

# SOLAR ROOF RACKING SYSTEM

# CY Solar



For cement roof



For cement roof

(without penetrating)



For metal roof

## FLAT ROOF RACKING SYSTEM

## PENETRATING TYPE



### Introduction:

CY-ZJ06 is designed for flat roof or pitched roof with inclination less than 10 degrees. The high-quality aluminum material makes it has a good performance on anti-corrosion. Although this is an penetrating racking system, it can use the concrete foundation to protect the roof. Due to the concise design, it is delivered pre-assembled with solid packing material. Besides, it saves the installation time and labor at site. Your project schedule will be shortened and budget will be reduced accordingly.

### Benefits:

1. Best price value available.
2. Less material and less shipping costs.
3. Highly pre-assembly at factory.
4. 15-year warranty and 30 years of service life is promised.
5. Flexibility of panel arrangements.

### Technical data:

Applicable roof type	Flat concrete or metal roof(or with inclination less than 10 °)
Material	Aluminum 6005 T5
Arrangement of module	Customized
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years

### Standard and certifications:

1. ASCE / SEI 7-10

### DETAILS OF STRUCTURE



### Advices for Best Structure Design:

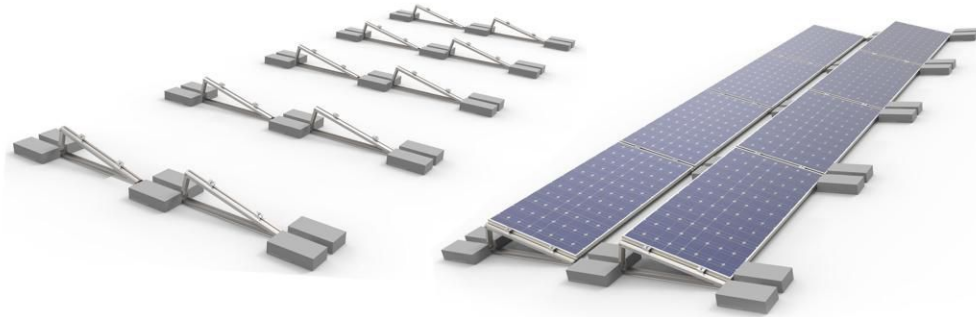
1. Module array: 1 row in vertical.
2. Module size: Any type.
3. Module inclination: Based on the latitude of construction site.





## SOLAR ROOF RACKING SYSTEM

# CY Solar



## FLAT BALLAST RACKING SYSTEM

### Introduction:

This racking system CY-ZJ07 is applied to large commercial solar plant and plant for public utilities.

CY-ZJ07 is designed for flat and low-slop roof which is suitable for both frame and frameless modules. It is a ballast system which does not need to penetrate the roof. So the roof is totally protected, and it saves a lot of installation time at site.

This system is made of stainless steel and aluminum which not only lowers the weight of whole system but improve the ability of anti-corrosion.

The R&D team of CY Solar draw lessons from the experience on both domestic and foreign project installation, and devote themselves to improving design based on mechanics. This kind of system is a buckle-into type which does not need any clamp or bolt. The installation work is very easy and fast.

80% of the components are pre-assembled at our factory, only two installation steps will complete the whole installation. It very much saves your installation time and labor.

### Benefits:

1. The concise design saves a lot of material which makes its price very competitive.
2. This buckle-into type has a very easy installation work. 4 steps complete the whole work(1. Open the folded structure, 2. Fix the ballast plate, 3. Clip the module, 4. Put the concrete foundation. ).
3. 80% of pre-assemble work improves the efficiency at site.
4. 80% of pre-assemble work improves the efficiency at site.
5. 15-year warranty and 30 years of service life is promised.

### Technical data:

Applicable roof type	Flat concrete roof (or with inclination less than 10 °)
Material	Aluminum6005 T5, hot dip galvanized steel
Arrangement of module	Horizontal
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years



### DETAILS OF STRUCTURE



Folded Structure

Middle Clamp

End Clamp



Ballast plate



Concrete foundation



### Advices for Best Structure Design:

1. Module array: 1 row in horizontal.
2. Module size: Any type.
3. Module inclination: Based on the latitude of construction site.

### Standard and certifications:

1. ASCE / SEI 7-10



## SOLAR ROOF RACKING SYSTEM

# CY Solar



## FLAT BALLAST RACKING SYSTEM

### • Introduction:

This racking system CY-ZJ08 is applied to large commercial solar roofing plant. It is designed for flat concrete roof. Because of the concise design, 4 steps will complete the whole installation work.

1. Put the cement block on the ballast plate.
2. Fix the middle and end clamps.
3. Install side and back plates.
4. Install the module.

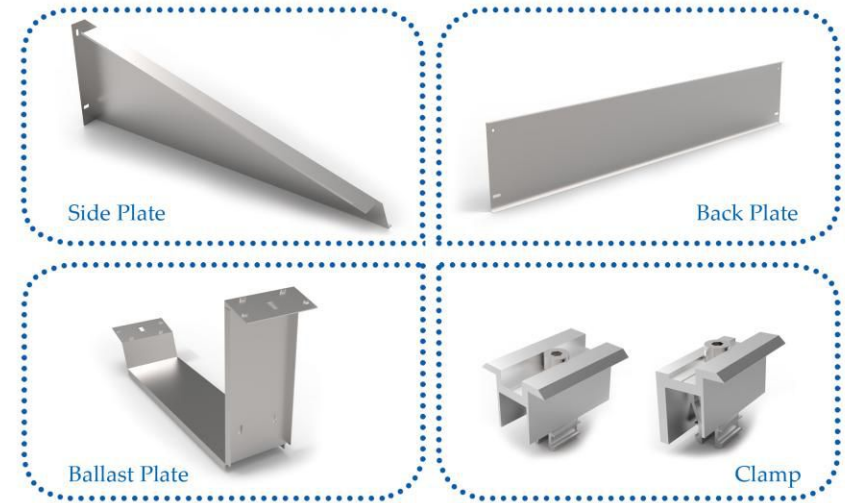
### • Benefits:

1. The rail-less design saves a lot of material which makes its price very competitive.
2. This racking system has a very easy installation work. 4 steps complete the whole work (1. Put the cement block on the ballast plate. 2. Fix the middle and end clamps. 3. Install side and back plates. 4. Install the module.).
4. Highly pre-assembled work improves the efficiency at site.
5. 15-year warranty and 30 years of service life is promised.

### • Technical data:

Applicable roof type	Flat concrete roof
Material	Hot dip galvanized steel, aluminum 6005-T5
Arrangement of module	Horizontal
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years

### DETAILS OF STRUCTURE



### • Advices for Best Structure Design:

1. Module array: 1 row in horizontal.
2. Module size: Any type.
3. Module inclination: Based on the latitude of construction site.

### • Standard and certifications:

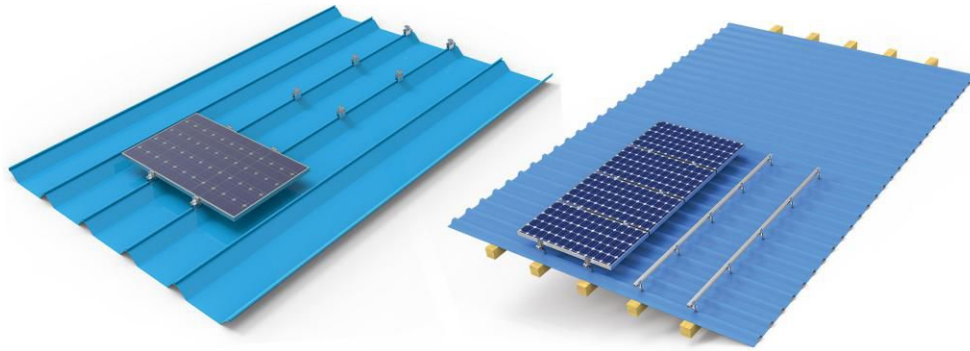
1. ASCE / SEI 7-10





## SOLAR ROOF RACKING SYSTEM

# CY Solar



## SOLAR METAL ROOF RACKING SYSTEM

### Introduction:

This racking system CY-ZJ09 is the innovative system designed for standing seam metal roofs. It has two ways of installation. One is penetrating (Screw or double wood screw), the other is non-penetrating (Clamps). For the non-penetrating system, it is also a no-rail solution which can save the costs a lot. Besides, it is a water-proof solution that can protect the roof. The installation work of no-rail is extremely very easy. 2 steps complete the whole installation work. 1. Install the clamp. 2. Fix the panel. So it very much saves your installation time and labor.

### Benefits:

1. Flexibility of this racking system allows for adjustment to account for variable roof surfaces.
2. Integrated bonding/grounding with Clic Lock clamp.
3. Landscape or portrait orientation on any roof type.
4. 80% of pre-assemble work improves the efficiency at site.
5. All components are aluminum and stainless steel.
6. 15-year warranty and 30 years of service life is promised.

### Technical data:

Applicable roof type	Pitched metal roof
Material	Stainless steel 304, aluminum 6005 T5
Arrangement of module	Horizontal
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years

DETAILS OF STRUCTURE

### No-rail Solution



### Rail Solution



- Standard and certifications:
  1. ASCE / SEI 7-10

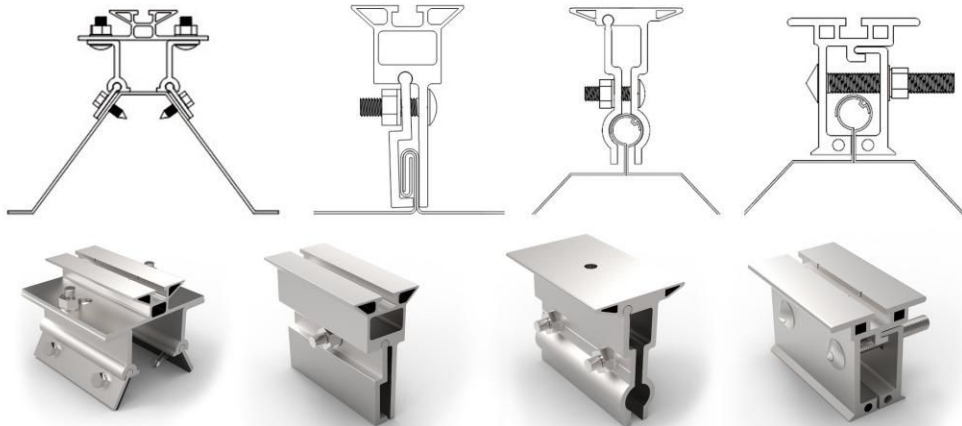
### Advices for Best Structure Design:

1. Module array: 1 row in horizontal.
2. Module size: Any type.
3. Module inclination: Based on the latitude of construction site.



TWO WAYS OF FIXING

1. Non-penetrating solution



CY-C01

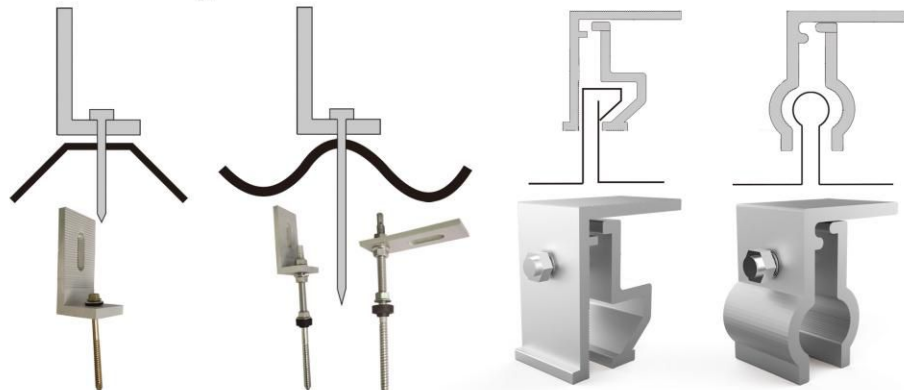
CY-C02

CY-C03

CY-C04

Item No.	Material	Dimension(L*H)
CY-C01	Aluminum 6005T5	100x60. 5mm
CY-C02	Aluminum 6005T5	100x90mm
CY-C03	Aluminum 6005T5	100x88. 51mm
CY-C04	Aluminum 6005T5	100x70mm

2. Penetrating solution



L hook

Double wood screw

Standing seam Clamp

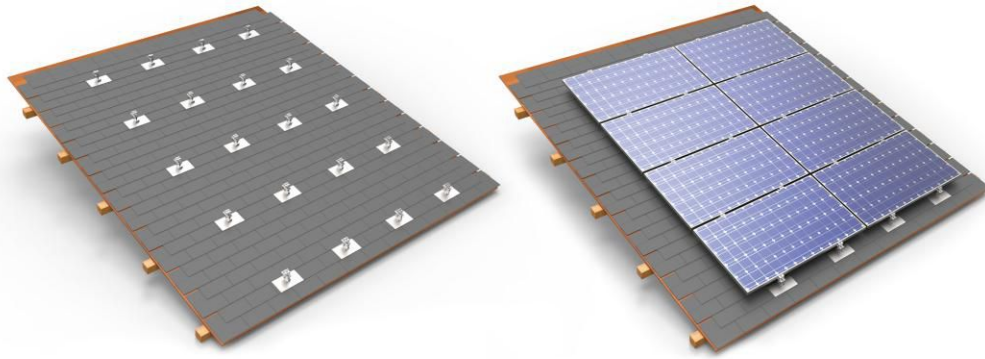
PROJECT PICTURES OF ROOF RACKING SYSTEM





## SOLAR ROOF RACKING SYSTEM

# CY Solar



## SOLAR ASPHALT SHINGLE ROOF RACKING SYSTEM

### • Introduction:

CY-ZJ10 is a rail-less pitched roof flush racking system which is very popular with customers. The racking system only has 3 components which is cost efficient and has high installation efficiency. 100% aluminum allows the racking system reaching as long as 30-year service life. Besides, the less components means less transportation costs. Also there is pre-assembly parts which saves the installation time and labor.

### • Benefits:

1. Simple and less components not only simplify the installation work but also save the transportation cost.
2. High-quality aluminum makes it have a good performance on anti-corrosion. The light material gives less pressure on the roof.
3. Rail-less design saves the cost.
4. Short lead time
5. 30 years of service life and 15-year warranty provided.

### • Technical data:

Applicable roof type	Pitched asphalt shingle roof
Material	Aluminum 6005 T5
Arrangement of module	Customized
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years

### • Advices for Best Structure Design:

1. Module array: In vertical or horizontal.
2. Module size: Any type.

### • Standard and certifications:

1. ASCE / SEI 7-10

### DETAILS OF STRUCTURE



Flashing plate

Middle Clamp

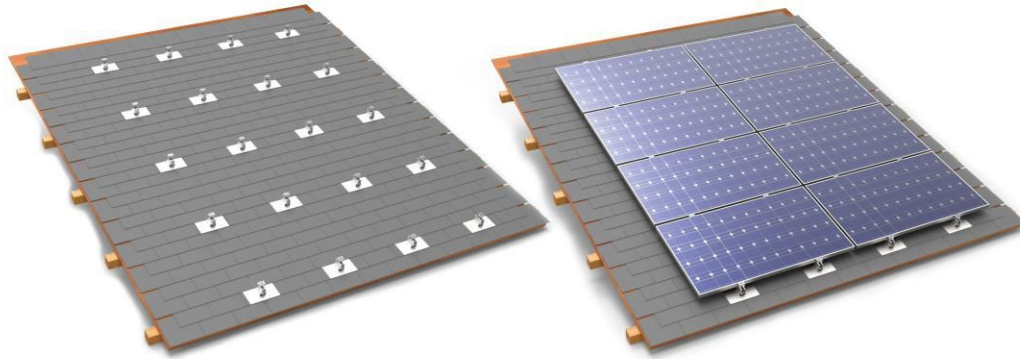
End Clamp





## SOLAR ROOF RACKING SYSTEM

# CY Solar



## SOLAR ASPHALT SHINGLE ROOF RACKING SYSTEM

### • Introduction:

CY-ZJ11 is a rail-less pitched roof flush racking system which is made of stainless steel. The racking system only has 3 highly pre-assembled components which is cost efficient and has high installation efficiency. 100% SS allows the racking system reaching as long as 30-year service life. Besides, the less components means less transportation costs. The flashing plate has a good performance on water proof.

### • Benefits:

1. Simple and less components not only simplify the installation work but also save the transportation cost.
2. High-quality SS makes it have a good performance on anti-corrosion.
3. Rail-less design saves the cost.
4. Standard package for 1KWp's components allows retail store.
5. 30 years of service life and 15-year warranty provided.

### • Technical data:

Applicable roof type	Pitched asphalt shingle roof
Material	SS304, aluminum 6005 T5
Arrangement of module	Customized
Connecting component	SS304 bolt
Wind load	35m/s
Snow load	0.8KN/m <sup>2</sup>
Warranty	15 years
Service life	30 years

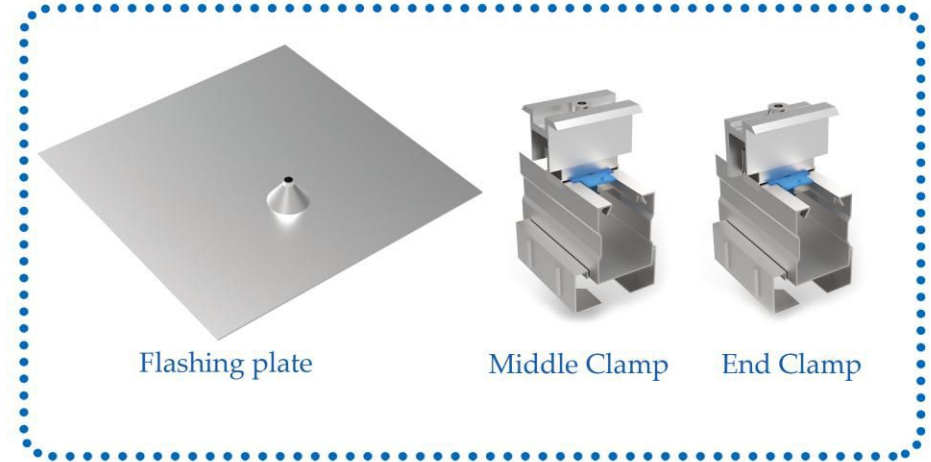
### • Advices for Best Structure Design:

1. Module array: In horizontal.
2. Module size: Any type.

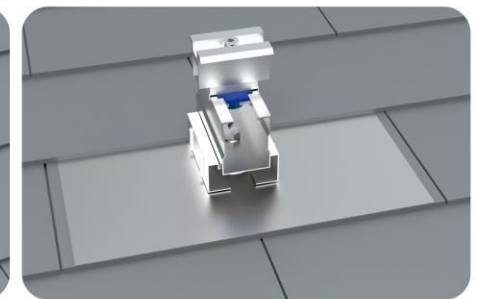
### • Standard and certifications:

1. ASCE / SEI 7-10

### DETAILS OF STRUCTURE



Step1: Put the flashing plate at the correct position



Step2: Fix the pre-assembled clamp to the flashing plate by one bolt.

