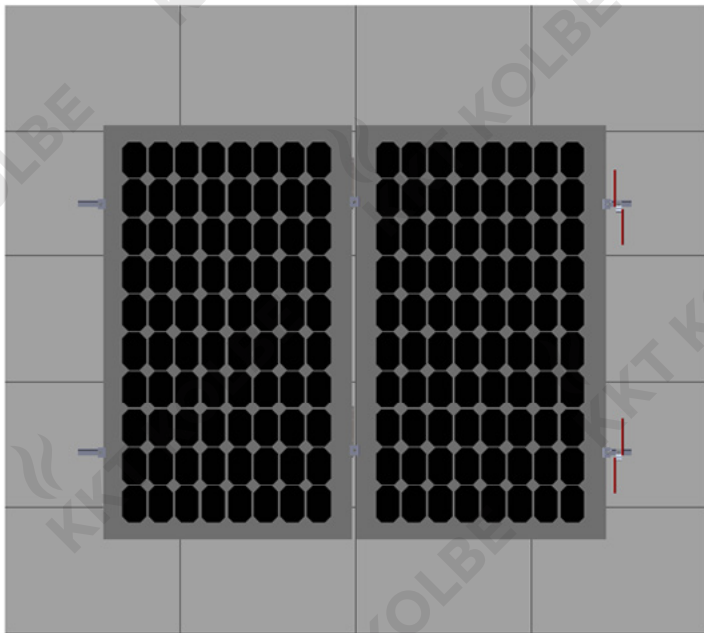




# Installation Manual

## Tile Roof Hook 05 Mounting Structure



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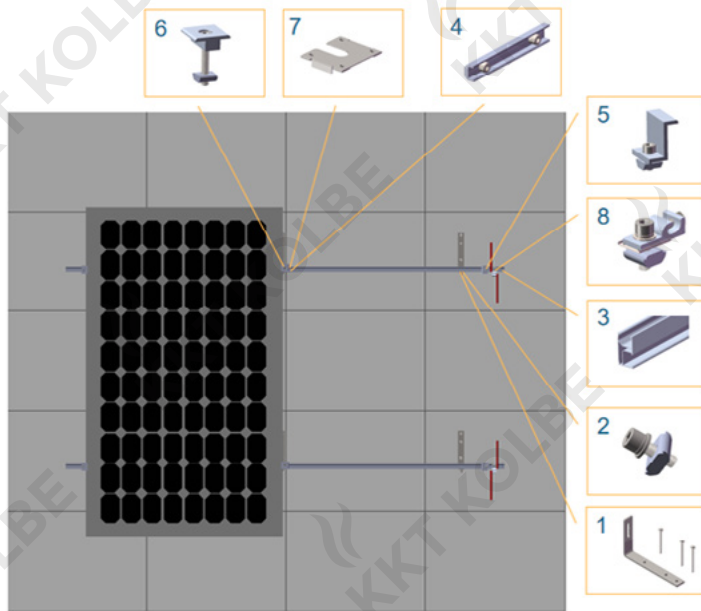
# 1. Product Introduction

Tile roof mounting kit allow solar panel installed on tile roof. It's a smart and simple PV mounting solution for residential projects. The main material of this mounting structure is aluminum alloy AL6005-T5 and stainless steel SUS304. The product has strong corrosion resistance. This mounting kit has high pre-assembled characteristics and saves installation time and cost greatly. Please kindly read the whole manual carefully before installation.

## 2. Installation Tools

				
String	Electric tool (M8/M10)	Hexagon sleeve (M8/M10)	Drilling Bit 9mm	Tape measure
				
Marking pen	Torque wrench (M8)	6# hexagonal wrench	Monkey wrench	Rubber Hammer

### 3. Components (consider 2 panels mounting)

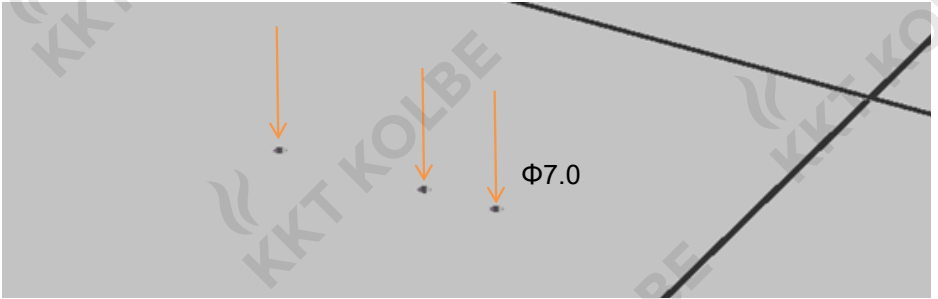


1	2	3	4
			
Tile Roof Hook	M8*25 Bolt set	AR51 Rail	AR Rail Connector
5	6	7	8
			
End Clamp	Mid Clamp	Earth Plate	Grounding Lug

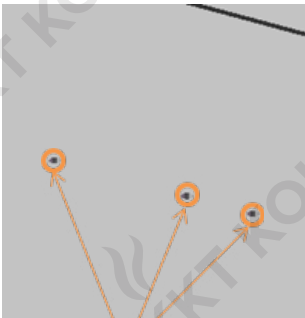
# 4. Installation Guide

## 4.1 Installation of Tile Roof Hook

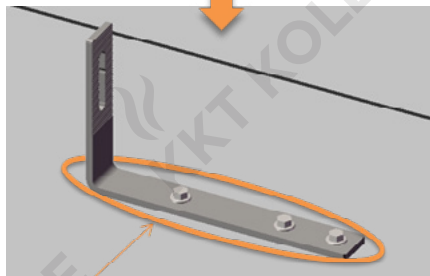
Mark suitable position of pre drilling holes, then drill holes (size  $\phi 7.0$ ).



Apply a layer of waterproof glue at the pre drilling position, install the Tile Roof Hook on the roof with the st6.3\*80 screws. Ensure the Tile Roof Hook are in same level, and finally apply a layer of waterproof glue again at the Tile Roof Hook.



waterproof glue



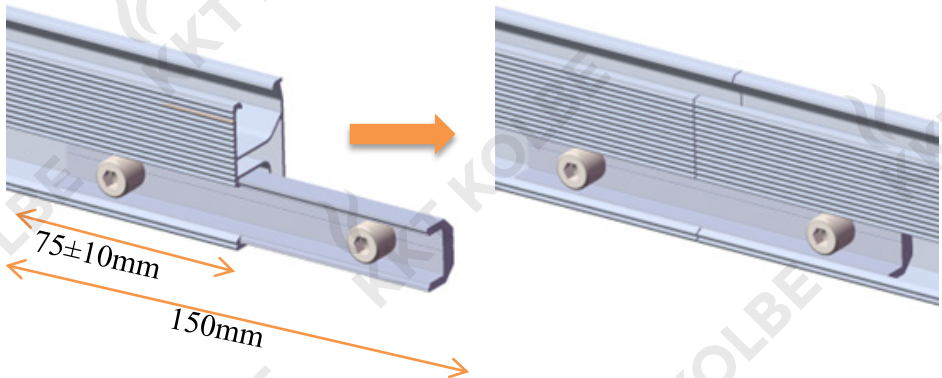
waterproof glue



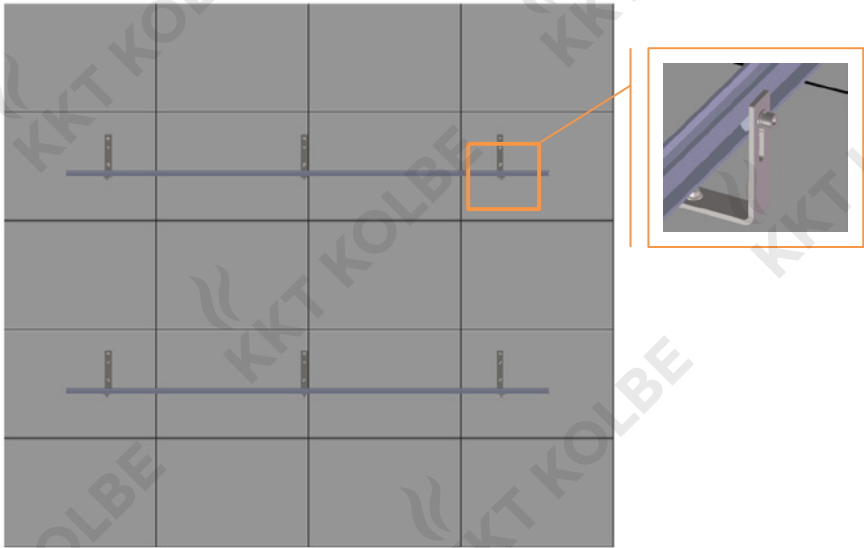
## 4.2 Installation of Rail

Rail connection (when Rail length is not enough)

Insert the Rail Connector into two Rail, use M8\*10 bolt to fix well.

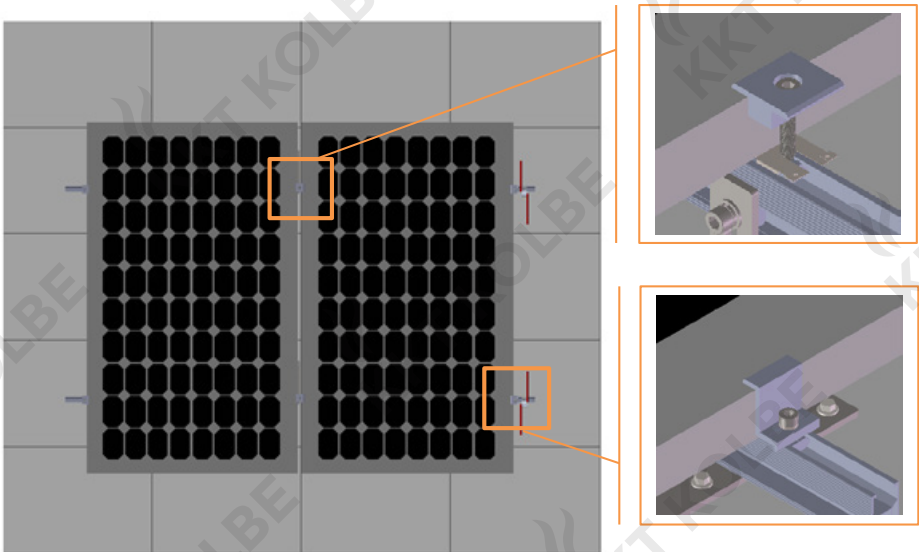


Install the Solar Panels on the Rail, use the End Clamp and Mid Clamp (with Earthing Plate) to fix and fasten the bolt tightly.



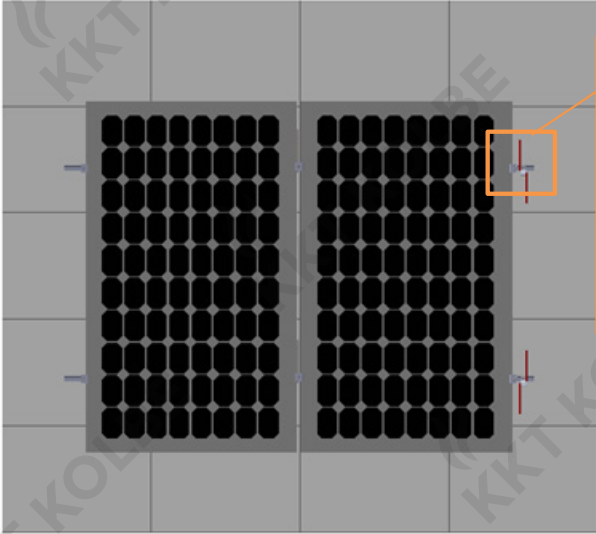
### 4.3 Installation of Solar Panels

Install the Solar Panels on the Rail, use the End Clamp and Mid Clamp (with Earthing Plate) to fix and fasten the bolt tightly.



#### 4.4 Installation of Grounding Lug

Install a Grounding Lug on the end of each Rail.





# 5. Installation Notes

## 1. Safety Precautions

- (1) The structure may cause harm to the body;
- (2) The accessories of the structure may cause harm to the body;
- (3) Pay attention to your head and eyes;
- (4) In the working area, take careful of your action.

## 2. Stainless Steel Fasteners Notes

Because of its good ductility, stainless steel is essentially different from carbon steel; improper use will result in bolts and nuts can't be turned off. Prevention of this situation is mainly in the following aspects:

(1) Reduction of friction coefficient:

- Make sure the thread surface is clean, no ash, dirt, etc.
- It is recommended to use wax or lubricant, such as butter and 40# oil, on the surface of bolts when installing.

(2) Correct operation:

- When screwing, it must be perpendicular to the axis of the thread.

Do not tilt.

- In the tightening process, the force must be uniform, and the tightening torque should not exceed the specified safety torque value.
- Use torque wrench or socket wrench as far as possible, avoid using movable wrench or electric wrench. If you need to use electric wrench, you should try to reduce the speed.
- Avoid high-temperature use, do not use fast rotation, avoid rapid temperature rise and lead to lock.

## 3. Notes after Finishing Work

- (1) After the work is completed, the small parts left on the site, such as bolts, conductive sheets, etc., should be retrieved to avoid the missing of small parts in the final installation.
- (2) When the weather is bad or need to stop work for a long time, please tidy up the parts to prevent soil fouling or loss.