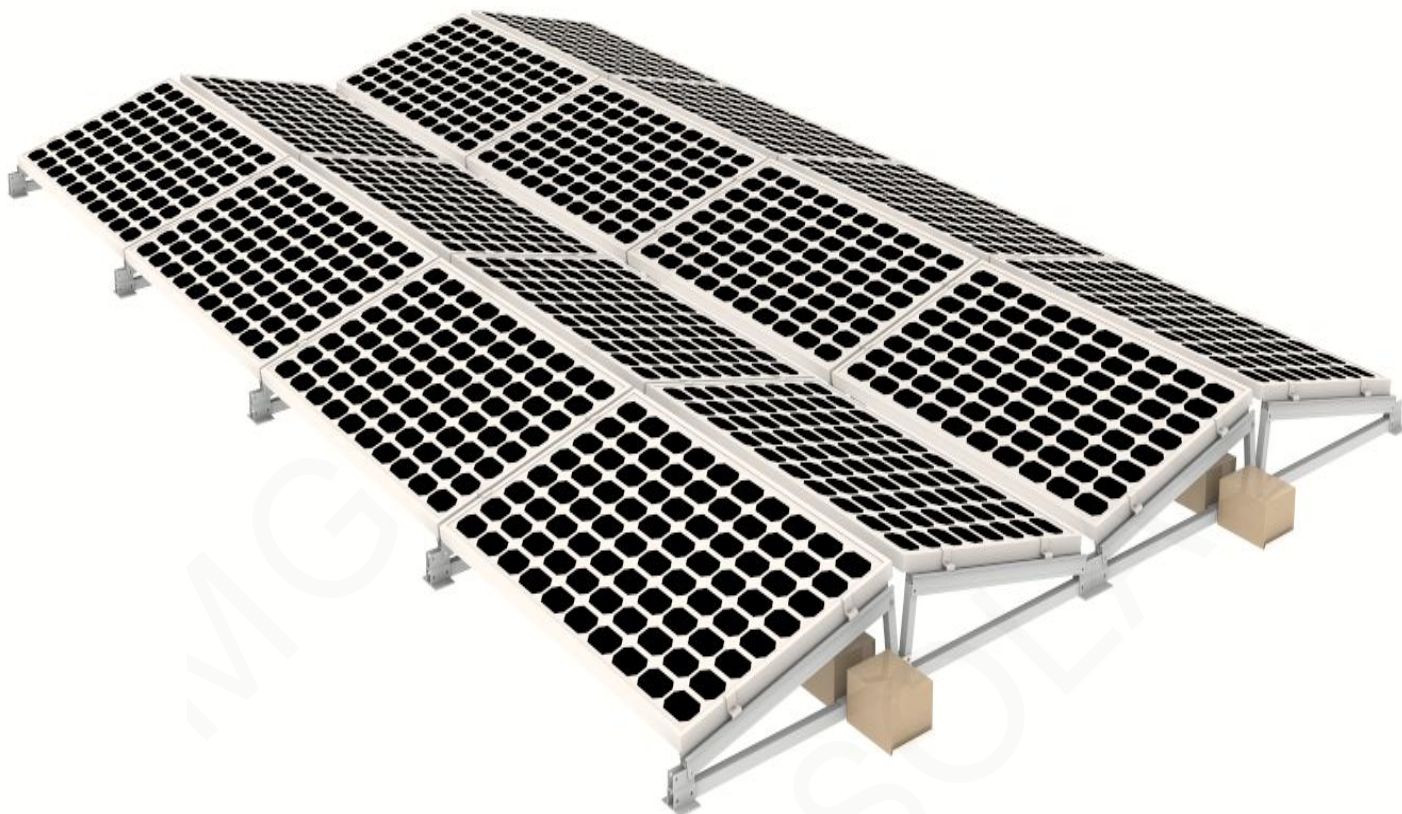


East-West Flat Roof Mount System Installation Manual

(4 x 4 Solar Layout in Landscape)



MG Solar East-West Flat Roof Mount System has developed to mount the module on a flat roof or ground. You can have the tilt angle solution as 5~15 degree according to your exact requirement. And there are two foundations you can choose, ballasted weight foundation and concrete block foundation. For this system, there is no need to use wind defend plate, then you can save some cost. Besides, all of parts should be pre-assembled in our factory to make the installation easy and quick for saving your labor cost and time.

The installations please follow the procedures and precautions in these instructions carefully. And it must be complied with the local construction acts and the safety laws.

1. Introduction

1.1 Intended use

- *Are intended to be used by individuals with sufficient technical skills for the task. Knowledge and use of hand tools, measuring devices and values is also required.*
- *Include various precautions in the forms of Notes, Cautions, and Warnings. These are to assist in the assembly process and/or to draw attention to the fact that certain assembly steps may be dangerous could cause serious personal injury and/or damage to components. Following the step-by-step procedures and these precautions should minimize the risk of any personal injury or damage to components making the installation not only safe but an efficient process.*

1.2 Service life warranty

Warranty of 10 years for the service life of all materials used.

1.3 Safety

The following basic safety instructions and warning symbols form an essential part of this manual and are of fundamental importance when handling this product.

- *Do not remove or disable any safety devices*
- *Comply with the relevant safety regulations.*
- *The presence of a second party who can provide help in the event of an accident is obligatory during the entire installation process.*
- *Keep a copy of this installation manual in the immediate vicinity of the system.*



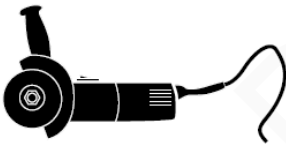




1.4 Responsibilities of the owner/operator

The system operator has the following safety-related responsibilities:

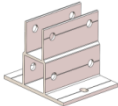
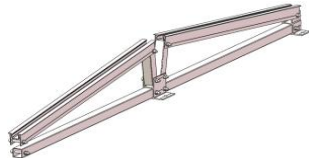
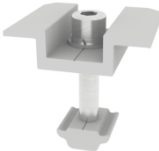
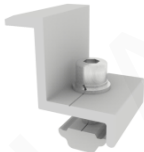
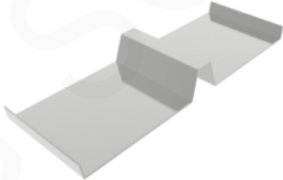

- *To ensure that installation of the system is only carried out by individuals with specialist technical knowledge and basic knowledge of mechanical engineering.*
- *To ensure that those commissioned to perform the work can evaluate their assigned tasks and recognize possible risks.*
- *To ensure that those commissioned to perform the work are familiar with the system components.*
- *To ensure that the installation manual is available during installation. The installation manual is an integral part of the product.*
- *Ensure that the installation manual, and in particular the safety instructions, are read and understood by the relevant personnel before installation.*
- *Ensure that the permissible operation conditions are observed. Mounting systems is not liable for damage occurring when these conditions are not adhered to.*
- *Ensure the durability of all connections and the attachment of the system.*
- *Ensure that suitable lifting gear is used for installation.*
- *Ensure that only Mounting System components are used when parts need to be replaced. Otherwise any warranty claim is null and void.*

2. Tools For Installation

The following tools are required for the installation:

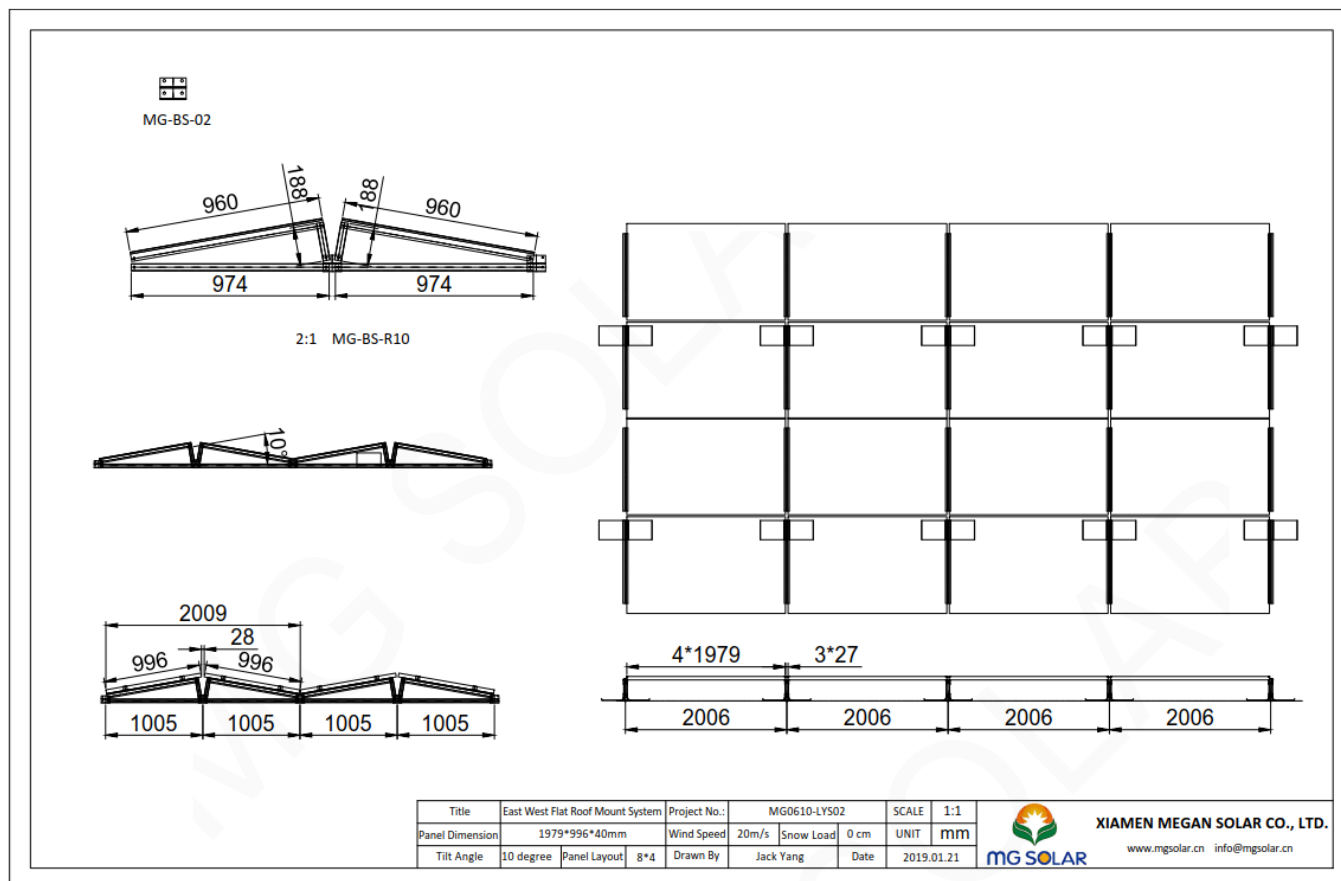
<p>✓ 6 mm Allen key or hexagonal driver bit. If using a 6mm driver bit, make sure the cordless power tool used for the driving has a hand-tight clutch setting a fine (soft) impact drive to prevent damage to the fragile glass panels and threads on the Structure.</p>	
<p>✓ Cordless drill; Drill or impact driver for driving roof material fixings</p>	
<p>✓ Angle grinder; For terracotta tile roof installation, and angle grinder fitted with a continuous edge diamond tipped tile cutting blade; gloves, hearing protection, a face protection mask, and a suitably rated breathing protection mask for all people in proximity of grinding</p>	
<p>✓ Gloves; Protect the hazard of the sharp corners.</p>	
<p>✓ Cord or color pen; Mark the installation position;</p>	
<p>✓ Spirit level</p>	
<p>✓ Rule</p>	
<p>✓ If necessary, timber to shim the legs</p>	

3. Component List

<p>Pre-assembled East-West Flat Roof Mount</p> <ul style="list-style-type: none"> ✓ Suitable for all types solar panel ✓ Tilt Angle can be customized ✓ 6005-T5 extruded aluminum 	  <p style="text-align: center;">A B</p>
<p>Mid Clamp</p> <ul style="list-style-type: none"> ✓ Fit between two panels ✓ Fastened with a 6mm Allen key ✓ Standard pre-assembly for the usual panels with thickness 30, 35, 40, 46, 50mm 	
<p>End Clamp Kit for Framed Modules</p> <ul style="list-style-type: none"> ✓ Hold the edge of each end panels ✓ Fastened with a 6mm Allen key ✓ Standard pre-assembly for the usual panels with thickness 30, 35, 40, 46, 50mm 	
<p>Mid Ballasted Plate</p> <ul style="list-style-type: none"> ✓ Using M6.3x25mm self-tapping screw to fix it on the tube of east-west flat roof structure ✓ Put concrete block on the sides ✓ 5052 extruded aluminum 	 

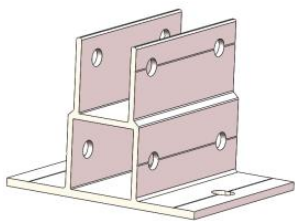
4. Installation Dimension

Below, the distances between roof connections for a portrait installation are specified. Clamp-on Front and Rear Legs need to be installed in specific distances, depending on the distance of rafters and the stoical conditions.

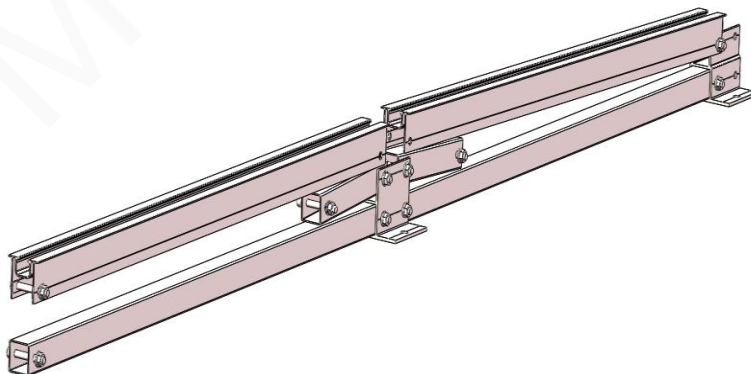


5. Installation Guide

5.1 Pre-assembled East-West Flat Roof Mount



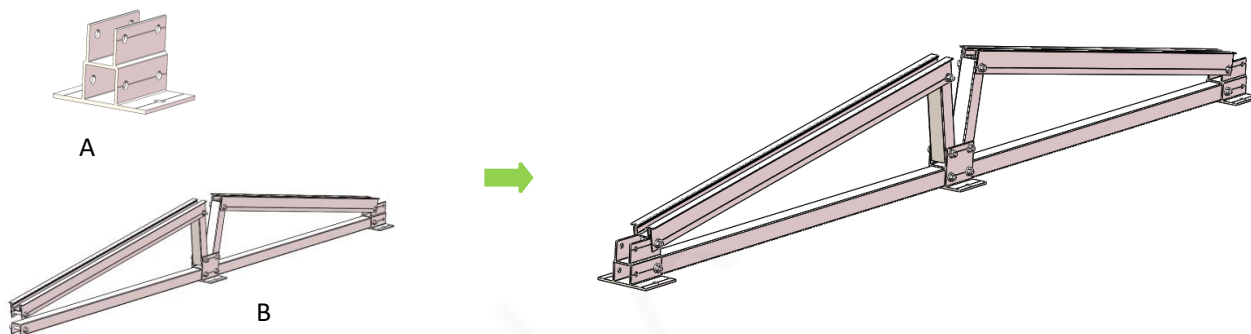
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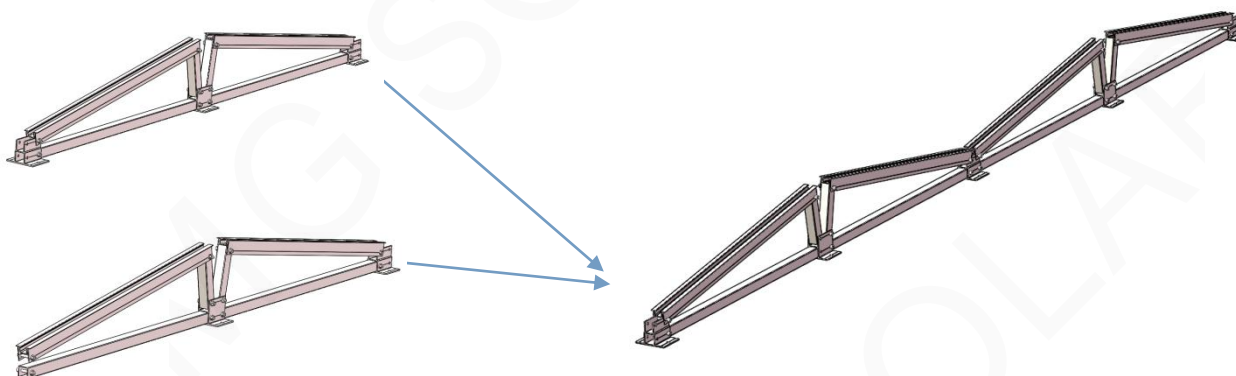
B

5.2 Pre-assembled East-West Flat Roof Mount Installation

Open Pre-assembled structure part B, like below picture, using M8*55mm bolt kit to fix the tube on the main mean. Same way to fix the part A on the part B. Part A and B would be become a complete set, please see below picture.

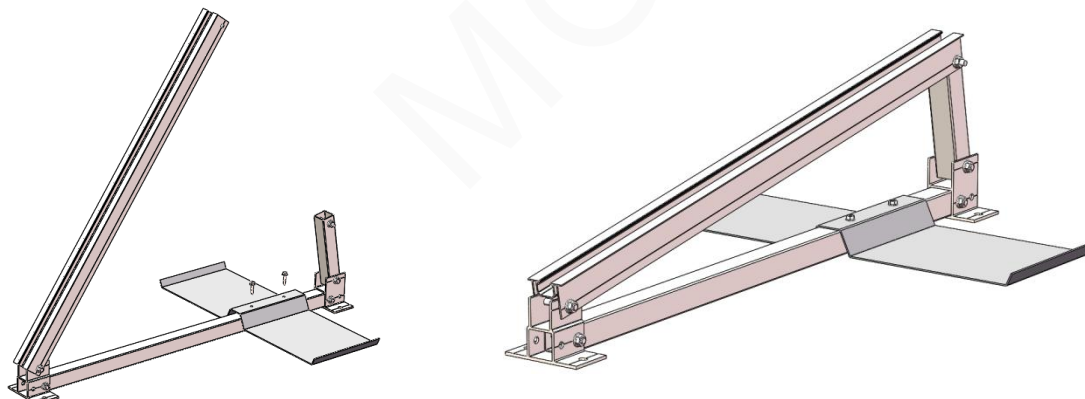


Fixed all of pre-assembled structure in the same way and confirmed the location as the drawing. (As below pictures)



5.3 Mid Ballasted Plate Installation

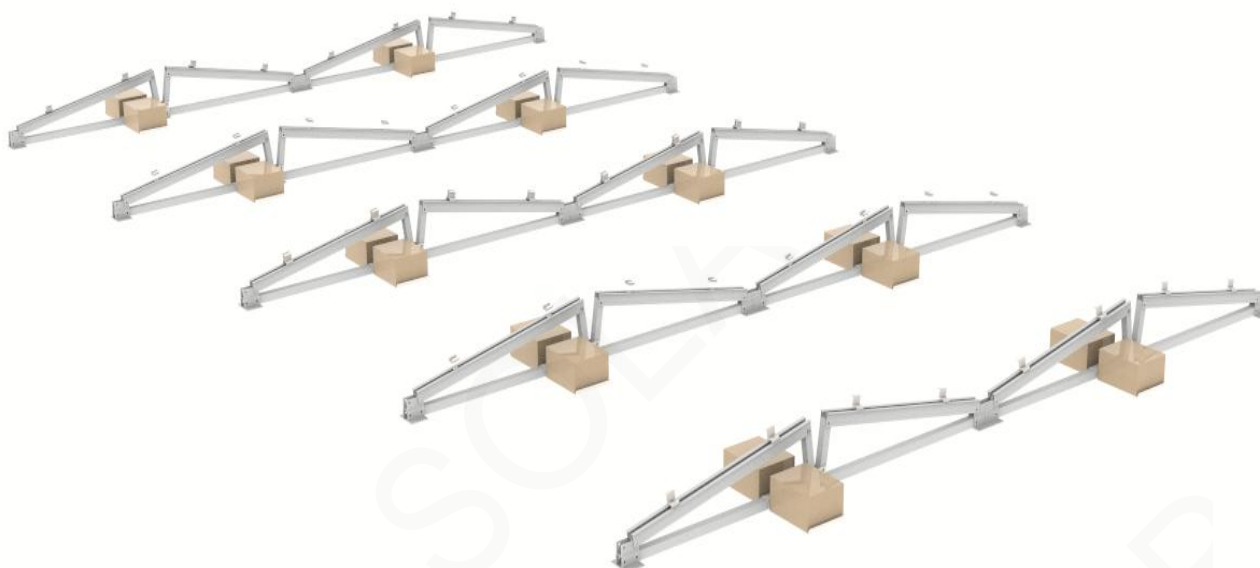
Before starting Pre-assembled East-West Flat Roof Mount Installation, we need to fix the mid ballasted plate on the bottom tube first, as the pictures show:



When installation, you can adjust the location of mid ballasted plate as the size of concrete block to ensure that the cement block does not interfere with the panel.

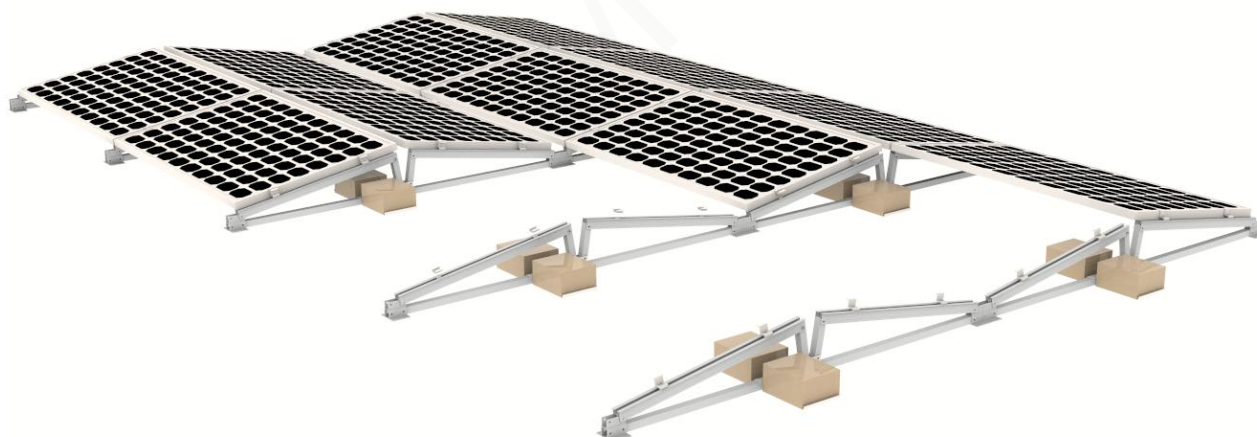
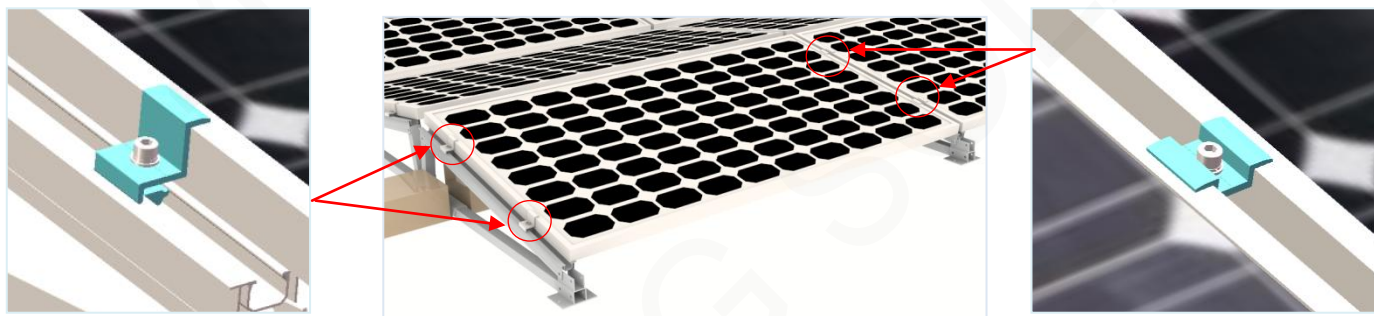
5.4 Series Pre-assembled Structure Installation

Fixed all of pre-assembled structure in the same way and confirmed the location as the drawing.



5.5 Solar Panel Installation

Put solar panel on the structure and use mid clamp and end clamp to fix the solar panels.



6. Finished Installation

