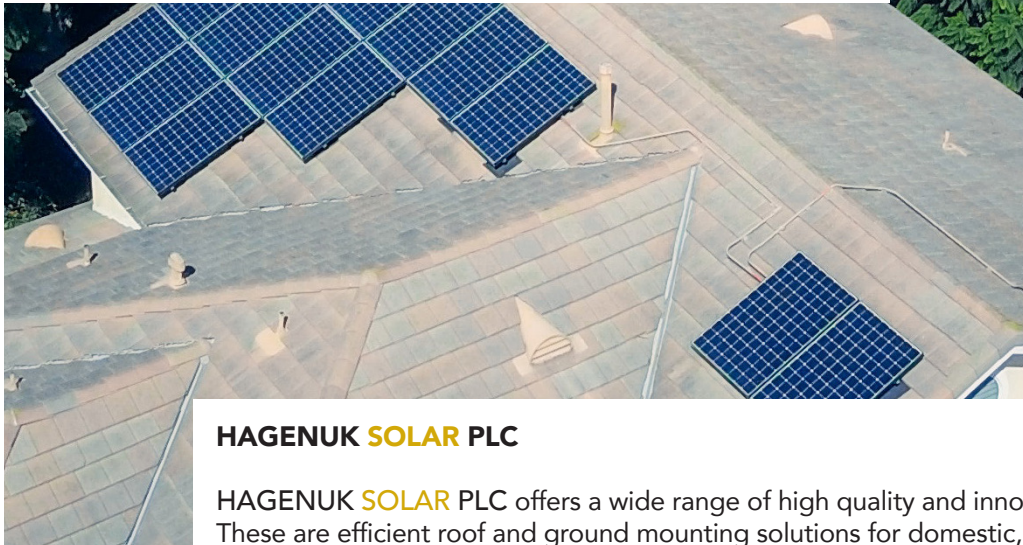


## MOUNTING SYSTEMS FOR HAGENUK PV MODULES



### HAGENUK SOLAR PLC

HAGENUK SOLAR PLC offers a wide range of high quality and innovative PV mounting systems. These are efficient roof and ground mounting solutions for domestic, for residential, agricultural, industrial and other commercial projects.

HAGENUK SOLAR PLC has many universal or customised PV mounting solutions, that can be mounted in a variety of different application environments.

### TILE ROOF PV MOUNTING SYSTEM

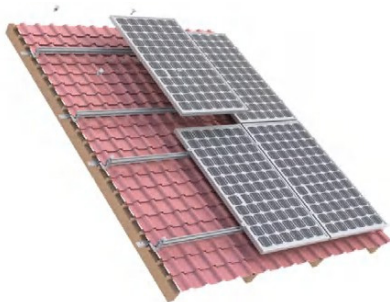
The hagenuk tile roof PV mounting system with great flexibility mainly used for residential roof, and use aluminum alloy rail with stainless steel roof hook to install, suitable for installing framed and frameless modules flushed to the pitched roof. Special extruded aluminum rail, pre-assembled clamps and varied roof hooks or brackets with tilt-in module ensure easy and quick installation.

#### SPEZIFICATION

- Wind Speed: < 60m/s
- Snow load: 1.4 KN/m<sup>2</sup>
- Standard: AS1170.2
- Degree: parallel to the roof
- Arrangement: Vertical or Horizontal
- Warranty: 10 years

#### INSTALLTION MANUAL

1. Installing roof hook by tapping screws.
2. Installing rail by side of roof hook, hook's hole can adjust the height of rail.
3. Two rails supported each panel, fix panels by mid clamp and end clamp kit.



### TILE FOOG MOUNTING ACSESSORIES

#### MOUNTING RAIL

Rail, Extruded Aluminum Profile, A16005-T52560mm, 3405 and 4200mm are the standard size



#### ROOF HOOK KIT

Tile rook hook, Stainless Steel SUS304  
Function: Fix the rail to the rafter



#### END CLAMP . MID CLAMP KIT

A16005-T5 & Stainless Steel A2-70  
Function: Fix PV panel at the end

#### ROOF HOOK

##### PART-NO. HDH-PT02

Material: Stainless steel  
Tapping screw  
Socket bolt kit  
Finish: N/A  
Remark: The length of tile is long than normal



#### ROOF HOOK

##### PART-NO. HDH-PT03

Material: Stainless steel  
Tapping screw  
Socket bolt kit  
Finish: N/A  
Remark: Used for another type rails



Also we can choose other according to other actual section of tile roof as below

HDH-PT04



HDH-PT05



HDH-PT06



HDH-PT07



HDH-PT08



## METAL ROOF PV MOUNTING

With variety of different tin roof brackets, HAGENUK PV tin roof mounting system can meet trapezoid/corrugated metal roof and standing seam roof demand with or without penetrating on the roof. hagenuk has the excellent engineer team and quality management system to provide the perfect service.

### SPEZIFICATION

- Wind speed: < 60m/s
- Snow load: 1.4 KN/m<sup>2</sup>
- Standard: AS1170.2
- Degree: Parallel to thr roof
- Arrangement: Vertical or Horizontal
- Warranty: 10 years



### INSTALLTION MANUAL

1. Fix L-feet by tapping screw, ensure waterproof by rubber plate.
2. Installing rail by side of L-feet, L-feet's hole can adjust the height of rail.
3. Two rails supported each panel, fix panels by mid clamp and end clamp kit.

## GROUND PV MOUNTING SYSTEM FOR 2 ROWS TYPE

The hagenuk Ground Mount is applicable to install the PV panel on a open field. Not only for residential, but also widely used for commercial project. Strong and powerful structure, nice appearance and lowest cost make this system quite popular all over the world.

### SPEZIFICATION

- Wind speed: <42m/s
- Snow load: 1.4 KN/m<sup>2</sup>
- Standard: AS1170.2
- Degree: 10°-70°
- Arrangement: Vertical
- Warranty: 10 years



### INSTALLATION MANUAL

1. Install posts first, and then install main beam and diagonal brace on 2 columns.
2. Install mounting rail upon main beam.
3. Install PV panels by mid clamp and end clamps.

### MAIN PARTS SHOW AS BELOW:

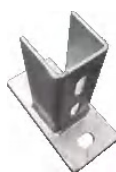
Mounting rail, Mainbeam  
Diagonal brace back support

Splice

Front Rear Post

Connection

End clamp Mid clamp kit



## METAL ROOF MOUNTING ACCESSORIES

### MOUNTING RAIL

Rail, Extruded Aluminum Profile, A16005-T52560mm, 3405 and 4200mm are the standard size



### L-FEEL KIT

A16005-T5

Function: Fix the rail to the beam



### END CLAMP .MID CLAMP KIT

A16005-T5 & Stainless Steel A2-70

Function: Fix PV panel at the end



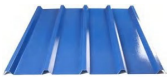
### TRAPEZOID ROOF BRACKET (NORMAL TYPE)

PART-NO.: HTD-PM02

Material: Stainless steel + Tapping screw + Socket bolt kit

Finish: N/A

Remark: By short Tapping screw to fix bracket



### CORRUGATED ROOF BRACKET (NORMAL TYPE)

PART-NO.: HGD-PM03

Material: Stainless steel + hanger bolt + Socket bolt kit

Finish: N/A

Remark: Drilled into purlin of metal roof



### SEAM CLAMP (NORMAL TYPE)

PART-NO.: HFK-PM04

Material: Aluminum alloy + Socket bolt kit

Finish: N/A

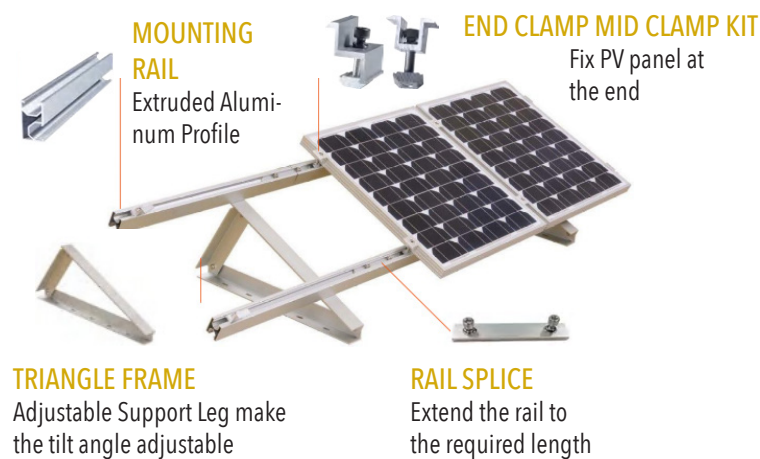
Remark: Seam clamp





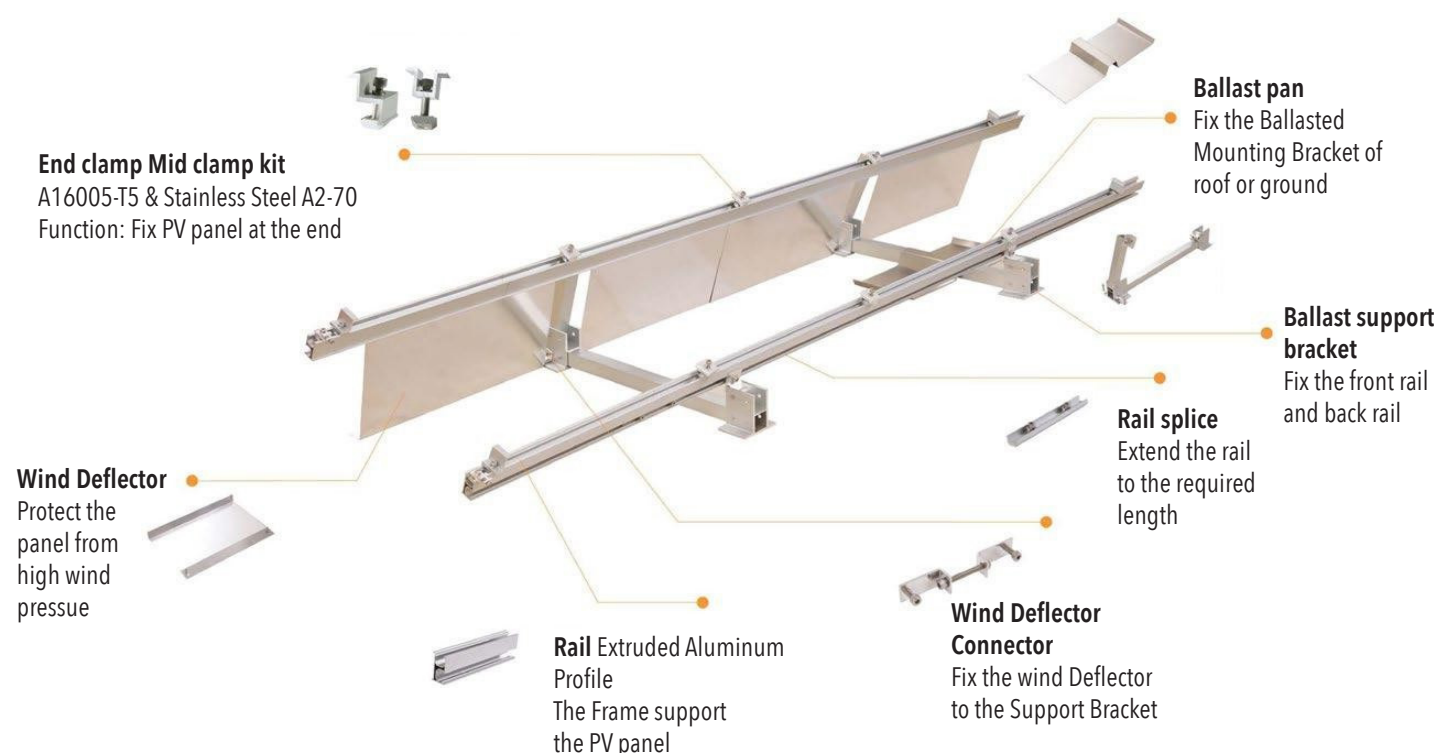
## TRIANGLE MOUNTING SYSTEM

Adjustable Triangle PV Racking System is specially designed for easy installation of PV panel to tilt a certain angle with flat roof. The mounting system design provides a strong and sturdy support for PV modules, it can be a fixed angle or adjustable such as 10~15 degree 15~30 degree and 30~60 degree for your requirement. Using our innovative rail and pre-assembled components like tilt-in T module, clamp kit and highly pre-assembled tilt leg. This metal adjustable tilt PV mounting makes the installation easy and quick to save your labor cost and time.



## BALLASTED MOUNTING SYSTEM

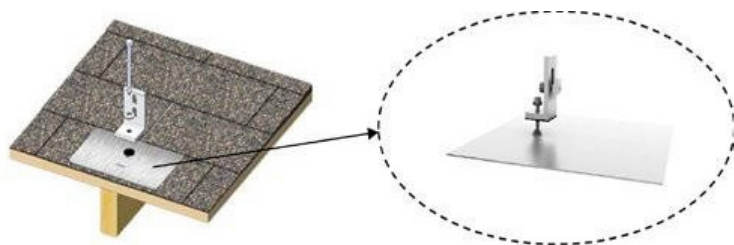
The hagenuk PV mounting system is a highly engineered solution which can effectively reduce the influence of wind on the photovoltaic system. Also this one type can secure the array without damaging the flat roof, it is compatible with the usual framed modules and typically does not require roof penetrations. Made of light weight and strong aluminum construction, ballasted solution components are preassembled and pre-cut to prevent corrosion and save your installation time and labor cost.



## ASPHALT SHINGLE ROOF PV MOUNTING SYSTEM

The hagenuk Asphalt shingle roof PV mounting system used for support PV panel on asphalt shingle roof without any degree. Just use simple tools will be fine to complete all accessories installation.

Main parts we use are aluminum alloy 6063-T5 material, surface treat will be anodizing. All bolts pre-assembled will be stainless steel SUS304 material. Tapping screw which need to be drilled into asphalt shingle roof by L-feet holes, so we use by carbon steel material with hot dip galvanized surface treatment. All mounting structure has 10- year warranty and 25-year service life.



## SCHINDELDACH ZUBEHÖR:

### MOUNTING RAIL

Rail, Extruded Aluminum Profile, A16005-T52560mm, 3405 and 4200mm are the standard size



### L-FEEL KIT

A16005-T5

Function: Fix the rail to the beam



### END CLAMP .MID CLAMP KIT

A16005-T5 & Stainless Steel A2-70

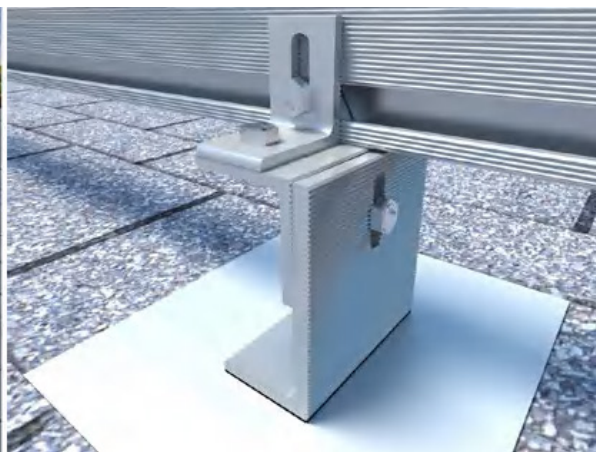
Function: Fix PV panel at the end



### RAIL SPLICE KIT



### ALUMINUM INSERT NUT





## GROUND SCREW STRUCTURE

The hagenuk Ground Screw structure with features :










- convenient installation
- low cost
- suitable for large-scale photovoltaic power station .

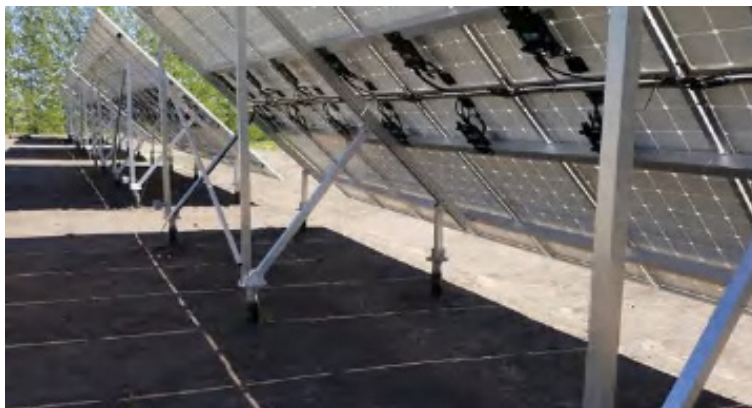
Ground Screw drilling into the earth , make sure connection is firm, construction is convenient , easy to install bracket foot. The main structure is HDG steel , beautiful appearance , strong structure and reliable.



### SPEZIFICATION

- Install site: Ground
- Installtion angle: customers' requirement
- Max Wind speed: <60m/s
- Snow load: <1,2KN/m2
- Standard: GB50009, DIN 1055
- Material:Q235B
- Warranty:10 years warranty and 20 years service life

Type	HBA-001	HBA-002	HBA-003	HBA-004	HBA-005	HBA-006	HBA-007	HBA-008	HBA-009
									
Size (Pmax/w)	Ground screw we choose according to actual soil factors or customers' requirements.								
Finish (Vmp/V)	HD G	HD G	HD G	HD G	HD G	HD G	HD G	HD G	HD G
Remark (Imp/A)	Normal size: 76*3*1600mm/1800mm/2000mm; Big blades or small blades; With flange or without flange.								



Note: Illustrations similar.

**HAGENUK SOLAR PLC**  
Grangegorman Court  
2C Grangegorman Lower  
D07 PW9N Dublin 7  
Ireland

**BRANCH OFFICE GERMANY**  
Im kleinen Bruch 7  
D - 76149 Karlsruhe/Germany

**Tel:** +49 721 96 14 86 48  
**Fax:** +49 721 96 14 86 56  
**Mail:** [info@hagenuk-solar.com](mailto:info@hagenuk-solar.com)