

## **MOTORISED LOUVERED ROOF SYSTEM**

### **INSTALLATION INSTRUCTIONS**



Order No: GA21090CO

Size: 3.5\*5 m

Date: 07/22/2021

# CONTENT

*These instructions outline the steps involved in erecting the Waterproof Motorised Roof Louvres (Size 3500mm Width X 5000mm Length). Before installation, please open the plywood box and get the packing list to check all the components. Once checked, remove the protective film from the aluminum profile. If there is any uncertainty about installation, please contact us for further assistance at [customerservices@gardenfurniturecentre.co.uk](mailto:customerservices@gardenfurniturecentre.co.uk).*

*The steps involved are:*

(1) 、	<i>Install the framework</i>	... ..	<i>Step 01-04</i>
(2) 、	<i>Install the posts</i>	... ..	<i>Step 05-09</i>
(3) 、	<i>Install the gutters...</i>	... ..	<i>Step 10-12</i>
(4) 、	<i>Install the louver blades</i>	... ..	<i>Step 13-16</i>
(5) 、	<i>Install the control rods...</i>	... ..	<i>Step 17-18</i>
(6) 、	<i>Install the motor</i>	... ..	<i>Step 19-20</i>
	<b>Note</b>		<i>Step 21-23</i>

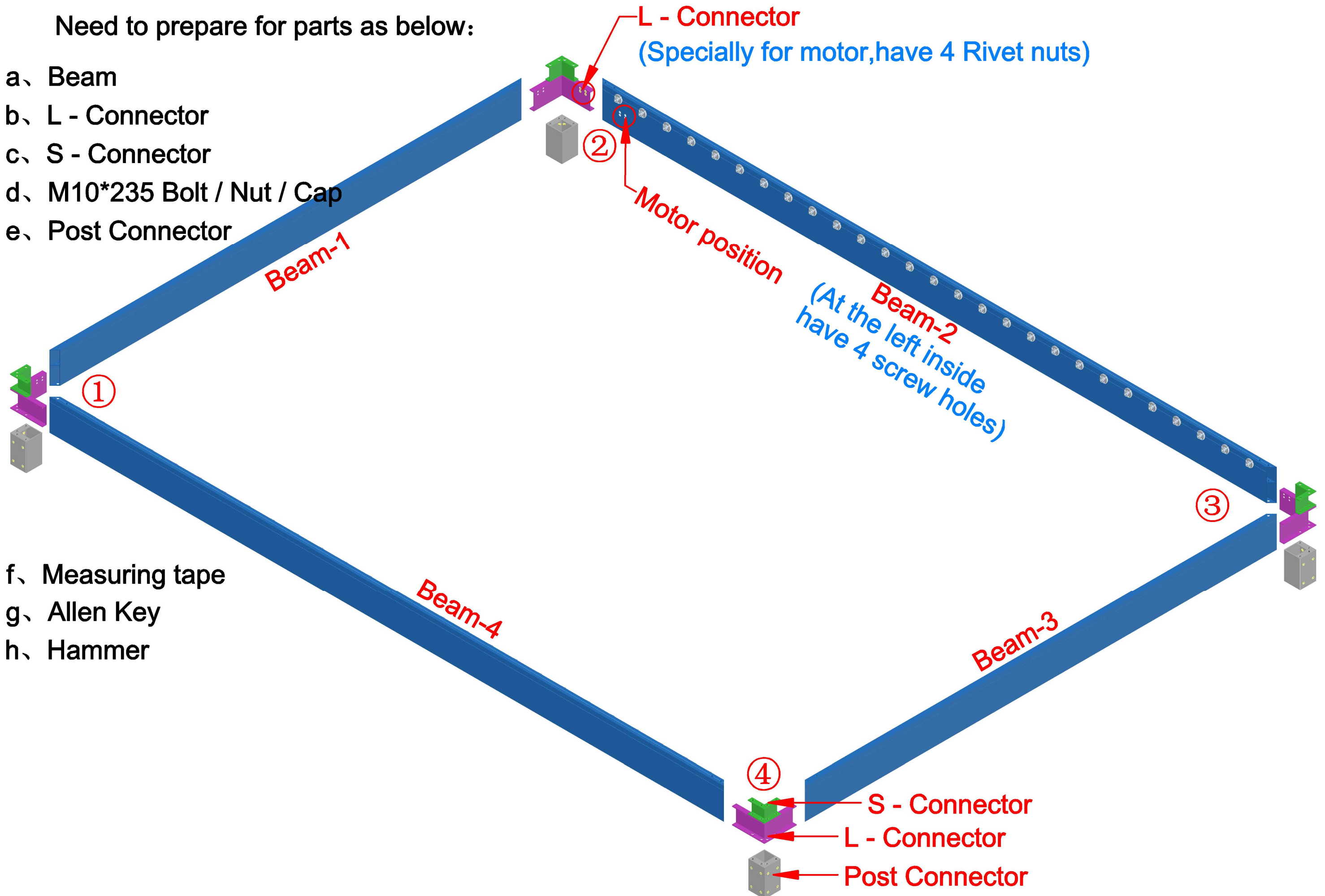
**\* Please Pay Attention To Your Safety During Installation.**

(1) 、 Install the framework.

Need to prepare for parts as below:

- a、 Beam
- b、 L - Connector
- c、 S - Connector
- d、 M10\*235 Bolt / Nut / Cap
- e、 Post Connector

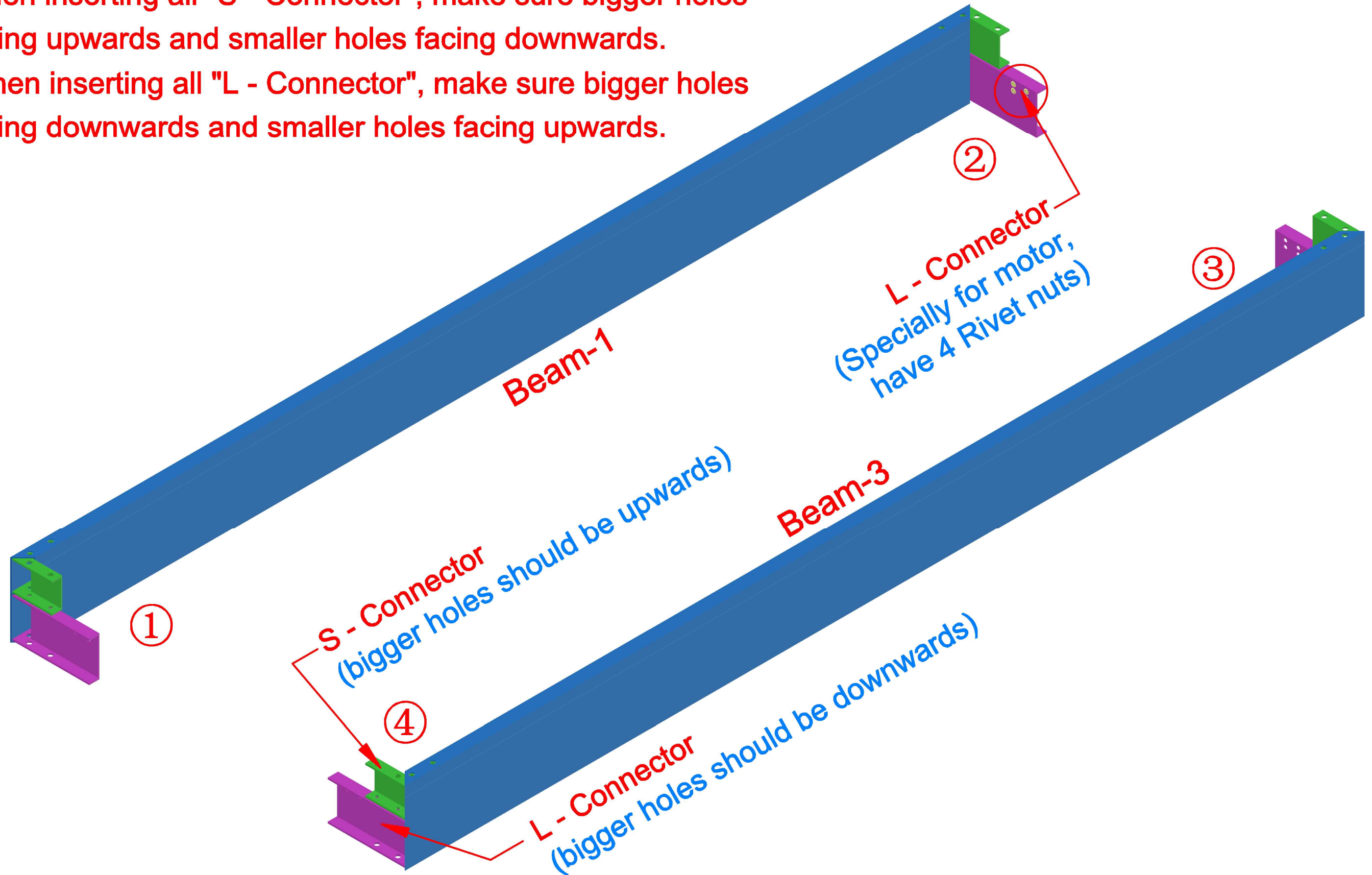
- f、 Measuring tape
- g、 Allen Key
- h、 Hammer



1、 As shown, "L - Connector" and "S - Connector" will be put into both ends of the Beam-1 & Beam-3.

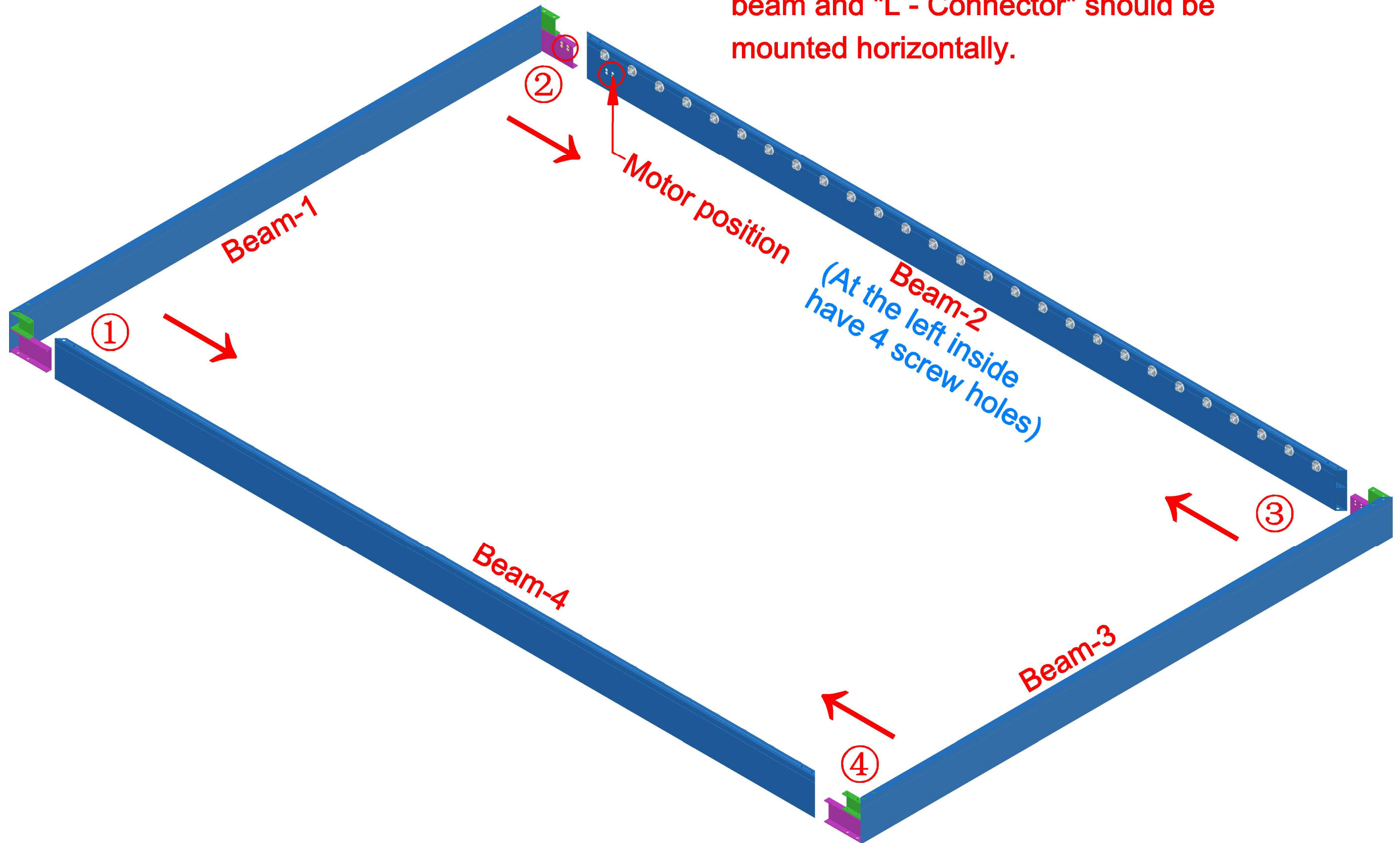
**Note:**

- I、 When inserting all "S - Connector", make sure bigger holes facing upwards and smaller holes facing downwards.
- II、 When inserting all "L - Connector", make sure bigger holes facing downwards and smaller holes facing upwards.



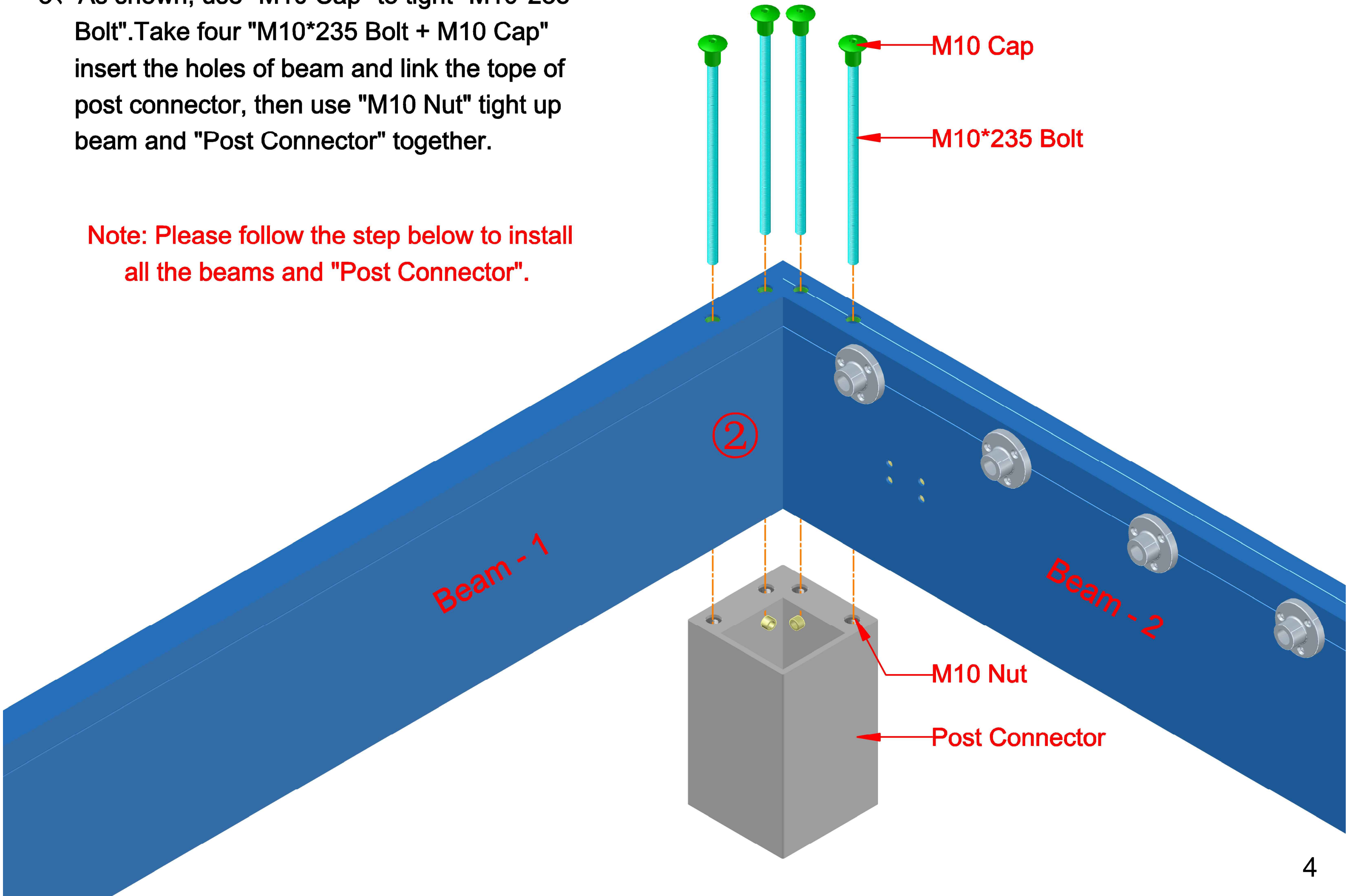
2、 As the arrow hint, assemble "beam-2 & beam-4" and "beam-1 & beam-3" together.

Note: ② red circle mark have 4 screw holes, beam and "L - Connector" should be mounted horizontally.



3、 As shown, use "M10 Cap" to tight "M10\*235 Bolt".Take four "M10\*235 Bolt + M10 Cap" insert the holes of beam and link the tope of post connector, then use "M10 Nut" tight up beam and "Post Connector" together.

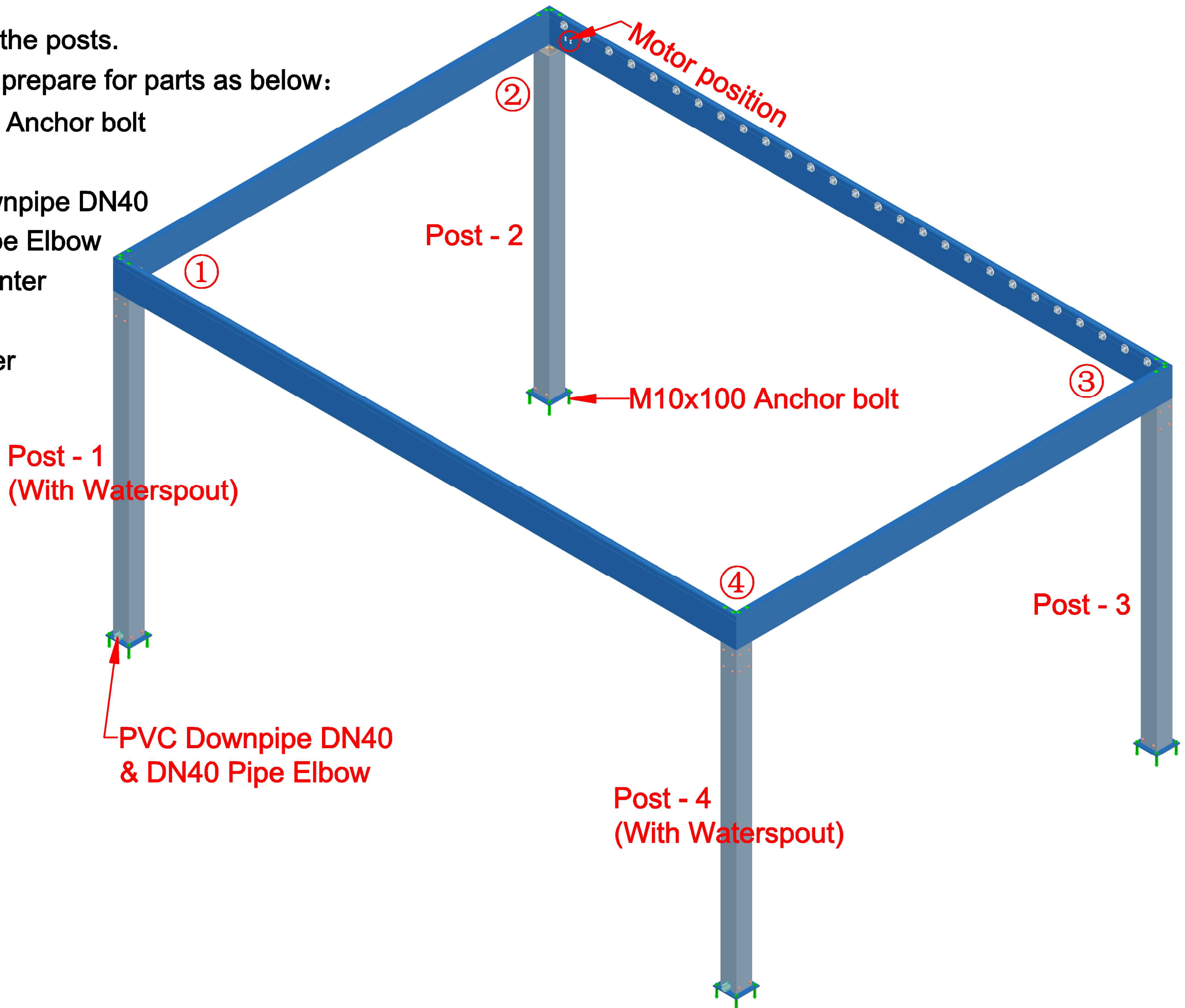
**Note:** Please follow the step below to install all the beams and "Post Connector".



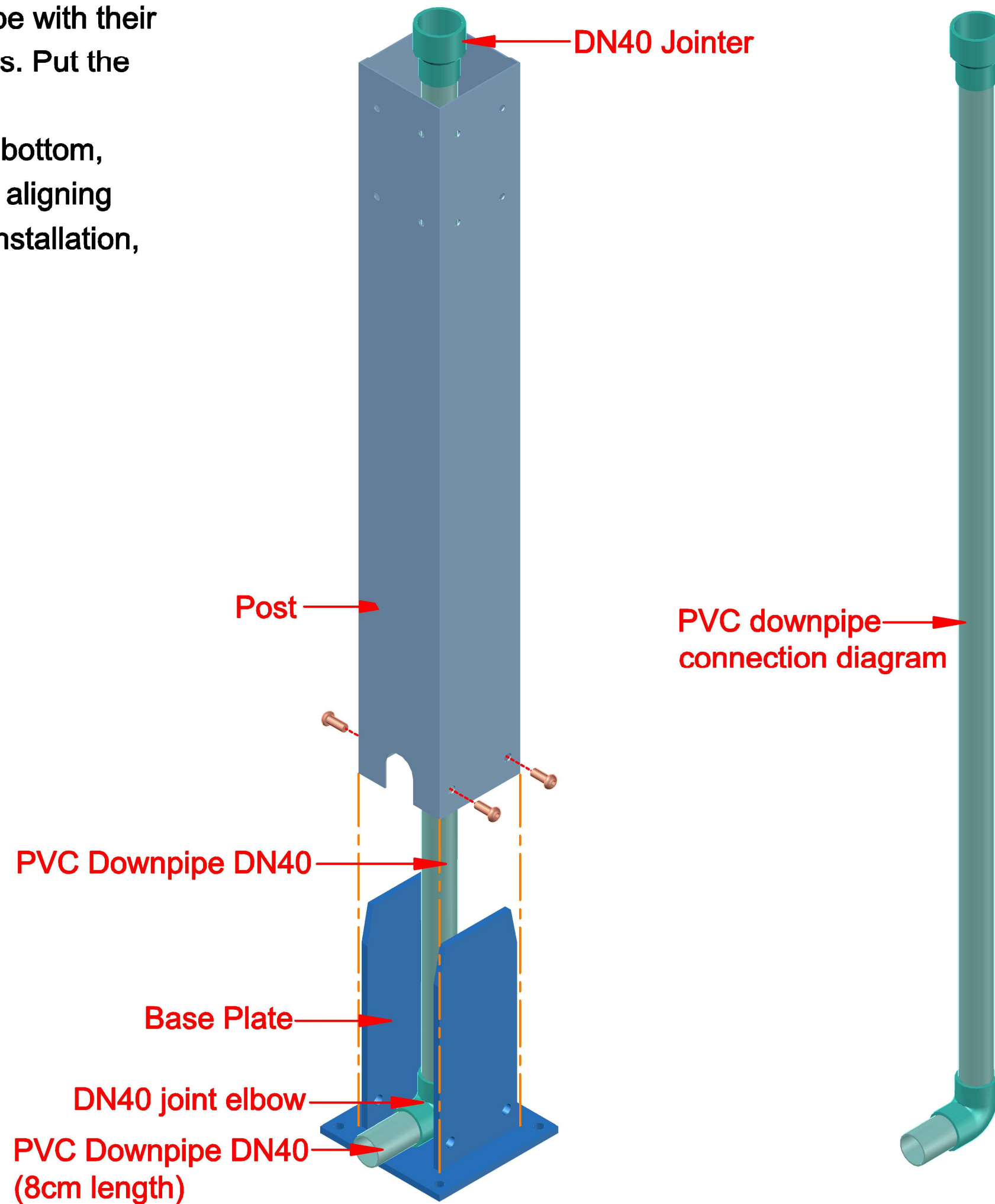
(2) 、 Install the posts.

Need to prepare for parts as below:

- a、 M10x100 Anchor bolt
- b、 Post
- c、 PVC Downpipe DN40
- d、 DN40 Pipe Elbow
- e、 DN40 Jointer
- f、 Allen Key
- g、 Gradienter
- h、 Hammer



- 1、 As shown, connect the pvc downpipe with their joint elbow and bushing at both ends. Put the pvc downpipe set inside the post.
- 2、 Insert "Base Plate" into all the post bottom, make sure 4 holes on "Base Plate" aligning with 4 holes on post bottom, after installation, PVC downpipe and post are flush.





3、 Lift up the beam framework, then insert the post into the post connector.

④

Note: When install the post, pls make sure 8 holes on post aligning with 8 holes on "Post Connector".

Post Connector

DN40 Jointer

Post

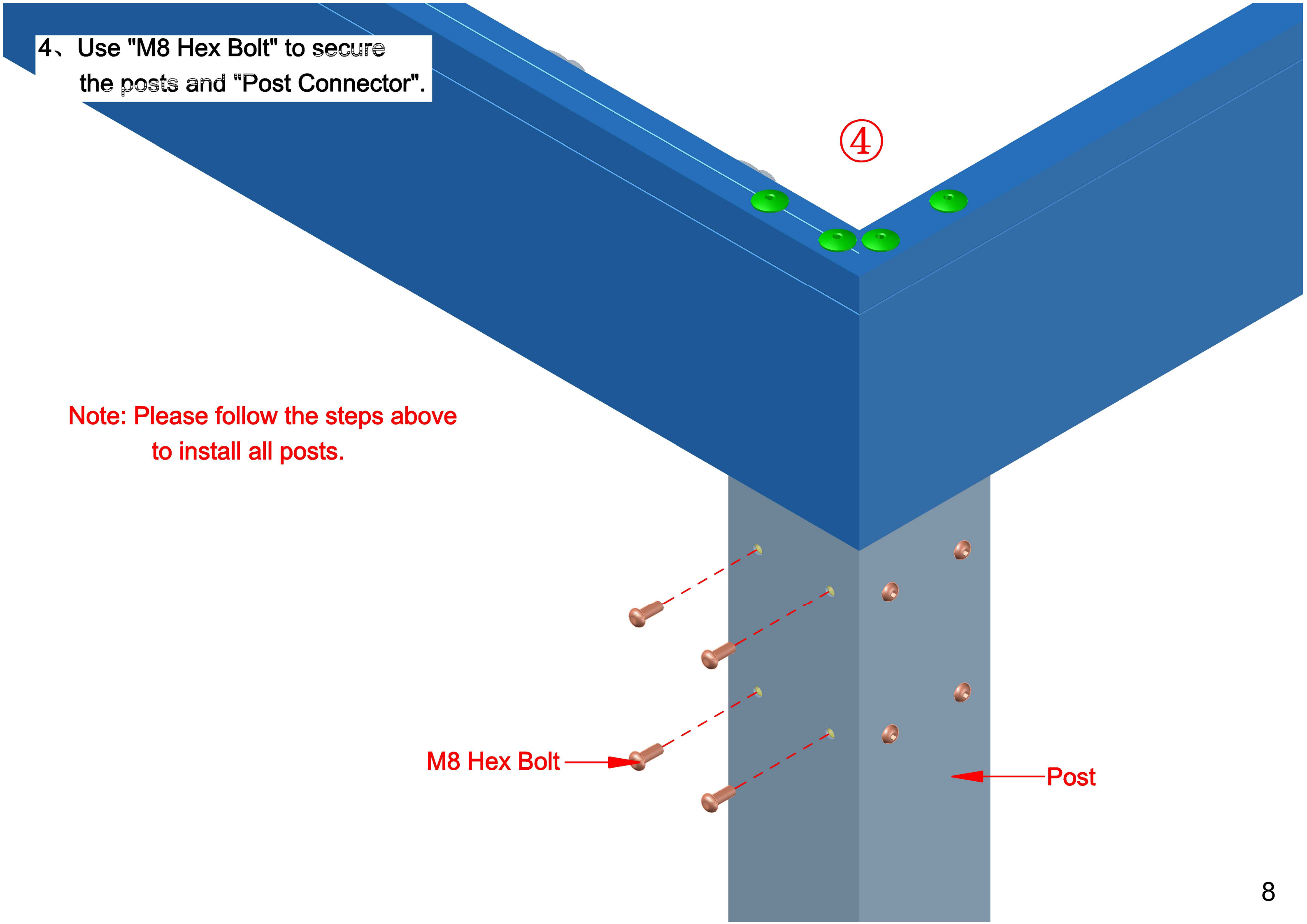
4、 Use "M8 Hex Bolt" to secure the posts and "Post Connector".

④

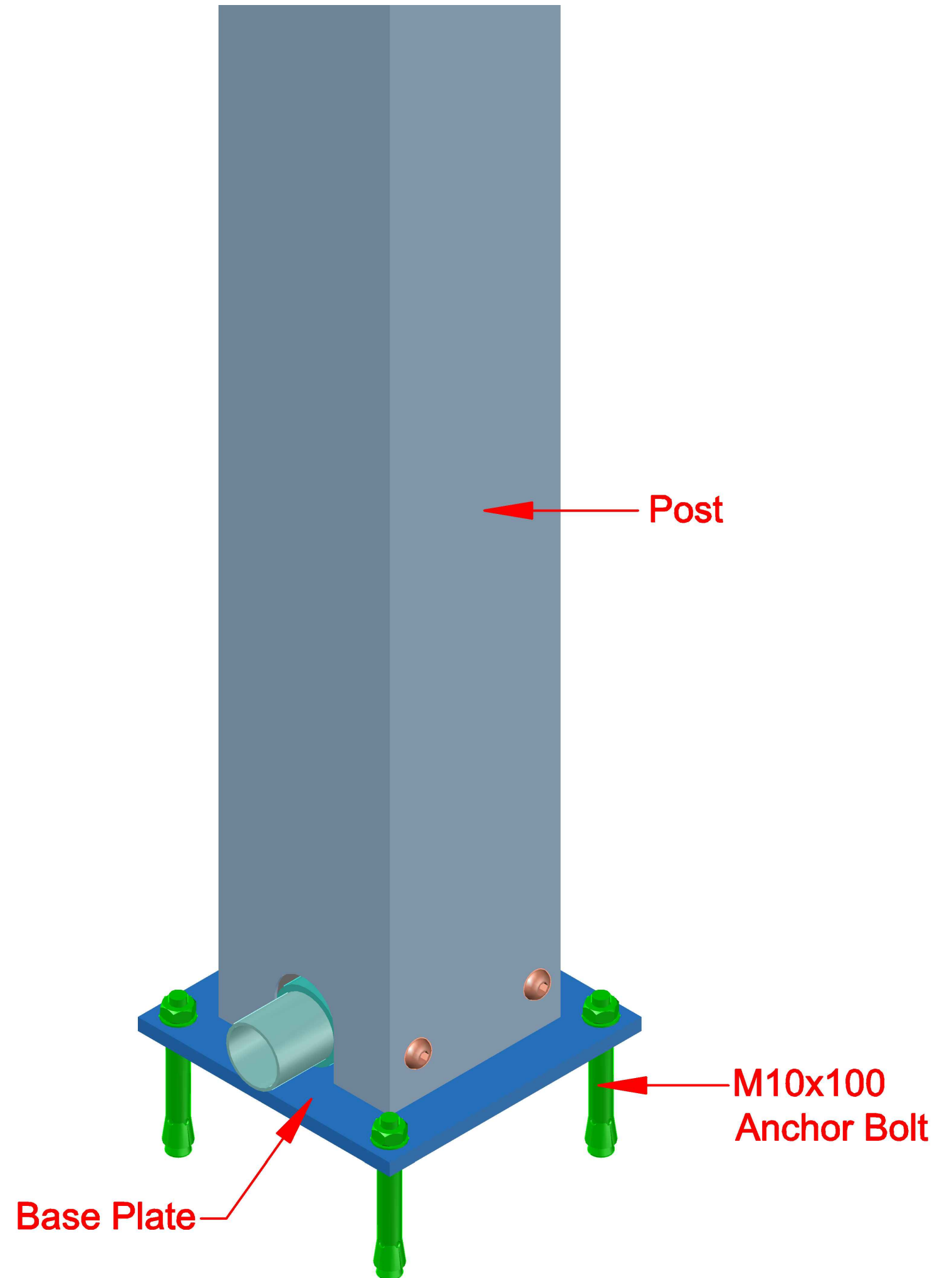
Note: Please follow the steps above to install all posts.

M8 Hex Bolt

Post



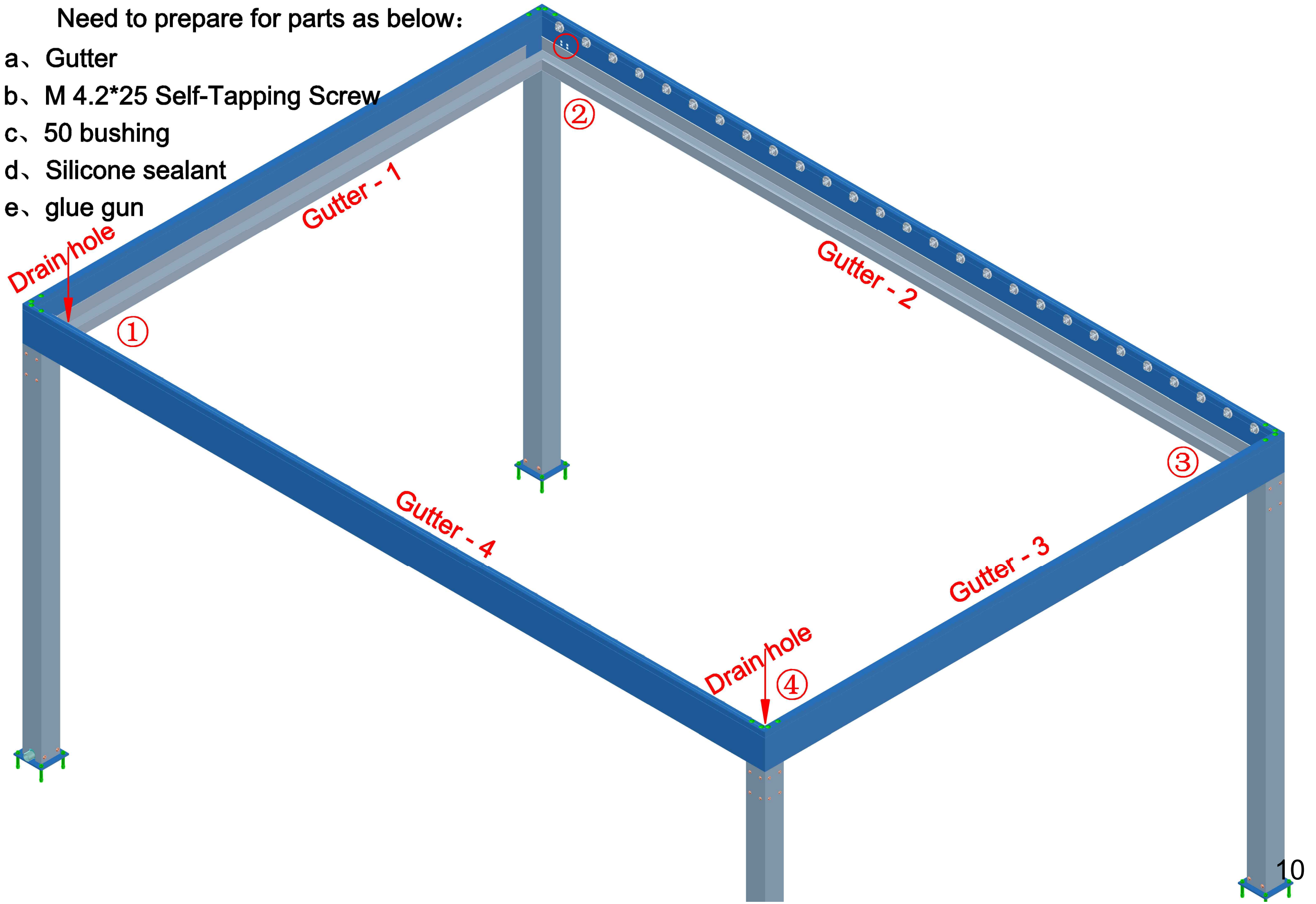
- 5、 Adjust the frame with the gradienter and tape measuring according to the size on the installation instruction, and keep the posts perpendicular to the ground.
- 6、 Make sure the post standing perpendicular on the floor and drill holes on the ground. Then use "M10x100 Anchor Bolt" to fix the "Base Plate" on the ground.



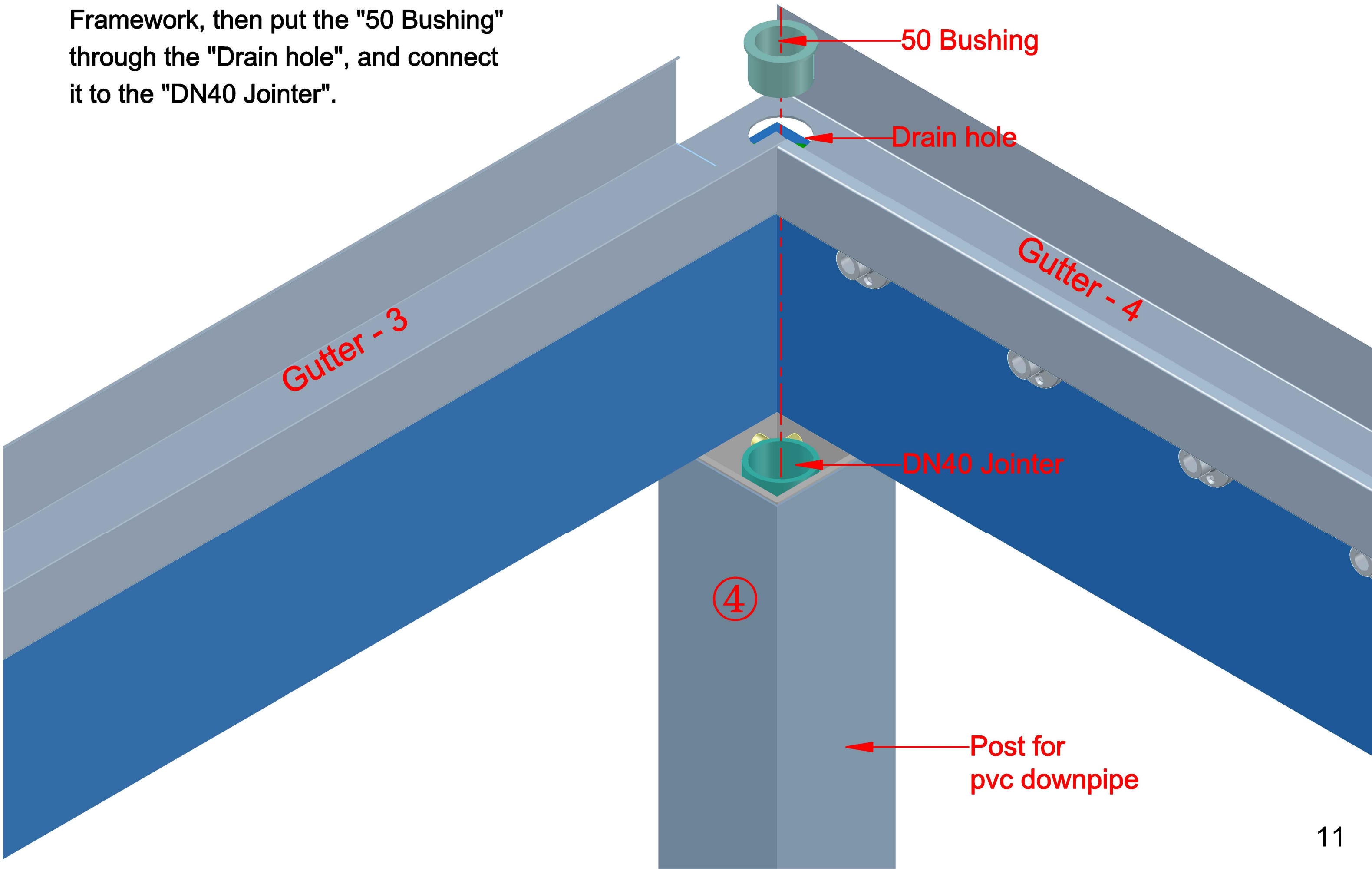
(3) 、 Install the gutters.

Need to prepare for parts as below:

- a、 Gutter
- b、 M 4.2\*25 Self-Tapping Screw
- c、 50 bushing
- d、 Silicone sealant
- e、 glue gun

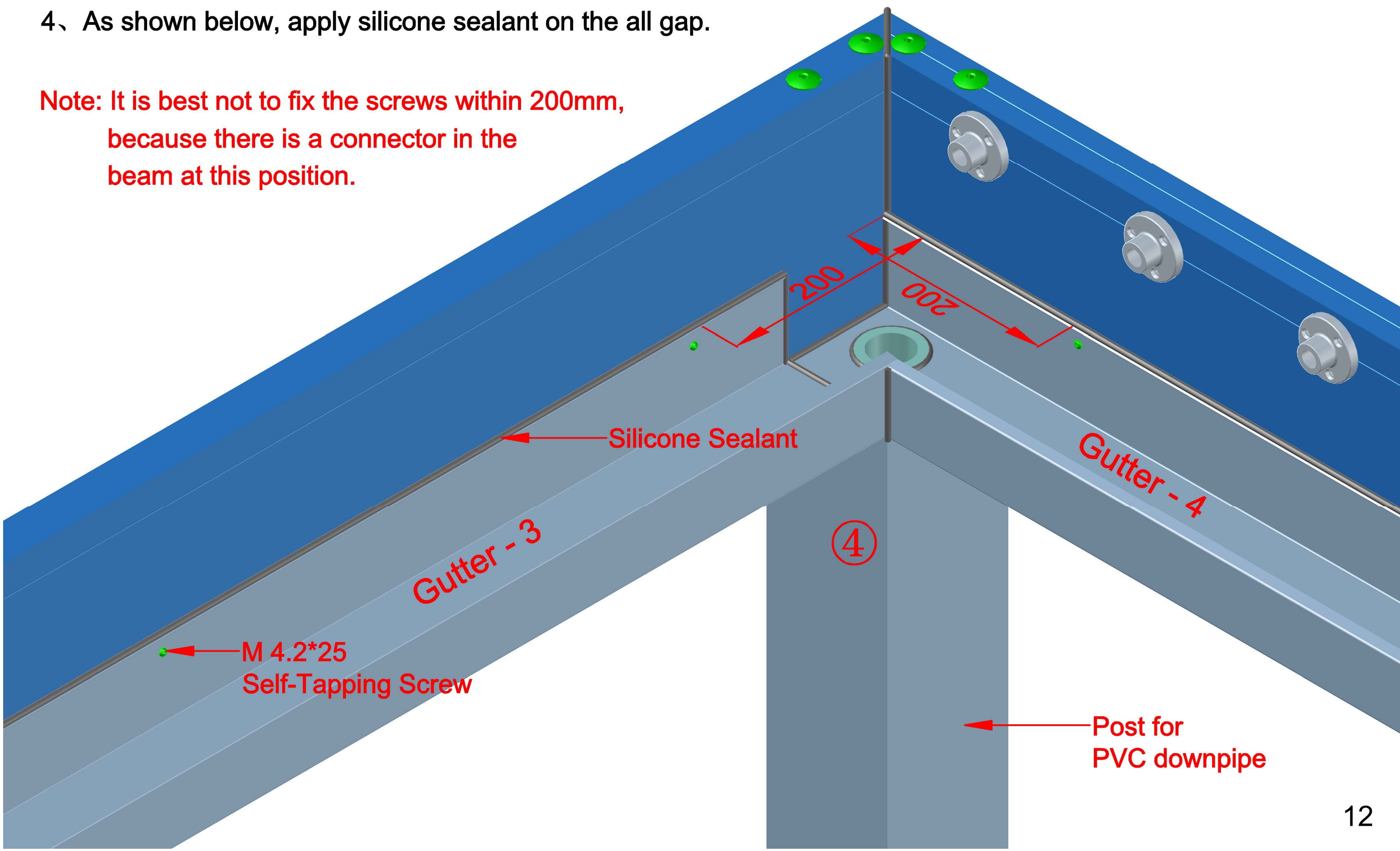


- 1、 As shown, put 4 gutters on the inner side of the beams on the post to create a Gutter Framework, then put the "50 Bushing" through the "Drain hole", and connect it to the "DN40 Jointer".



- 3、 Use "M 4.2\*25 Self-Tapping Screw" to drill through gutter and fix on the horizontal beam. 1.5 meters with 1 piece "M 4.2\*25 Self-Tapping Screw".
- 4、 As shown below, apply silicone sealant on the all gap.

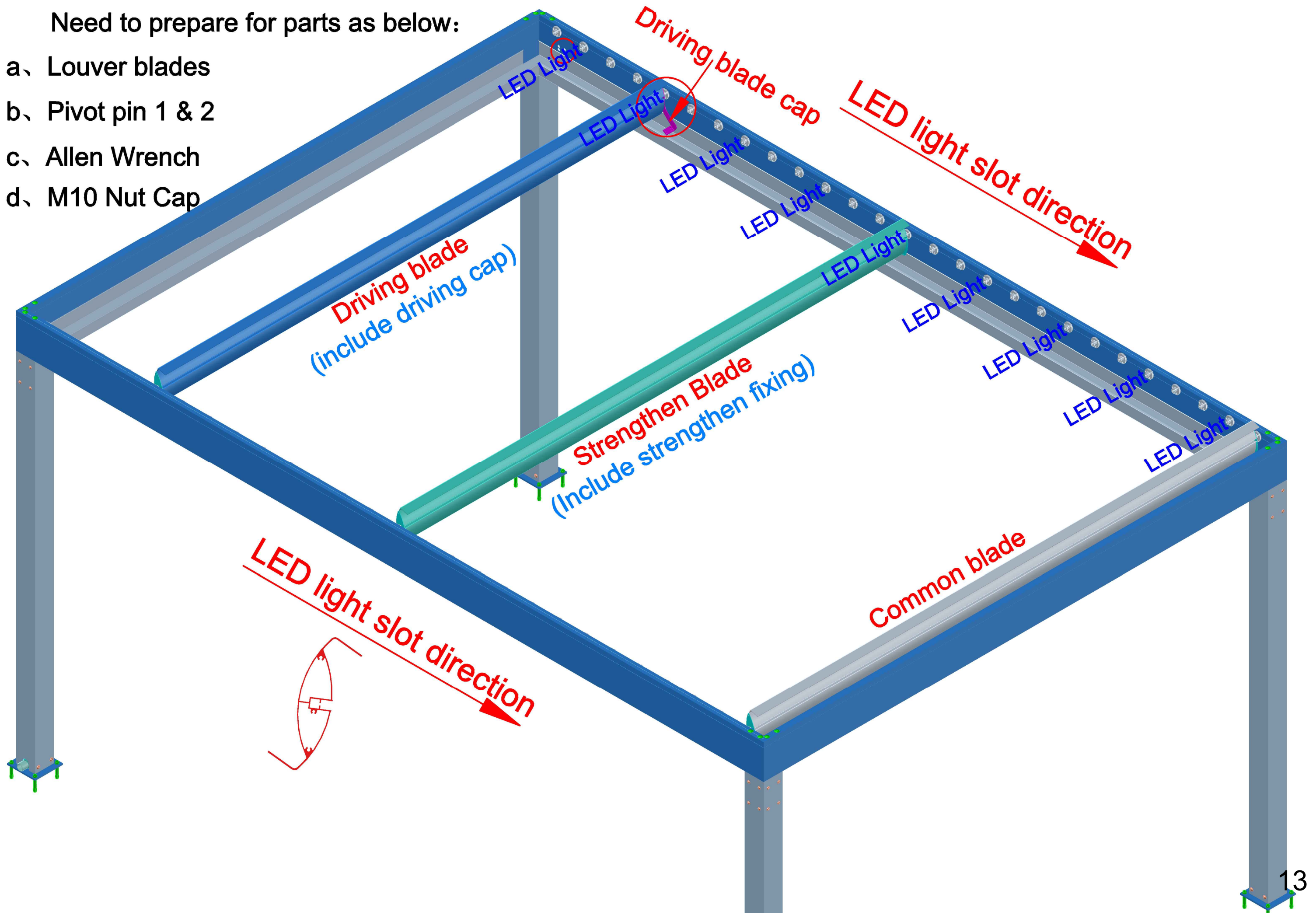
**Note:** It is best not to fix the screws within 200mm, because there is a connector in the beam at this position.



(4) 、 Install the louver blades.

Need to prepare for parts as below:

- a、 Louver blades
- b、 Pivot pin 1 & 2
- c、 Allen Wrench
- d、 M10 Nut Cap

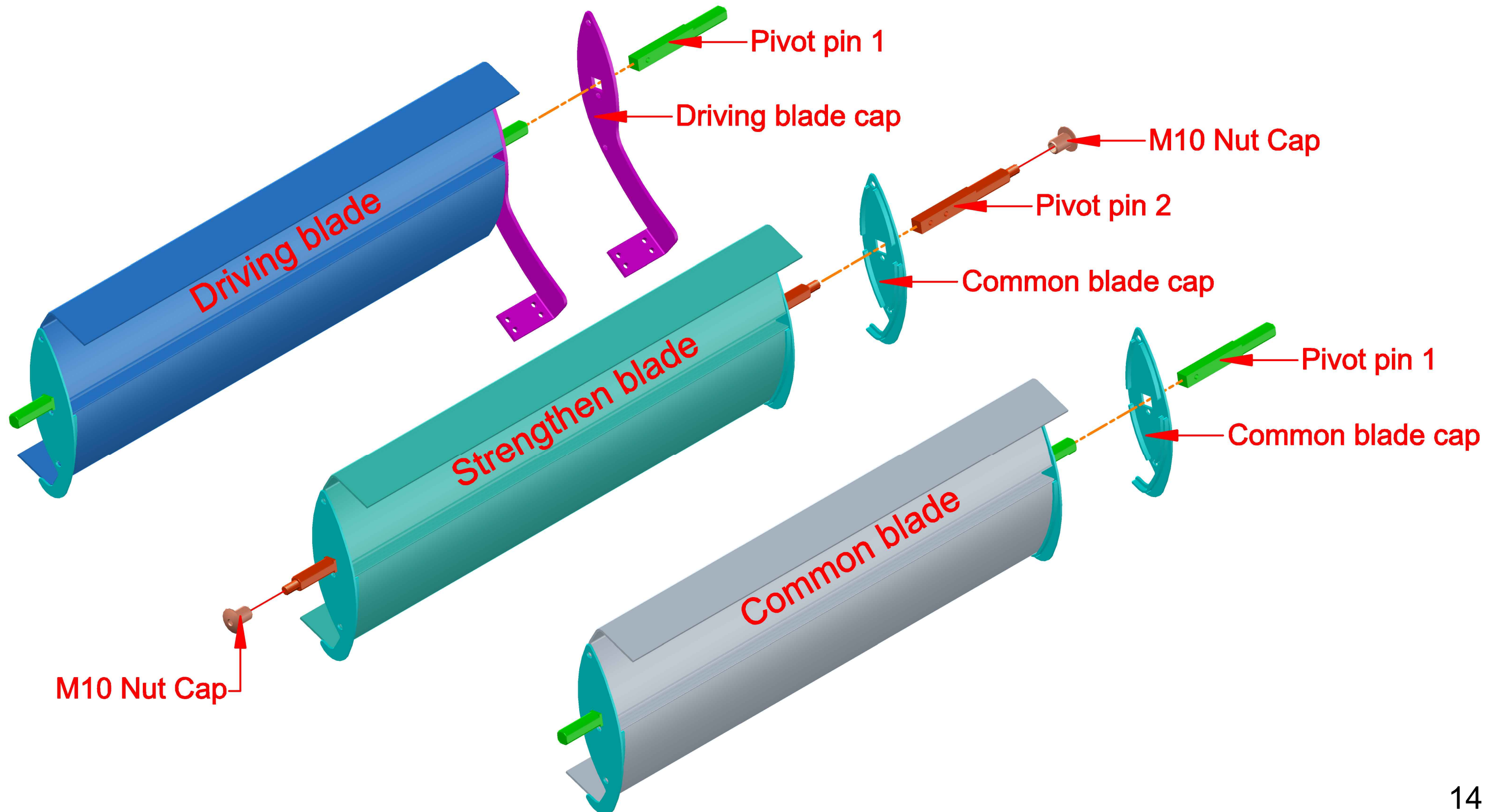


1、 First identify 3 types of louver blades:

①、 Driving blade---from the motor the fifth blade.

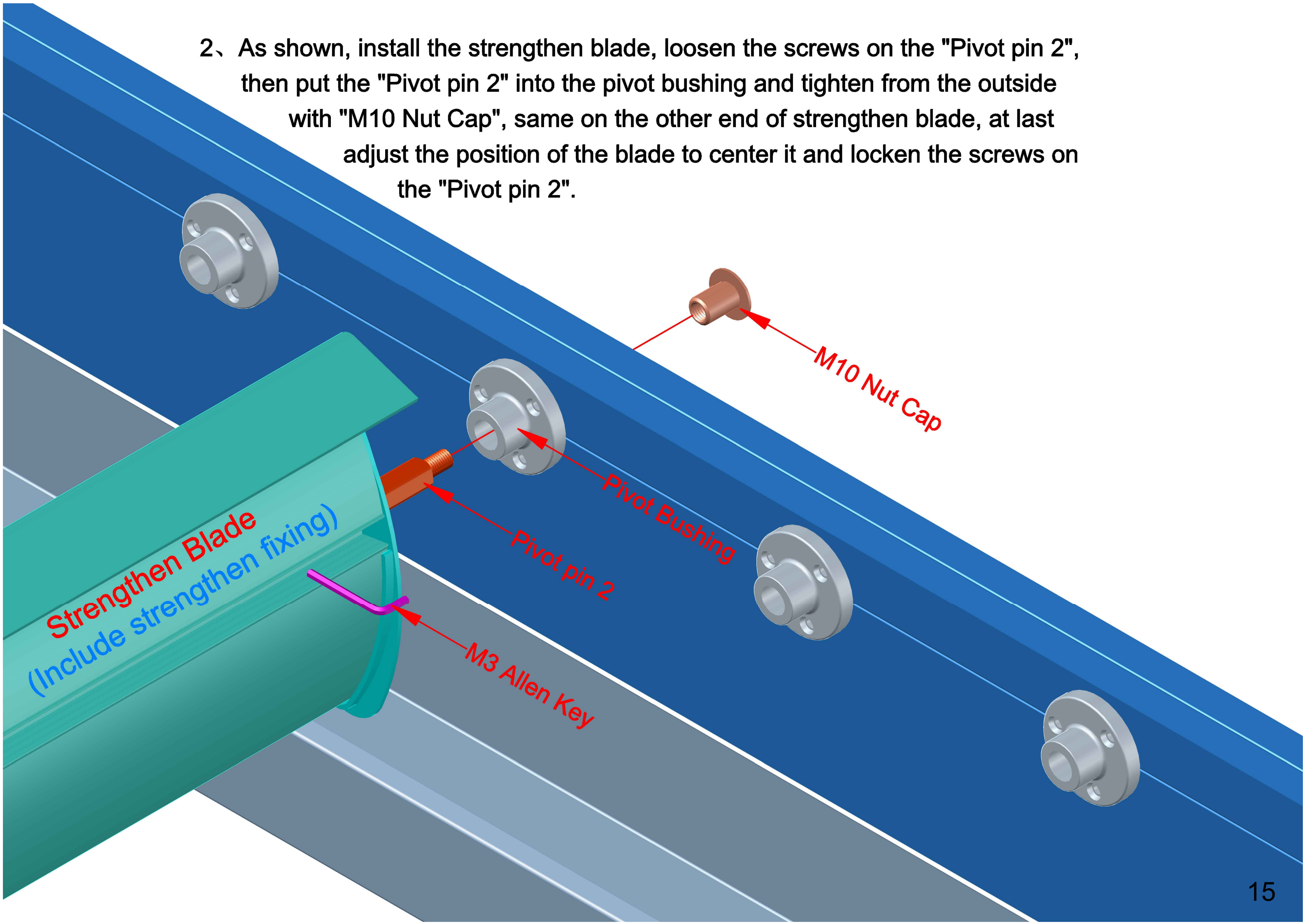
②、 Strengthen blade---in the middle of the blades, there have one screw hole in the beam.

③、 Common blades---Except the driving blade and strengthen blade are common blades.





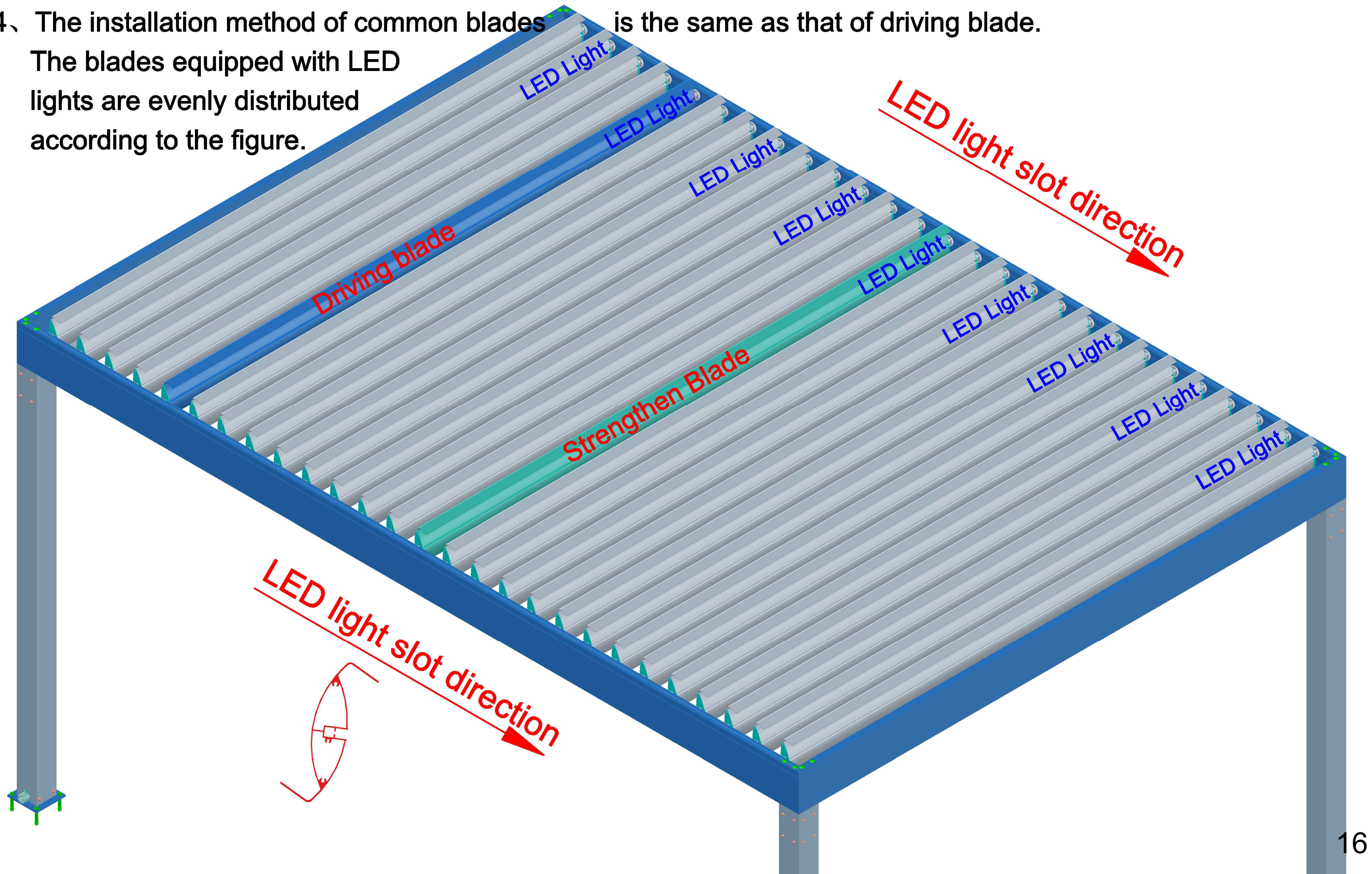
2. As shown, install the strengthen blade, loosen the screws on the "Pivot pin 2", then put the "Pivot pin 2" into the pivot bushing and tighten from the outside with "M10 Nut Cap", same on the other end of strengthen blade, at last adjust the position of the blade to center it and locken the screws on the "Pivot pin 2".



3、 Install the driving blade, loosen the screws on the "Pivot pin 1", then put the "Pivot pin 1" into the pivot bushing, same on the other end of driving blade, at last adjust the position of the blade to center it and locken the screws on the "Pivot pin 1".

4、 The installation method of common blades is the same as that of driving blade.

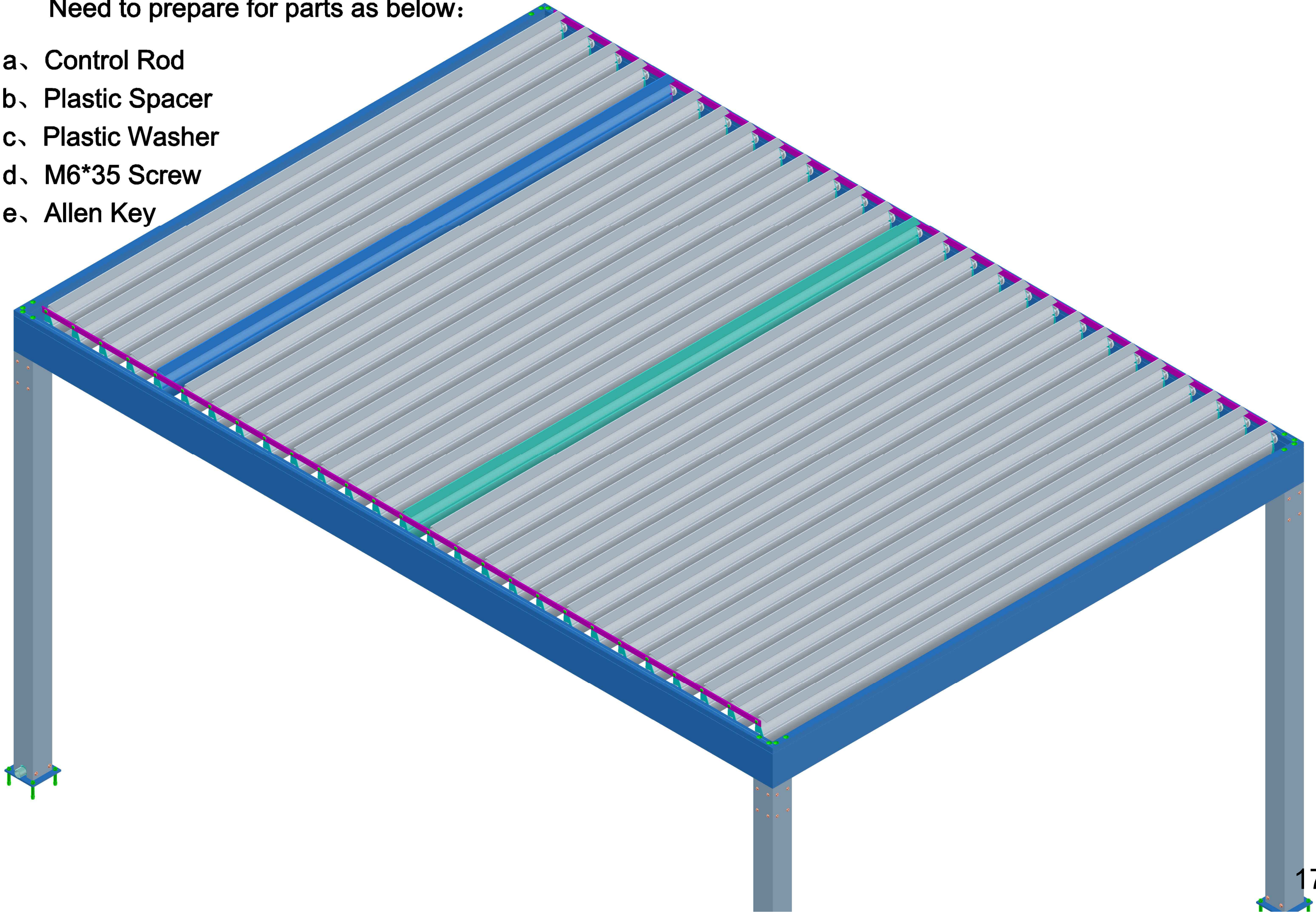
The blades equipped with LED lights are evenly distributed according to the figure.



(5) 、 Install the control rods.

Need to prepare for parts as below:

- a、 Control Rod
- b、 Plastic Spacer
- c、 Plastic Washer
- d、 M6\*35 Screw
- e、 Allen Key



- 1、 As shown,use 1pc "Plastic Washer" and 1pc "Plastic Spacer" to place at both sides of control rod. then use "M6\*35 Screw" to fasten the control rod and louver blade.

Note: The opposite end of the louver blade should follow the above steps to assemble control rod !  
After installing the control rod, turn the blade by hand to see if the blade is turned smoothly.  
Be careful not to pinch your hands !

M6\*35 Screw

Plastic Spacer

Plastic Washer

Control Rod

(6) 、 Install the motor.

Need to prepare for parts as below:

- a、 Motor
- b、 Motor Bracket
- c、 M4X25 Screw and Nut
- d、 Allen Key

1、 Use 4pcs "M8 Hex Bolt" to fix "Motor Bracket" into the 4 holes on the inner side of the pivot beam. Motor tail is at least 30 mm from the beam.

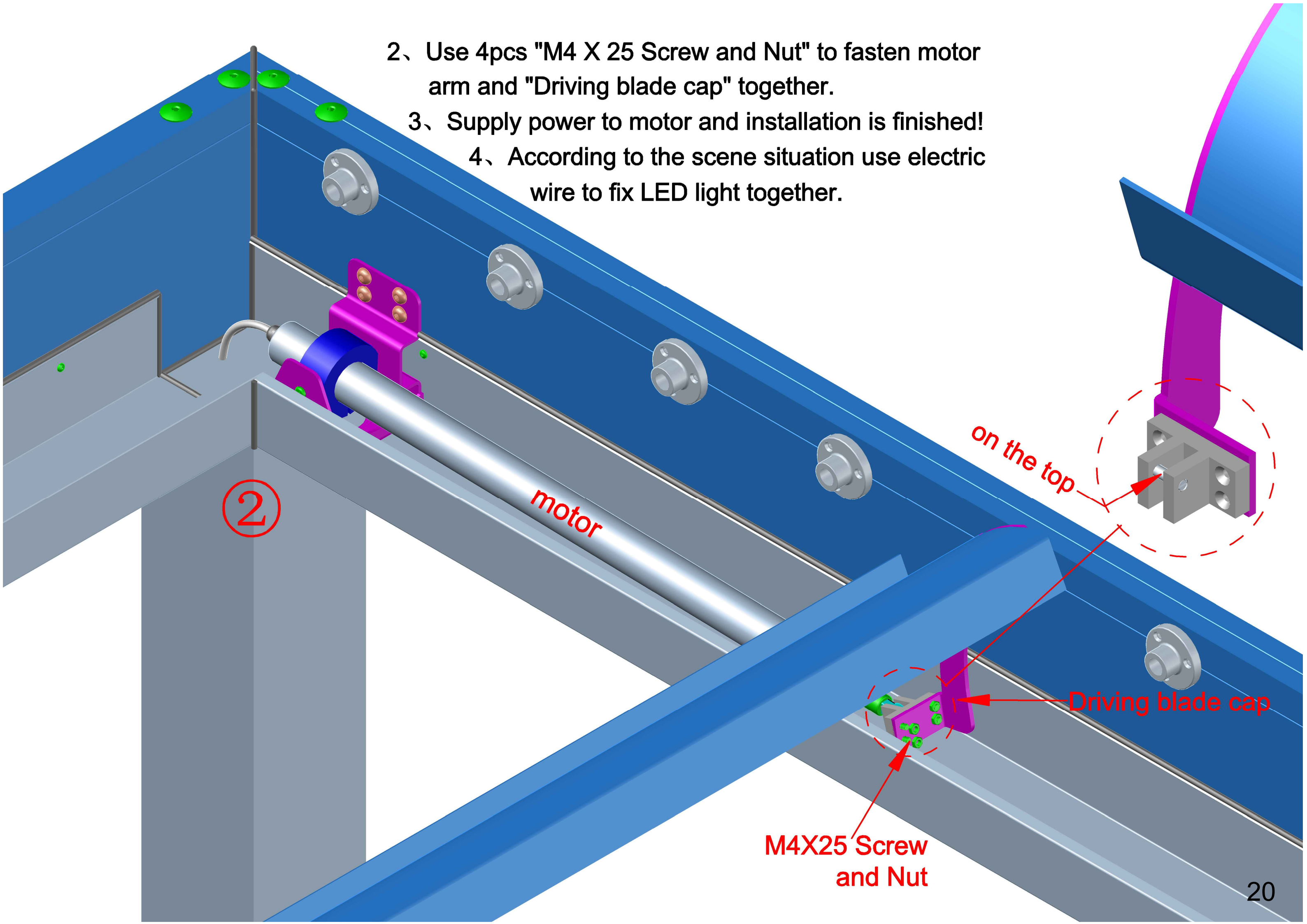
30mm  
M8 Hex Bolt  
Motor Bracket

②

**Note:** In order to clearly show the details of motor, gutter and pivot beam, the louver blades are invisible here. During installation you don't have to remove the louver blades. Just keep the louver blades in closed position and complete the fixing.

Driving blade cap

- 2、 Use 4pcs "M4 X 25 Screw and Nut" to fasten motor arm and "Driving blade cap" together.
- 3、 Supply power to motor and installation is finished!
- 4、 According to the scene situation use electric wire to fix LED light together.



Line

LED Light

Earth

Null

Electric Motor

火线	地线	零线	照明灯		直流电机	
AC100-240V			L	N	+ 24V -	

Model: ZC31-03-2AD



DC Receiver

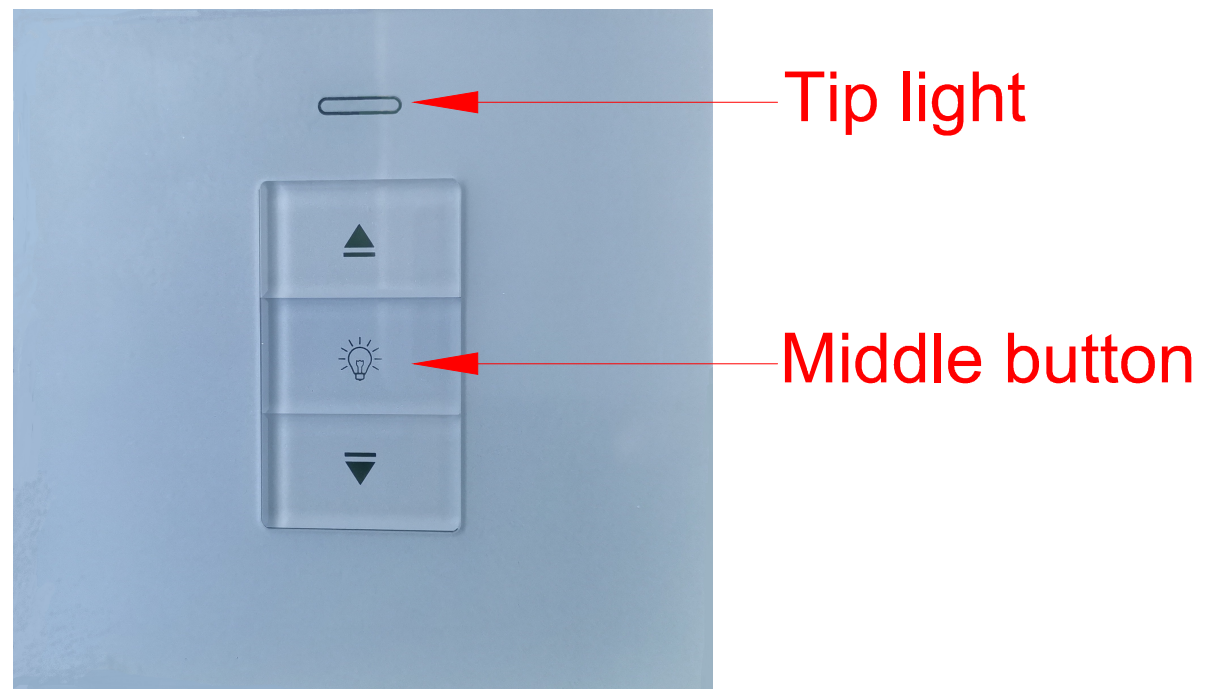
Frequency  
Input: AC1  
Loading po

86型单路直流

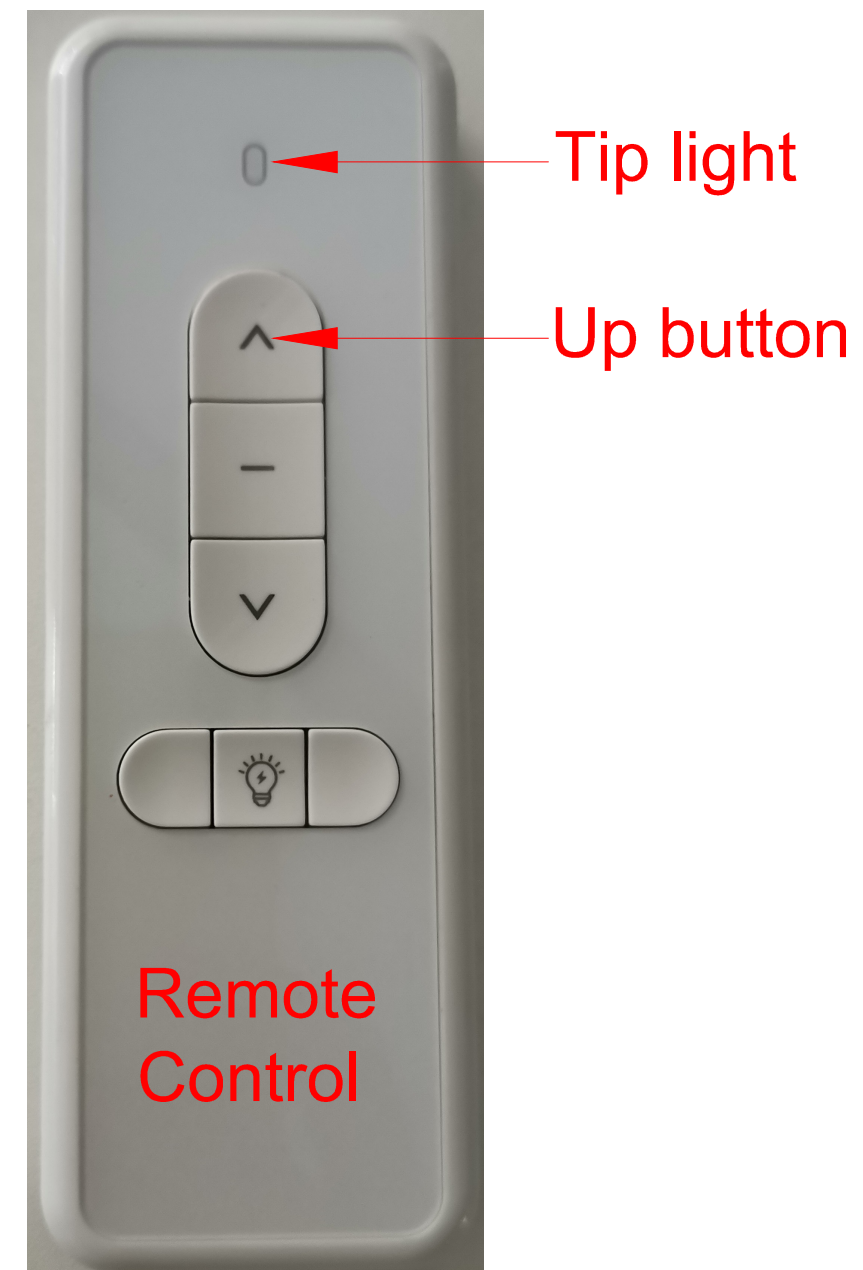
## Receiver and Remote Control

If the remote control can't control the pergola :

1. Please connect the power, start the following steps within 15 seconds..
2. Then press the middle button on the receiver for about 5 seconds until the tip light (blue) at the top continues to flash.
3. Press the up button on the remote control. When the receiver tip light (blue) flashes 3 times, this means the remote control can be used to control the motor.



Receiver



Remote Control





Please keep children away when installing the Pergola.

In colder weather, especially in snow, the operation of the pergola may become difficult. Excessive force may cause damage to the pergola. In order to prevent any damage, please clear the snow on the top of the Pergola.

Note:

1. Wall Switch is non-waterproof, must install our supplied waterproof box.
2. Please ensure that the downpipe hole on gutter won't be blocked by other things.
3. Please check the tightness of the screws regularly.