space utilized, and PV quantity installed.
- All parts are made of extruded aluminum, with stainless steel 304 fasteners
- EPDM foam tape is installed at the bottom of the system, separated the roof and system.
- EPDM foam tape provides better friction, and compensates for the height difference when the roof is uneven.

Technical features:		
Product name	E-W 10 or 15	
Application	Flat roof	
Tilt	10°or 15°	
System Material	extruded aluminum profile 6005 T5	
Fastener material	Stainelss steel 304	
Finish	Anodized	
Module orientation	Landscape	











ERK-BPF-10



ERK-BPR-10

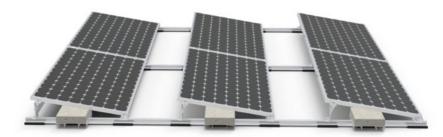


ERK-BPF15



ERK-BPR15

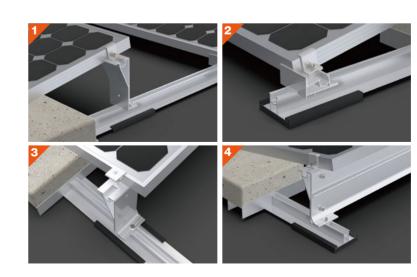




#### 10 or 15 Degree tilt

- Better panel output
- The Enerack S Ballast is for solar PV to be fast and easily installed on a flat roof with 10 or 15 tilt degree inclination. All parts are made of extruded aluminum, with stainless steel 304 fasteners
- EPDM foam tape is installed at the bottom of the system, separated the roof and system.
- EPDM foam tape provides better friction and compensates for the height difference when the roof is uneven.

Technical features:	
Product name	S 10 or 15
Application	Flat roof
Tilt	10°or 15°
System Material	extruded aluminum profile 6005 T5
Fastener material	Stainelss steel 304
Finish	Anodized
Module orientation	Landscape









ERK-BST-02



ERK-SFR-04



ERK-EFT-03



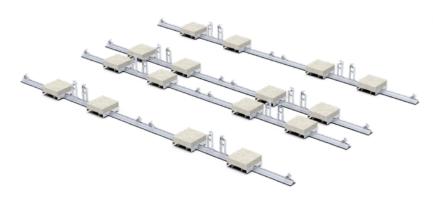
### **Ballasted-ULT Mounting**





Enerack East & West Ballasted-Ult Systems suitable for concrete flat roof and trapezoidal sheet metal roof. Unlike the traditional solar panel fixing method, whose fixing point at the end of the long side of the panel, this series help solar panels to be fixed anywhere on the long side. Therefore, solar panels could withstand greater wind and snow pressure. There is no need to use expansion bolts or chemical bolts on the roof, no damage to roof. The system connects all the panels with the rails into a whole. East-west facing panels have a great effect on resisting wind loads. A combination of high quality aluminium components make a robust, reliable system and quick and easy installation.

Technical features	:
Product name	Ballasted-ULT Series
Application	Concrete flat roof and trapezoidal sheet metal roof
Tilt	10°or 15°
System Material	Extruded aluminum profile 6005 T5, EPDM
Fastener material	Stainless steel 304
Finish	Anodized
Module orientation	Landscape



#### **1** Assembly



ERK-BUR-10



ERK-R41-02



ERK-BST-02



ERK-SFR-04



ERK-EFT-03



#### **Product Feature:**

Solar panels could withstand greater wind and snow pressure.

Maximal area utilized.

Maximal PV quantity installed.

Maximized roof space utilized, and PV quantity installed.

Better panel output.

Solar PV to be fast and easily installed on a flat roof with 10 tilt degree inclination.

All parts are made of extruded aluminum, with stainless steel 304 fasteners. EPDM foam tape is installed at the bottom of the system, separated the roof and system.

EPDM foam tape provides better friction and compensates for the height difference when the roof is uneven.



East & West 10° for concrete flat roof



South or North 10° for concrete flat roof



South or North 10° for trapezoidal sheet metal roof



### ERK-BUF-15



ERK-BUR-15

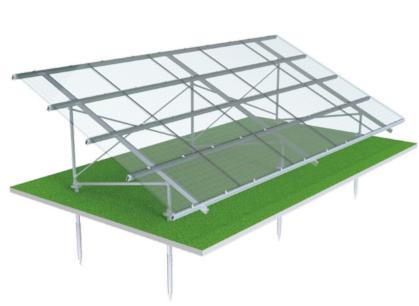






### **Ground Mounting**





#### **Standard Ground Mounting System**

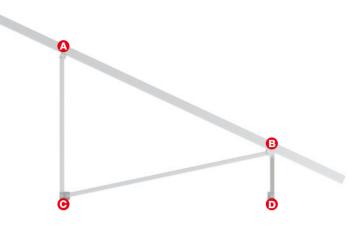
Aluminum ground mount, optimized for lightweight, quick and efficient installation with flexible on engineering upon site conditions.

Optional on foundation by ground screw or concrete. Maximize pre-assembled before shipment

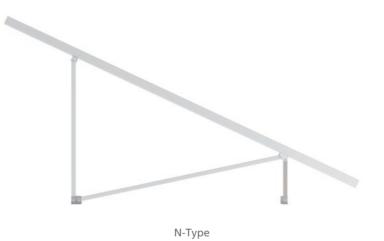
Technical features:	
Product name	Standard ground mounting system
Application	Flat concrete roof, open terrain
Inclination	Customized
Material	AL 6005-T5, SUS 304, Q235
Finish	AL 6005-T5 Anodized, Q235 Hot-dip galvanizing
Module orientation	Landscape or Portrait

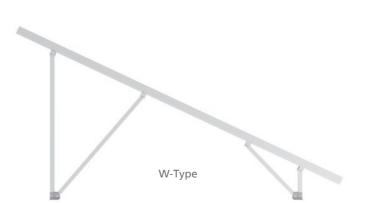


Assembly



Ground mounting system has been maximized pre-assembly before shipment, which make the installation more convenient.





2 Pre-Assembly











 Depending on the different design conditions, pre-assembly support is generally designed into the following two shapes:

The N-Type pre-assembly support is mainly used for the small wind & snow load condition projects.(2-4 columns)

The W-type pre-assembly support is mainly for the 4-5 columns wind & snow load condition projects. We will add cross support to make the structure stronger if the ground height is higher or wind & snow load is larger.

### **Ground Mounting**

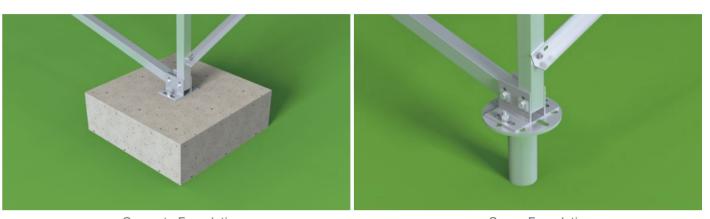








Ground mounting system are commonly used for Concrete Foundation and Screw Foundation.



Concrete Foundation Screw Foundation

Item	Concrete Foundation	Screw Foundation
Applicable terrain	Flat,EvenTilt,Ladder	
Applicable geology (reference)	Random	SWS3≤N≤10 SWS Test, cohesive soil 3 ≤N≤10
Difficulty Level	Complicated	Easy
Cost	Higher	Lower
Adjustment range	Not convenient to adjust the height of base	Larger
Corrosion resistance	Anti-Corrosion	Hot-dip galvanizing on the surface of the screw foundation, which has met the anti-corrosion requirements of the service life
Conventional pile compression and tensile strength reference values(KN)		

#### N=10 N=3 N=5 N=7 Ground Screw compression compression compression compression Resistance Resistance Resistance Length Resistance Resistance Resistance Resistance 8.7 14.6 15.2 20.4 29.2 30.6 1600 9.1 21.4 1800 9.9 10.2 16.5 17.1 23.1 24 33 34.4 2000 11 11.4 18.4 19 25.8 26.7 36.8 38.2 2200 12.2 12.5 20.3 21 28.4 29.4 40.6 42 2500 13.9 14.2 23.2 23.8 32.4 33.4 47.8

Remarks: The N value of the soil in this table are based on the Swedish penetration test (SWS).

### **Ground Mounting**

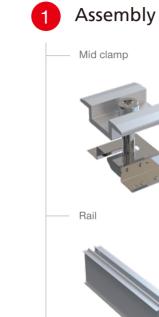




#### **U Pile Ground Mounting System**

Enerack U Pile Ground Mounting Systems suitable for large scale power station installation, Pile to the ground makes installation faster and lower cost than others. Each components are Maximize pre-assembled, widely save your labor cost and installation time. Customization allowed according to project wind &snow load, provide economic & effective solutions.



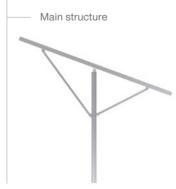




End clamp







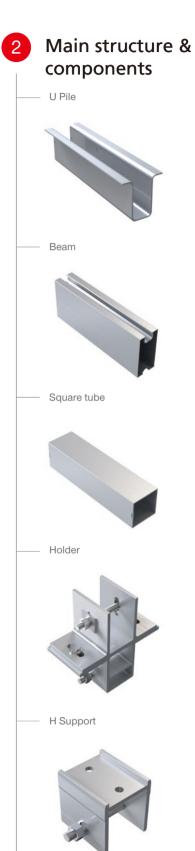


The U type Pile Ground Mounting System has been folded into a rectangular shape before shipment. Easy to transport.

Technical features:	
Product name	U Pile ground mounting system
Application	Open terrain
Inclination	Customized
Material	AL 6005-T5, SUS 304, Q235
Finish	AL 6005-T5 Anodized, Q235 Hot-dip galvanizing
Module orientation	Landscape or Portrait

	Conventional Upile compression and tensile strength reference values (KN)								
Penetration depth	N=3		N=5		N=7		N=10		
	Resistance	Compressi on Resistance	Resistance	Compressi on Resistance	Resistance	Compressi on Resistance	Resistance	Compressi on Resistance	
1500	9.5	11.5	15.7	19.3	21.9	27	31.13	38.6	
1600	10.1	12.3	16.7	20.6	23.3	28.8	3.235	41.2	
1700	10.8	13.1	17.8	21.8	24.8	30.6	.337.	43.7	
1800	11.4	13.9	18.8	23.1	26.2	32.4	341.4	46.3	
2000	12.6	15.4	20.8	25.7	29.1	36	45.65	51.5	
2200	13.8	17	22.9	28.3	32	39.6	1.7	56.6	
2500	15.7	19.3	26	32.1	36.3	45		64.3	

Remarks: The N value of the soil in this table are based on the Swedish penetration test (SWS).



### **Carport Mounting**





#### **Carport Mounting System**

Enerack Carport Mounting Systems offers a simplified and economical solutions that provides a perfect combination of Shade parking and solar power generation as well as electric vehicle charging. It applied for family parking, commercial parking, awnings and even bus stops.



### 1 Structure & components

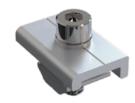




- End clamp



Rail fixing clamp



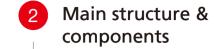
Main structure





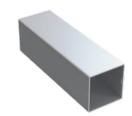
highly pre-assembled main structure for solar modules landscape or portrait 5°/8°/10°inclination or custom customized and engineered to project maximal span up to 5.4m cover up to 2 parking spaces per span.

Technical features:				
Product name	Carport mounting system			
Application	Solar parking structure			
Inclination	5°, 8°,10° or customized			
Material	AL 6005-T5, SUS 304			
Finish	AL 6005-T5 Anodized			
Module orientation	Landscape			





- Square tube



H Support



Base



## **Waterproof Carport System**





Our carport systems are sold to Africa, the Middle East, Southeast Asia, Europe and the South America. The idle area of the parking shed is used to build a photovoltaic parking shed, and the combination of photovoltaic power generation and carport is the simplest one in the combination of photovoltaic and building. It can not only achieve all the functions of the traditional carport, but also bring electricity generation benefits to the owner. It is stored in the battery by the charging device or directly supplied to the electric vehicle to charge for self-use. You can even use extra power to get online. Using aluminum alloy structure bracket, simple installation, generous, fashionable, elegant.

Product Overview:					
Install Site	Flat outdoor				
Material	AL6005-T5, SUS304				
Standards	AS/NZ1170.2、 JIS C 8955、 MCS 012、 TUV、 UL2703 etc				
Tilt Angle	5°, 30°				





#### Features:

- 1. Good heat absorption.
- 2. Good waterproof and rain protection, convenient installation, and flexibility.
- 3. Make full use of the original site to provide green energy.
- 4. Suitable for frame panel:Poly modules, double glass module etc.

Installation place: home, company, shopping mall, large parking lot.

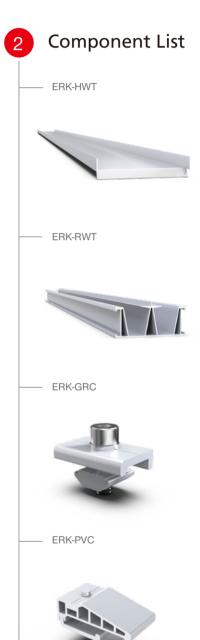
Parking category: battery car/bicycle, car, bus.

Number of parking Spaces: 1 parking space, 2 parking Spaces,

3 parking Spaces, multiple parking Spaces (large span).

By row: single row parking space, double row parking space.







#### Product Catalog Solar Mounting Solutions







Web



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