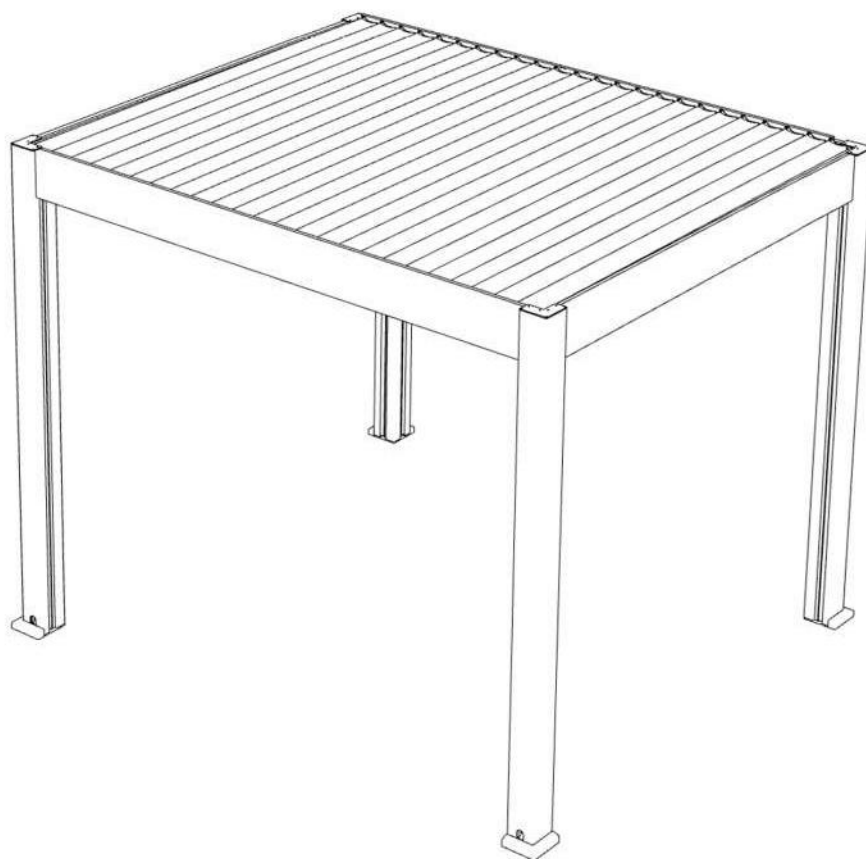


H Series Louvered Pergola

Installation Manual



Tools Required



Electric drill



Hammer drill



No. 4 & No. 5 hex key (Allen wrench)



Tape measure



Infrared level



Rubber mallet



Phillips screwdriver bit



10 mm & 12 mm drill bits



10 mm, 13 mm, 17 mm open-ended wrenches



Lift equipment



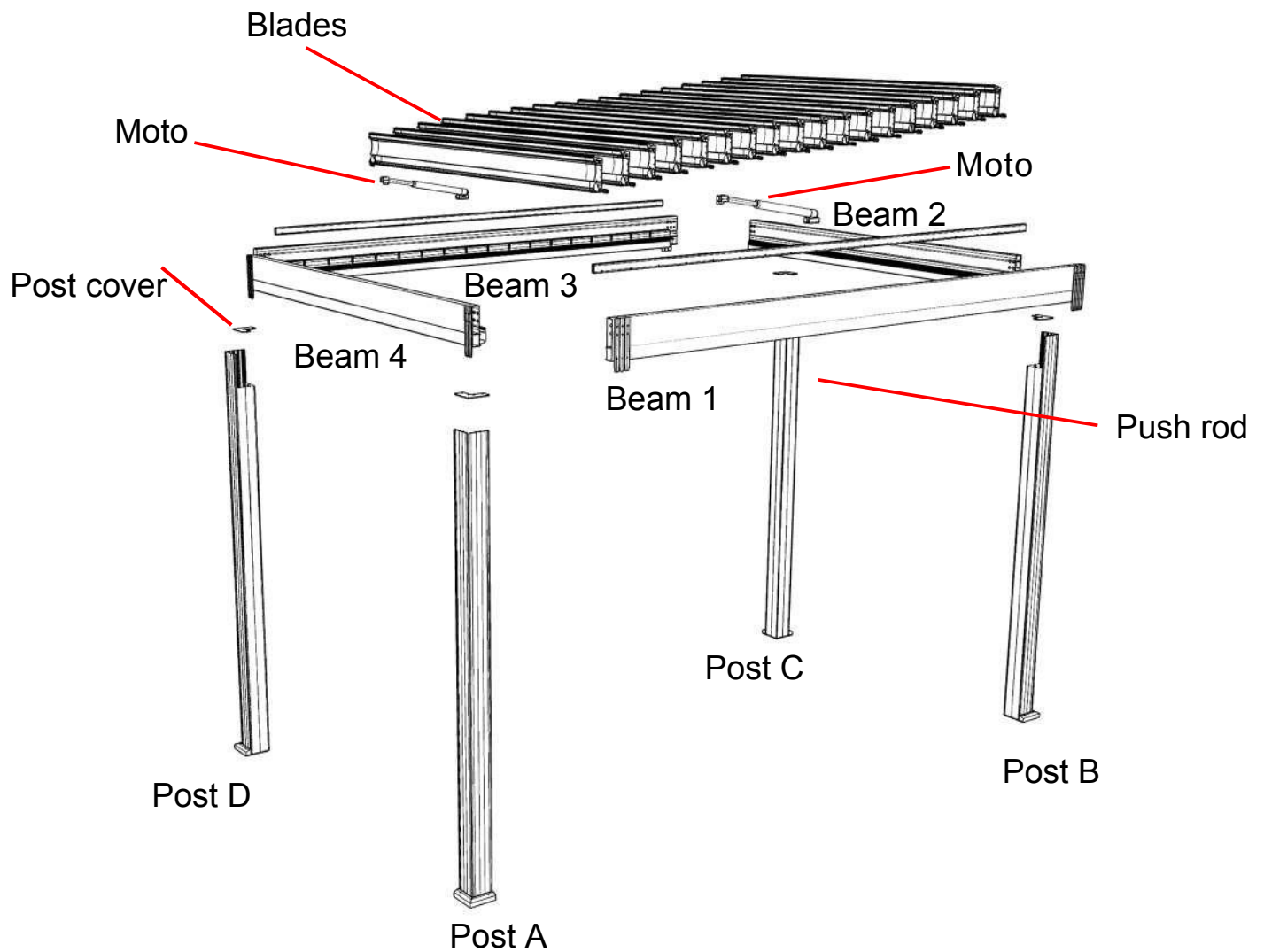
Ladder



Silicone sealant & sealant gun

Required installation personnel: 3–4 persons

H220 Pergola 3 × 4 × 2.7 m — Exploded View



Packing list

NO.	Description	Total pcs	Total number of cartons
1	Beam	2	1
2	Beam	2	1
3	Post	2	1
4	Post	2	1
5~7	Blade	15	3
8	Blade	4	1
9	Other accessories	1	1

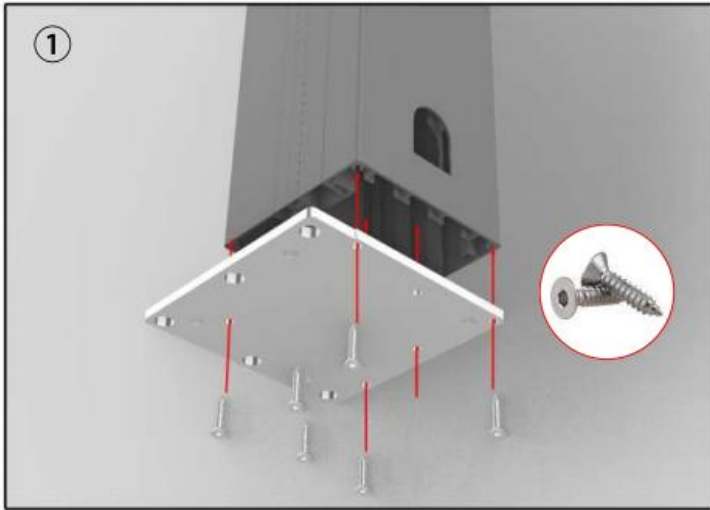
Accessories list

NO.	Picture	Name	NO.	Picture	Name
1		Post base fixing screws (10*120 expansion bolts)	7		Blade rubber plug
2		Post base height adjustment screws (12*40 hexagonal screws)	8		Blade motor box
3		Insert plate for beam	9		Top blade pushrod motors & remote controller & accessories
4		Screw for beam insert plate (8*12 hexagon socket screws)	10		Gutter mounting (4.5*25 cross tapping screws)
5		150mm Post base plate (6*30 hexagon socket self-tapping screws)	11		Beam mounting plate (6*30 hexagon socket self-tapping screws) (4.5*25 cross self-tapping screws)
6		150mm Post base shell nosing	12		European standard plug (different for different customers)

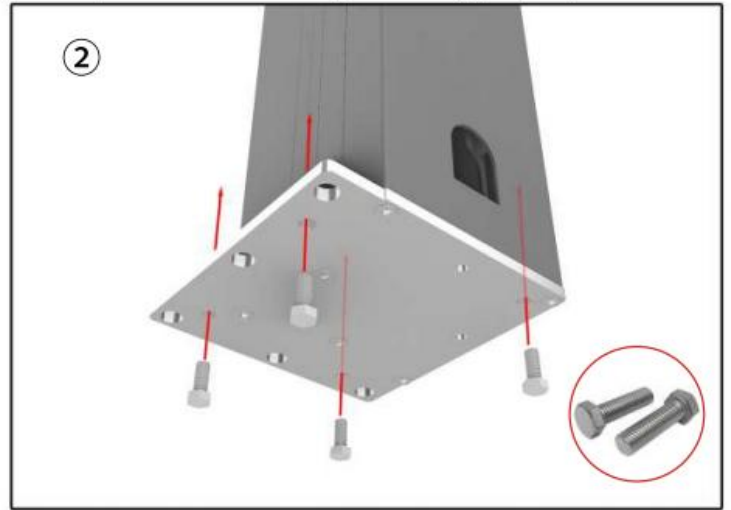
1. Preparation



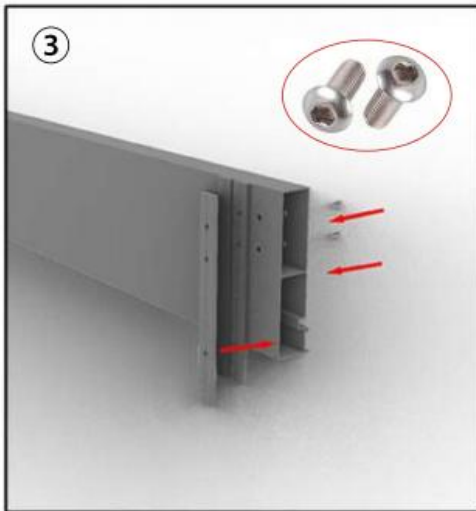
Note: The posts and beams will be numbered. Each post and beam must be placed according to the corresponding number on the production drawing. Do not mix up the positions, as this may cause problems with wiring not being properly connected.



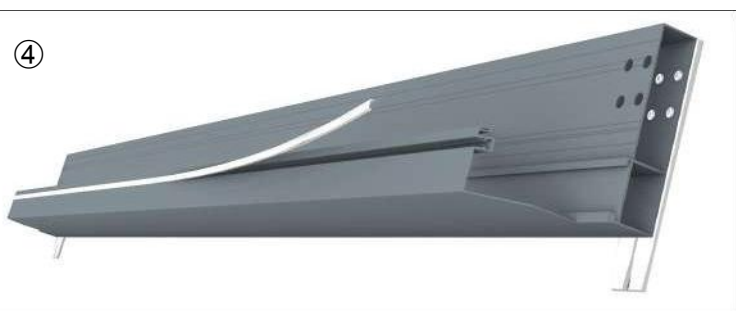
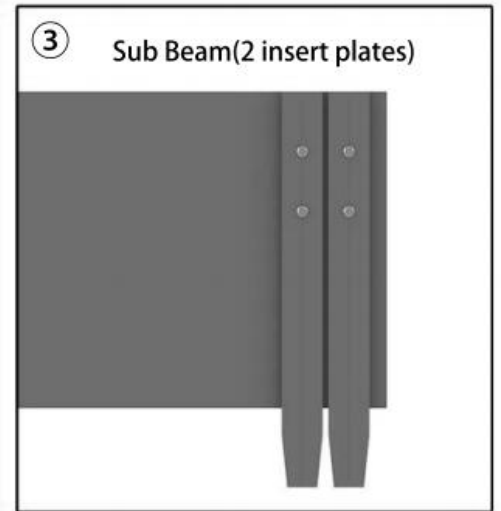
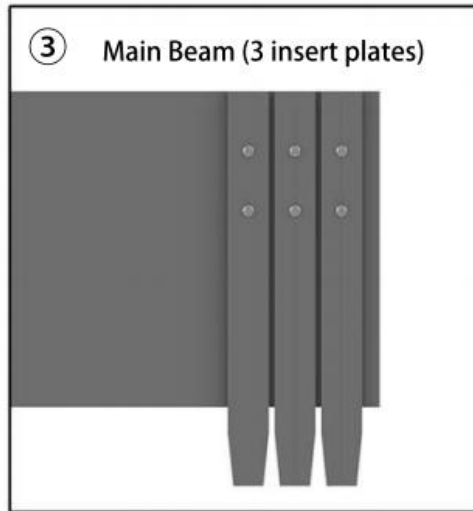
① Fix the posts and base plates with screws. (6*30mm hexagon socket self-tapping screws).



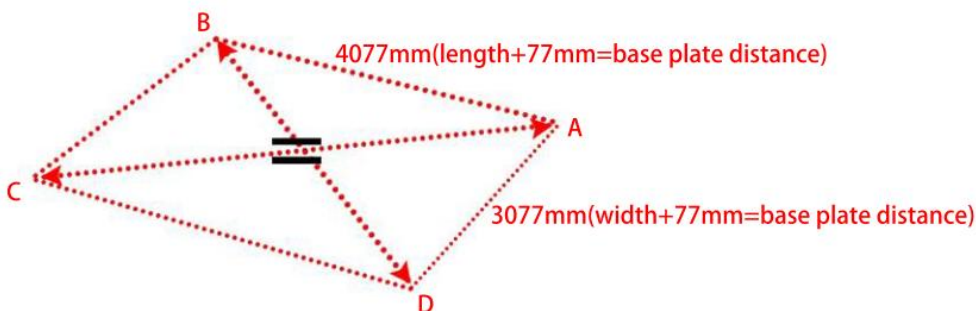
② Install the bottom plate height adjustable screws. (12*40mm hexagonal screws)



③ Install the insert plate into the beam. (8*12mm hexagon socket screws)
Don't tighten the screws too tightly; After installation on the post, tighten them again.



④ Remove the drainage channel light cover.



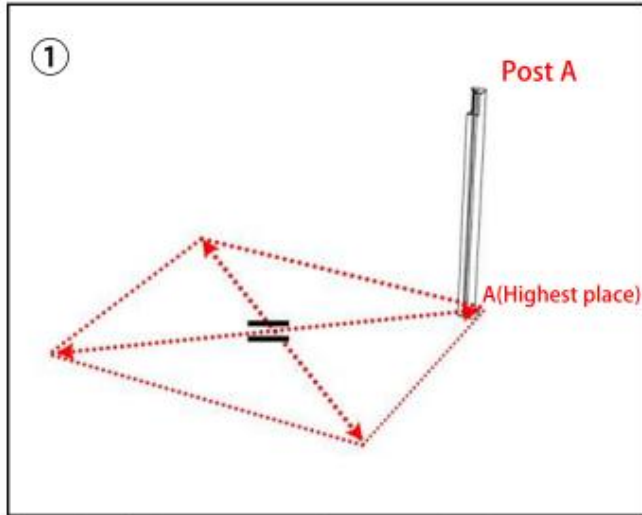
⑤⑥ Required tools



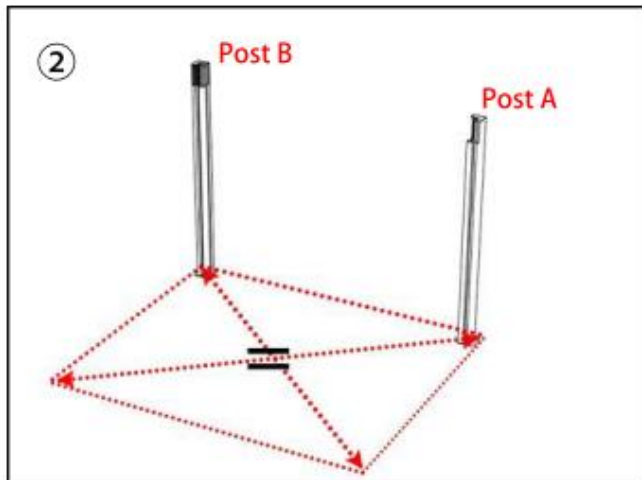
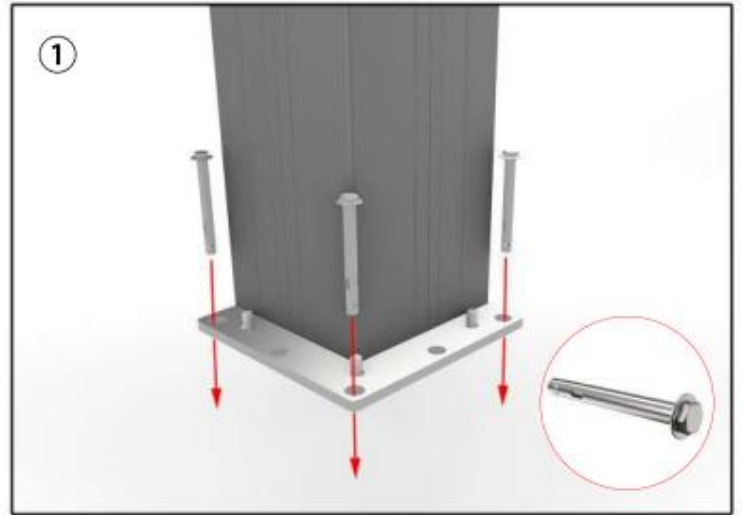
⑤ Mark the base plate positions. Ensure diagonal measurements are equal.

⑥ Mark the high-point elevations for all four columns. Measure and record points A, B, C, and D; identify and mark the highest point.

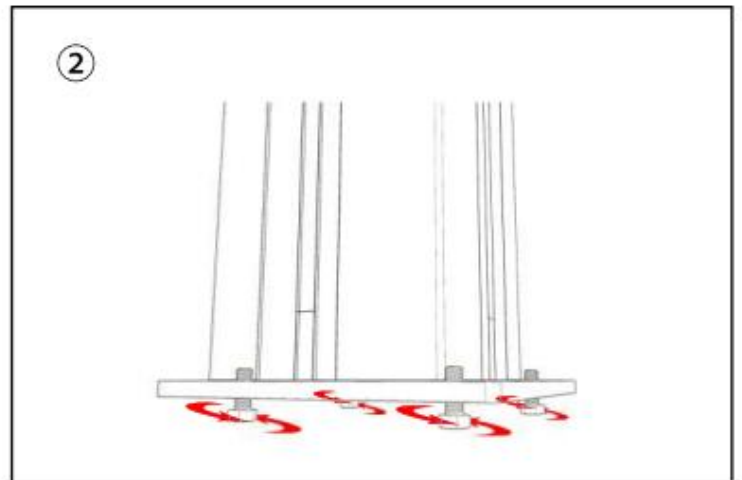
2. Installation of beams and posts



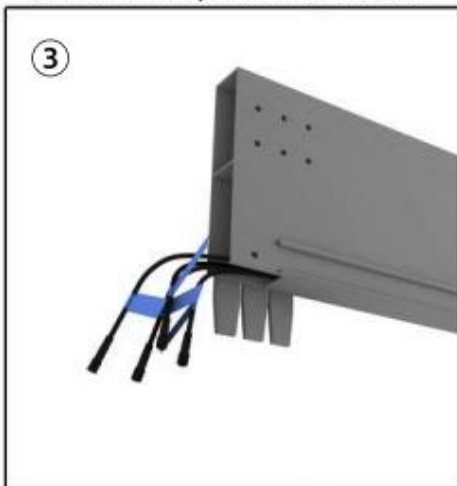
① Fix the highest post to the ground with expansion bolts. (10*120 expansion bolt)



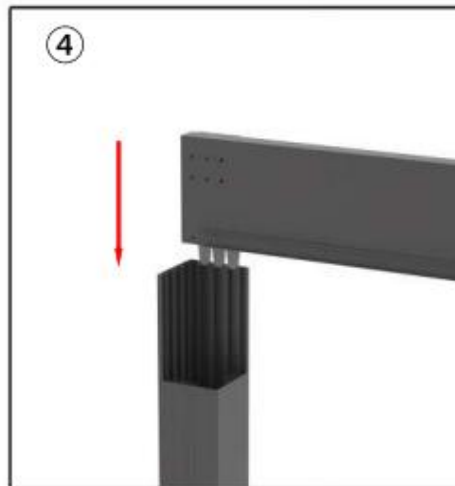
② Place the other main beam post in the correct position and adjust the height to be consistent. (Do not use expansion bolts fix it)



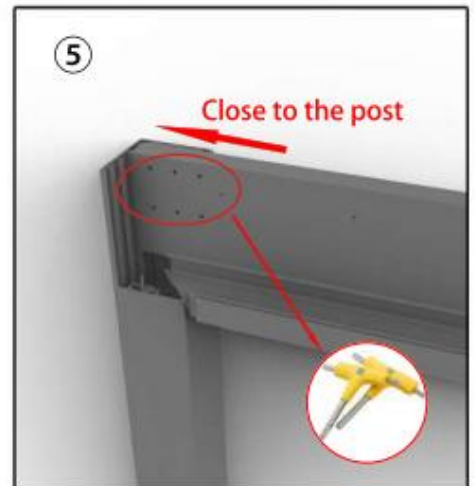
By adjusting the adjustable height screws at the bottom to keep post vertical. (hexagonal screws 12*40)



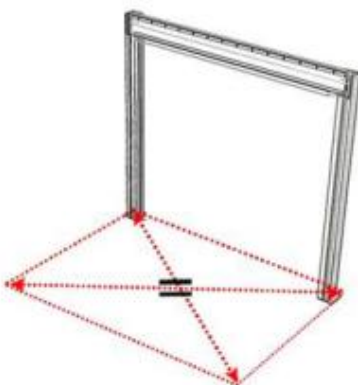
③ Pull out the waterproof plug of the main beam.

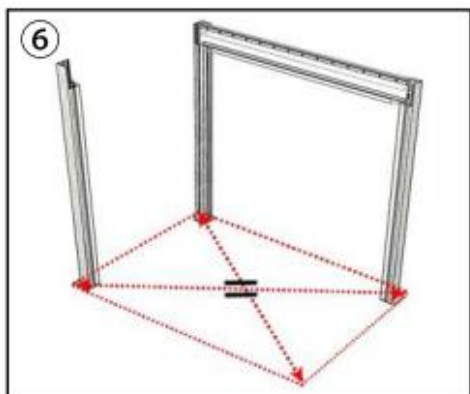


④ Install the main beam's insert into the post groove, install the beam close to the post.

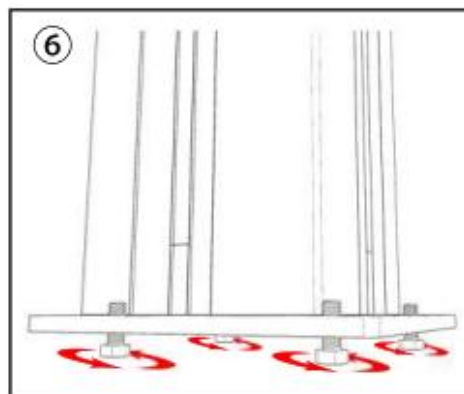


⑤ Tighten all loose screws with a hexagonal wrench.

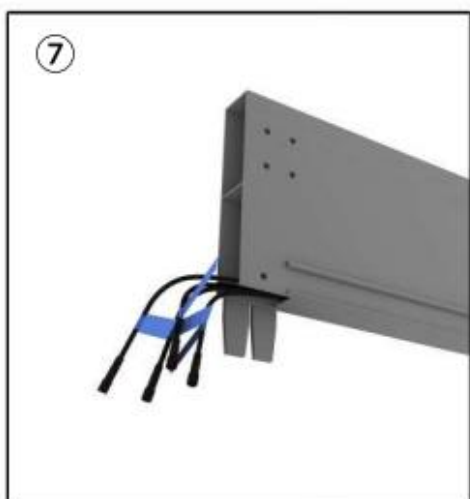




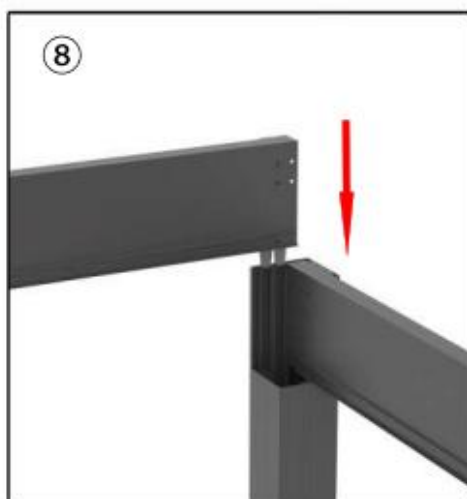
⑥ Place the third post in the corresponding position and adjust the height.



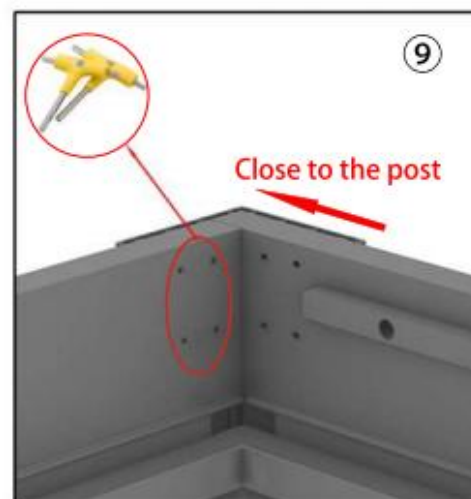
By adjusting the adjustable height screws at the bottom to keep post vertical. (hexagonal screws 12*40)



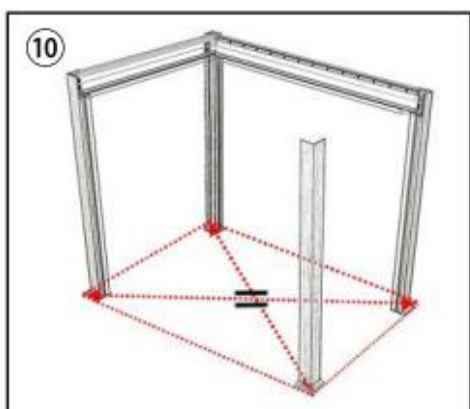
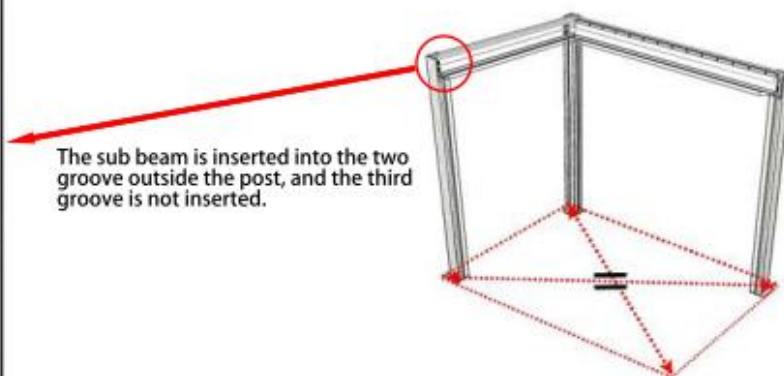
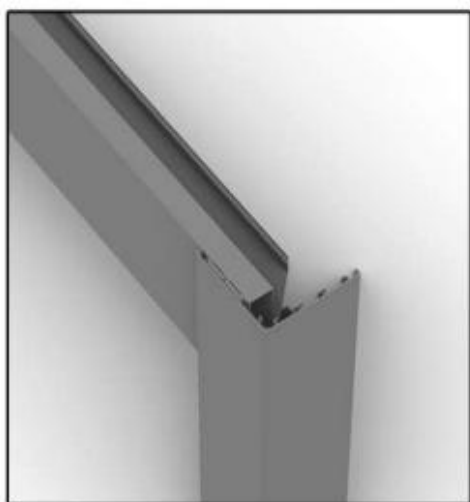
⑦ Pull out the waterproof plug of the sub beam.



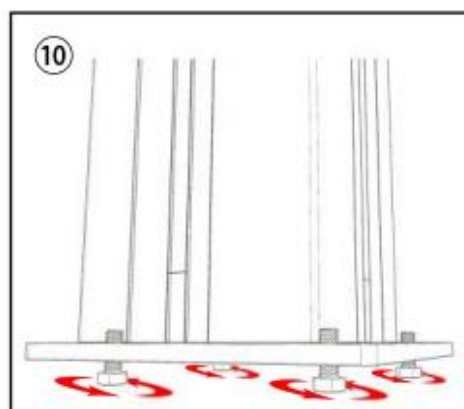
⑧ Install the sub beam's insert plate into the groove of the post, and make the beam close to the post.



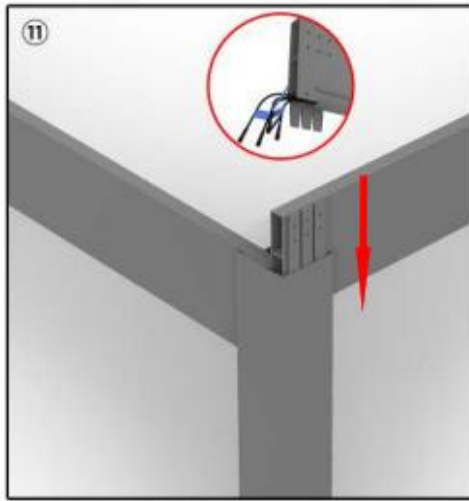
⑨ Tighten all loose screws with a hexagonal wrench.



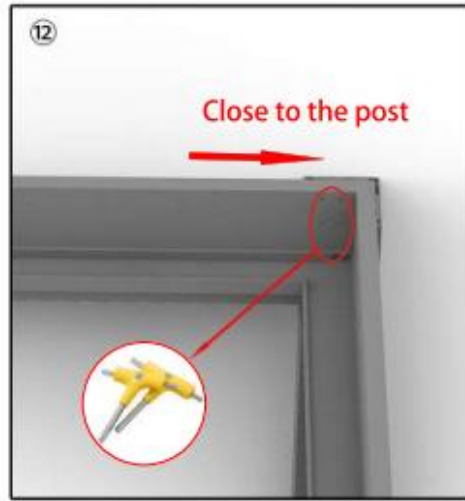
⑩ Place the fourth post in the corresponding position and adjust the height.



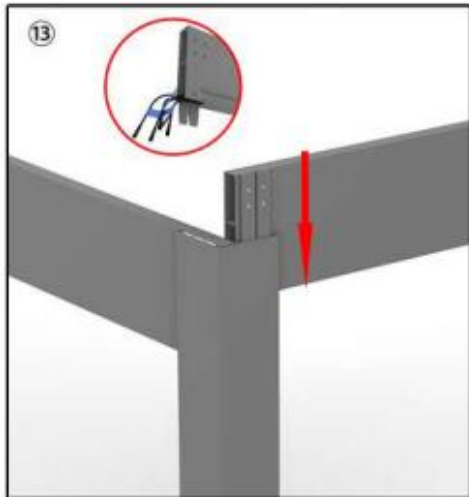
By adjusting the adjustable height screws at the bottom to keep post vertical. (hexagonal screws 12*40)



⑪ Pull out the waterproof plug of the second main beam, install the insert plate into the groove of the post, and make the beam close to the post.



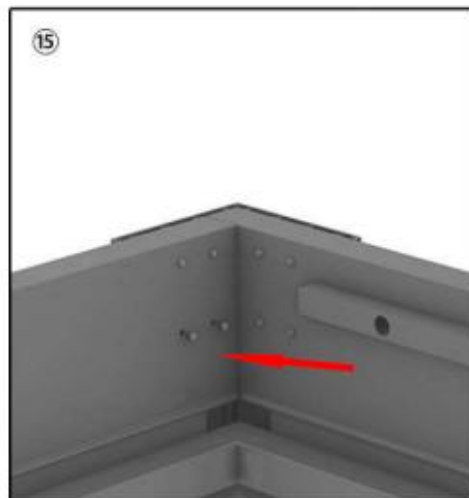
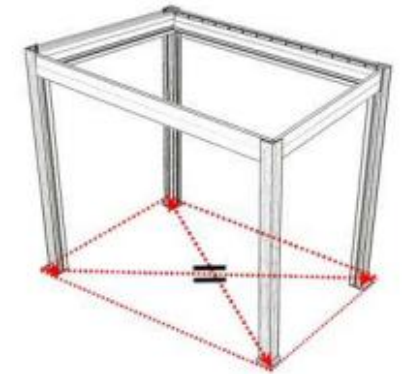
⑫ Tighten the screws with an hexagon socket wrench.
(Tighten two insert plates on the main beam and leave the innermost insert plate.)



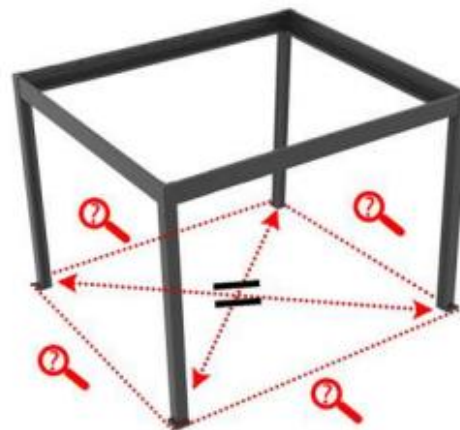
⑬ Pull out the waterproof plug of the second sub beam, install the insert plate into the groove of the post, and make the beam close to the post.



⑭ Tighten the screws with the hexagon socket wrench.



⑮ Please cover all the screw holes with plastic caps.

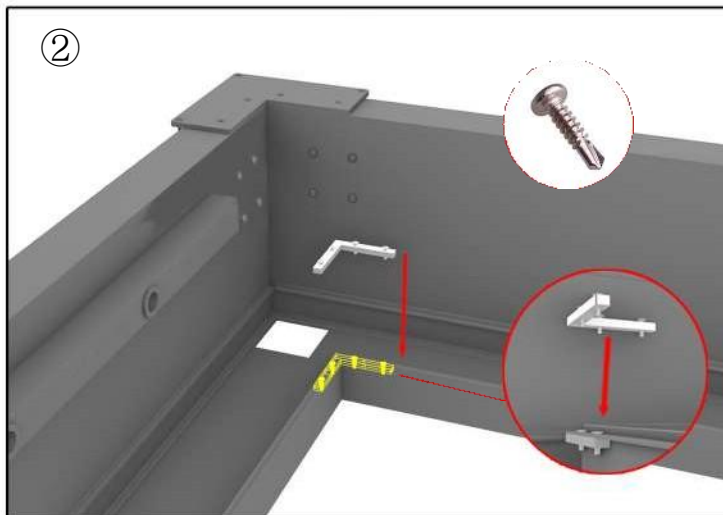


⑯ Measure the distance between the posts again to ensure that the distance is correct and the frame is vertical to the ground.

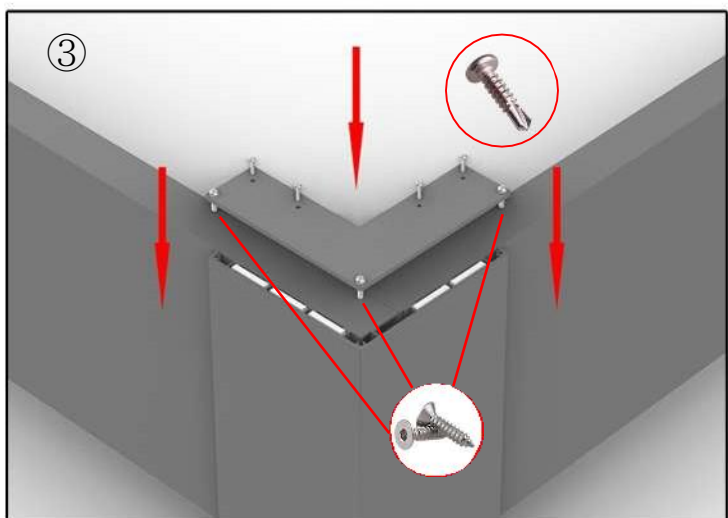
3. Securing Drainage Corner Brackets, Column Top Covers, and Waterproofing



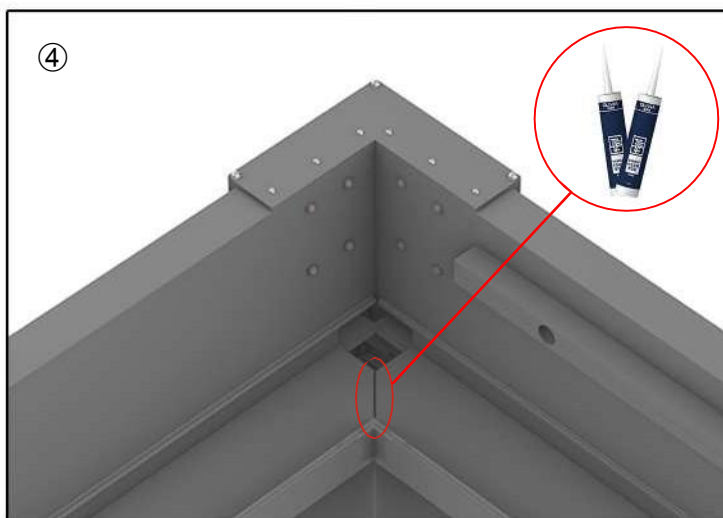
① Pull out the waterproof seals from the four corners of the drainage channel.



② Install the drainage corner brackets and secure with screws (4.5×25 mm Phillips self-tapping screws). Push the waterproof seals back into the channel grooves.

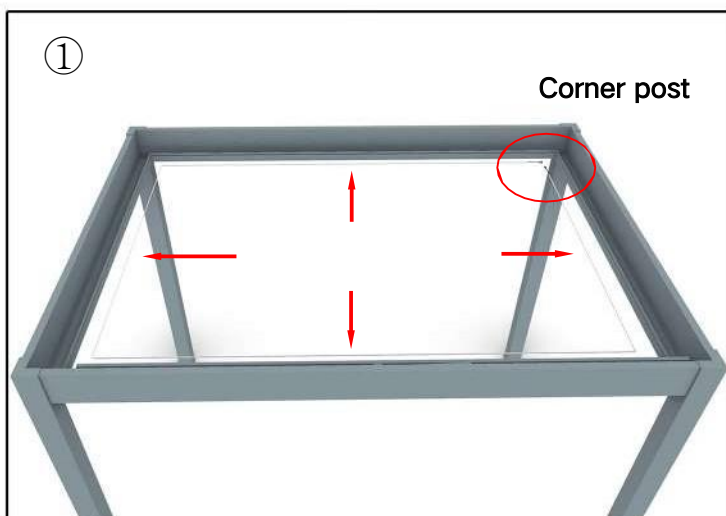


③ Install the column top cover plates and secure with screws (4.5×25 mm Phillips self-tapping screws + 6×30 mm hex self-tapping screws).

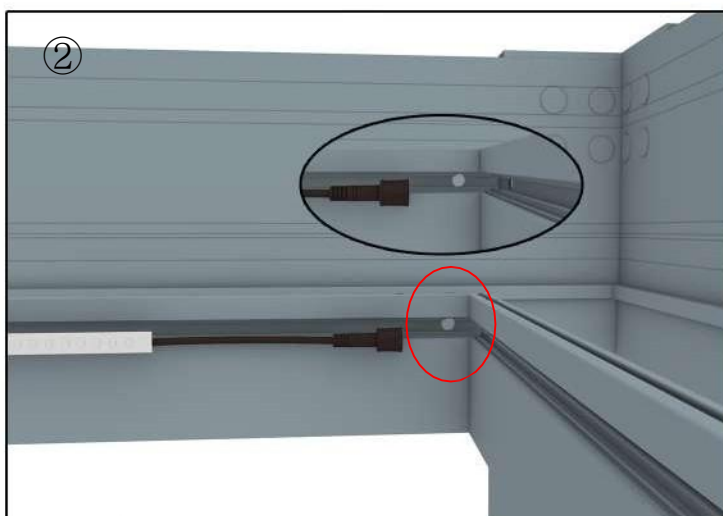


④ Apply silicone sealant to all panel joints and seams.

4. Installing LED Strip Lights



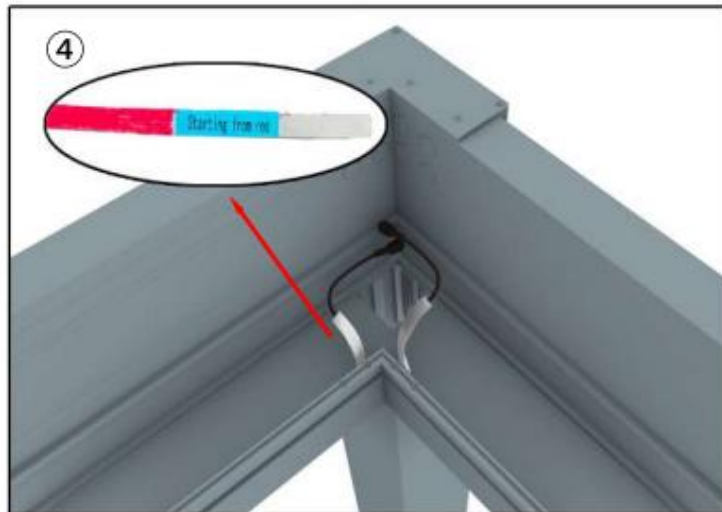
① If the drainage channel includes LED lighting, the strip starts at the connector, runs a full circle along the channel, and returns to the connector. The same applies for beam-mounted lights.



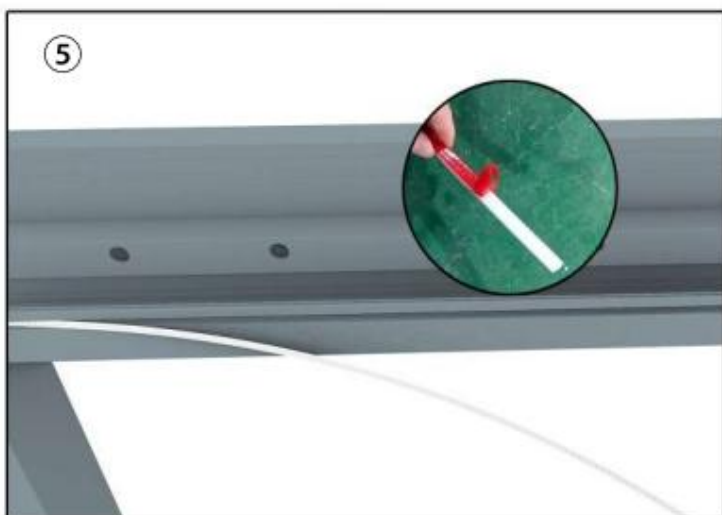
② Thread the LED strip through the indicated circular hole at the connector.



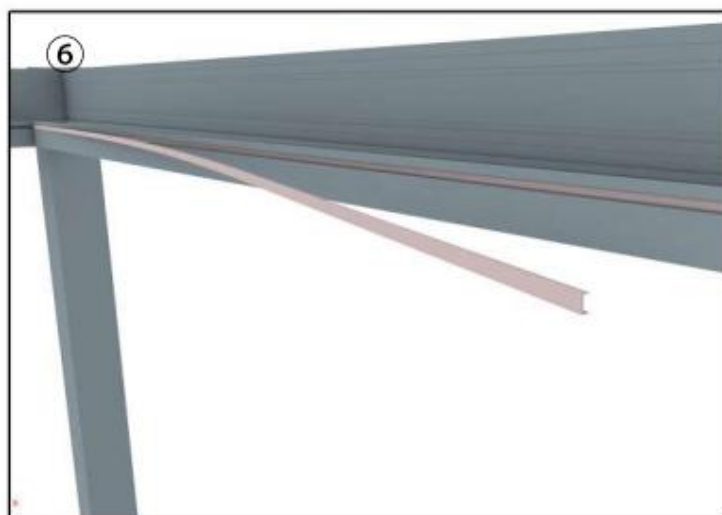
③ Pass the light strip through the round hole shown in the diagram at the connector position.



④ Pull out about 5cm of light strip to keep for future wiring first. Then, starting from the red position next to the blue label, peel off the adhesive backing of the light strip and stick it onto the corresponding light slot.

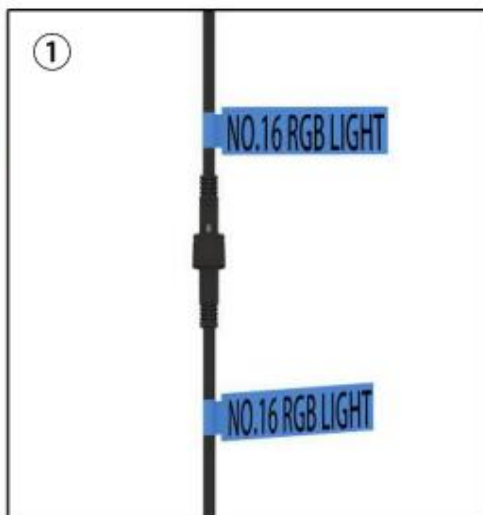


⑤ Peel off the adhesive backing of the light strip and insert it into the light slot of the gutter around its circumference. If the beam has the lighting, the operation is the same.

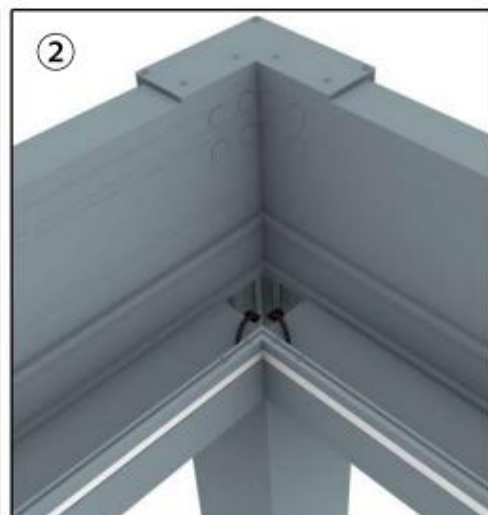


⑥ Install the lampshade.

5. Wiring

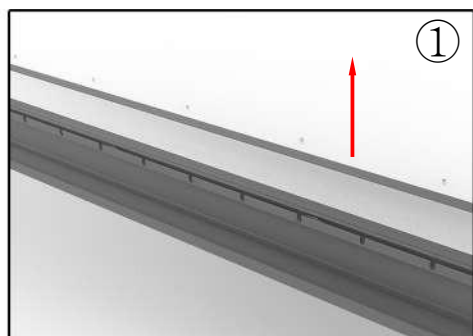


① Connect two led strip plugs with same labels. (Find out the arrows on the two cables and connect them, then tighten the caps.)

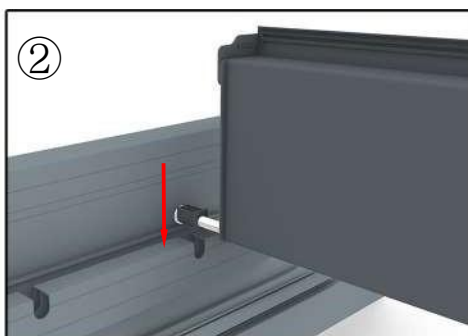


② Put all the cables into posts.

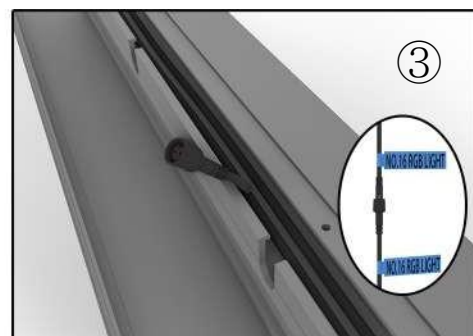
6. Installing Louver Blades



① Unscrew and remove the square tube cover plate on the beam side where the motor is located.



② Place the blade bearing sleeve into the hole, and connect the other end to the blade connector.



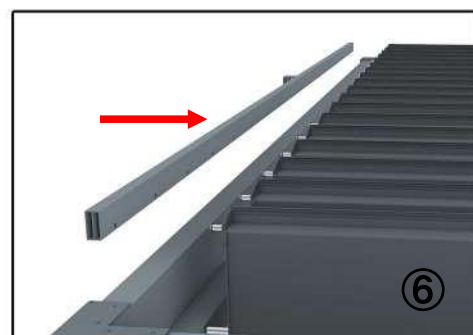
③ Pull the blade LED wire connector from inside the square tube and connect it to the blade connector.



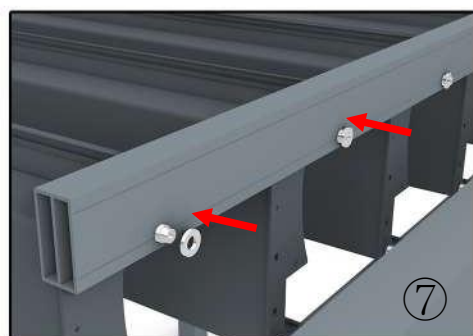
④ Install all blades using the same method, then raise each blade to the vertical (closed) position.



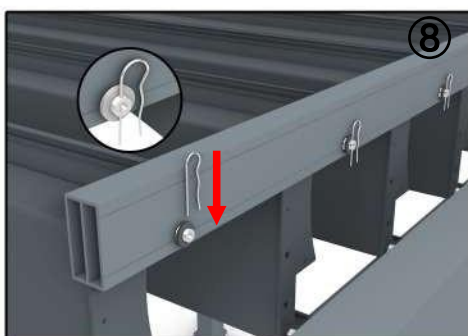
⑤ Insert the stainless steel sleeve onto the blade shaft.



⑥ Align the motor push rod hole with the blade shaft and engage it.



⑦ Install the stainless steel washer onto the blade shaft.



⑧ Insert the cotter pin through the blade shaft hole.

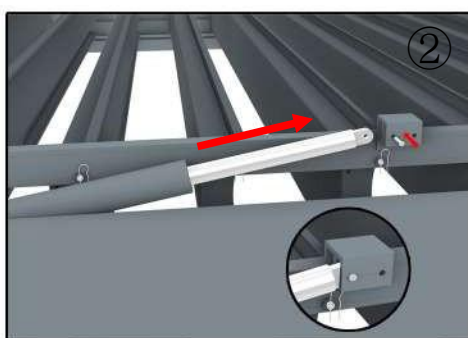


⑨ Pull out the motor connector, install the cover plate, and secure with screws.

7. Installing the Motor



① Place the motor on the base, secure with screws, and connect the motor plug.

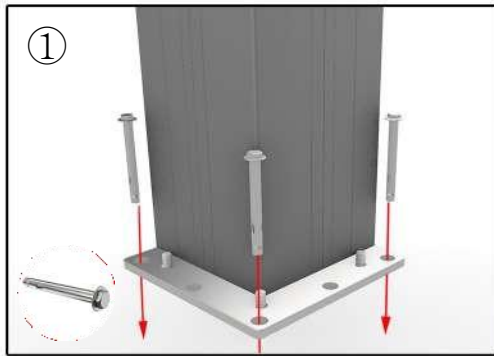


② Connect power to the motor. Use the remote control to extend the motor stroke to its maximum position, then connect the motor code and secure with screws.

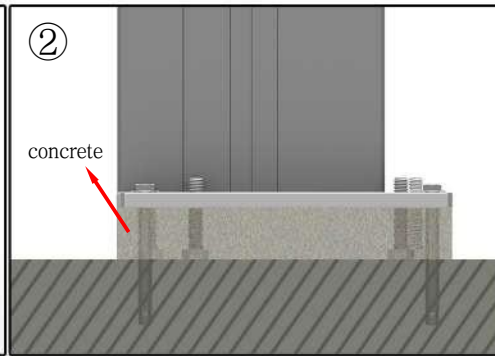


③ Test that the pergola operates normally through all range of motion.

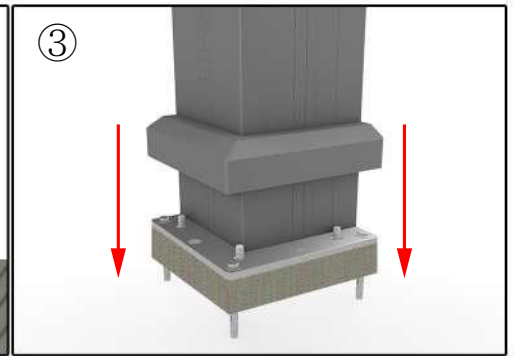
8、Securing the Columns



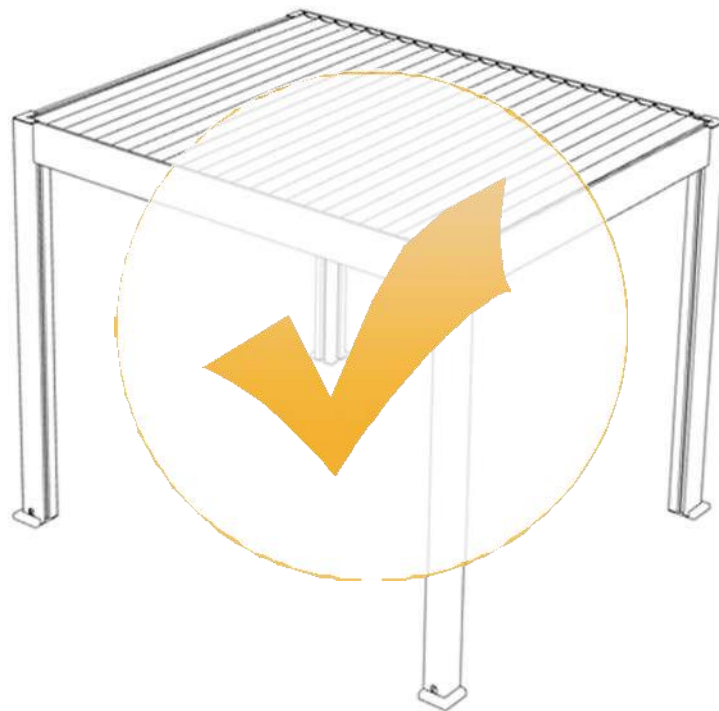
①Verify all columns are vertical and at consistent height. Once confirmed, secure each base plate with expansion bolts (10 mm diameter).



②Fill the gaps around the base plates with concrete for reinforcement. Note: do not rely on screws alone for load-bearing.



③Install the column base trim covers for a clean finished look.



Assembly Complete

User and Operation Manual

1. Sunny



2. Strong windy

-Open the blade 90 degree.



3. Rainy

-Closed the blade.



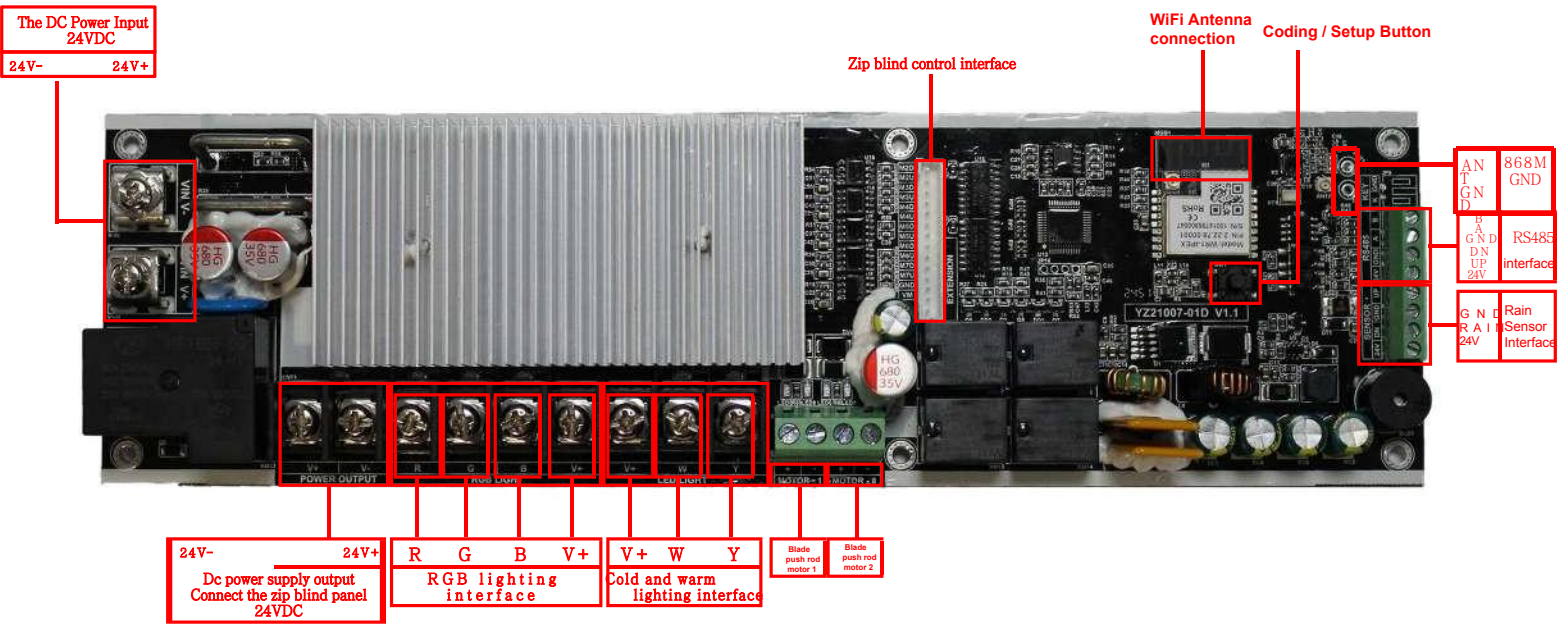
4. Snowy

① When it is light snowy, close the blades.

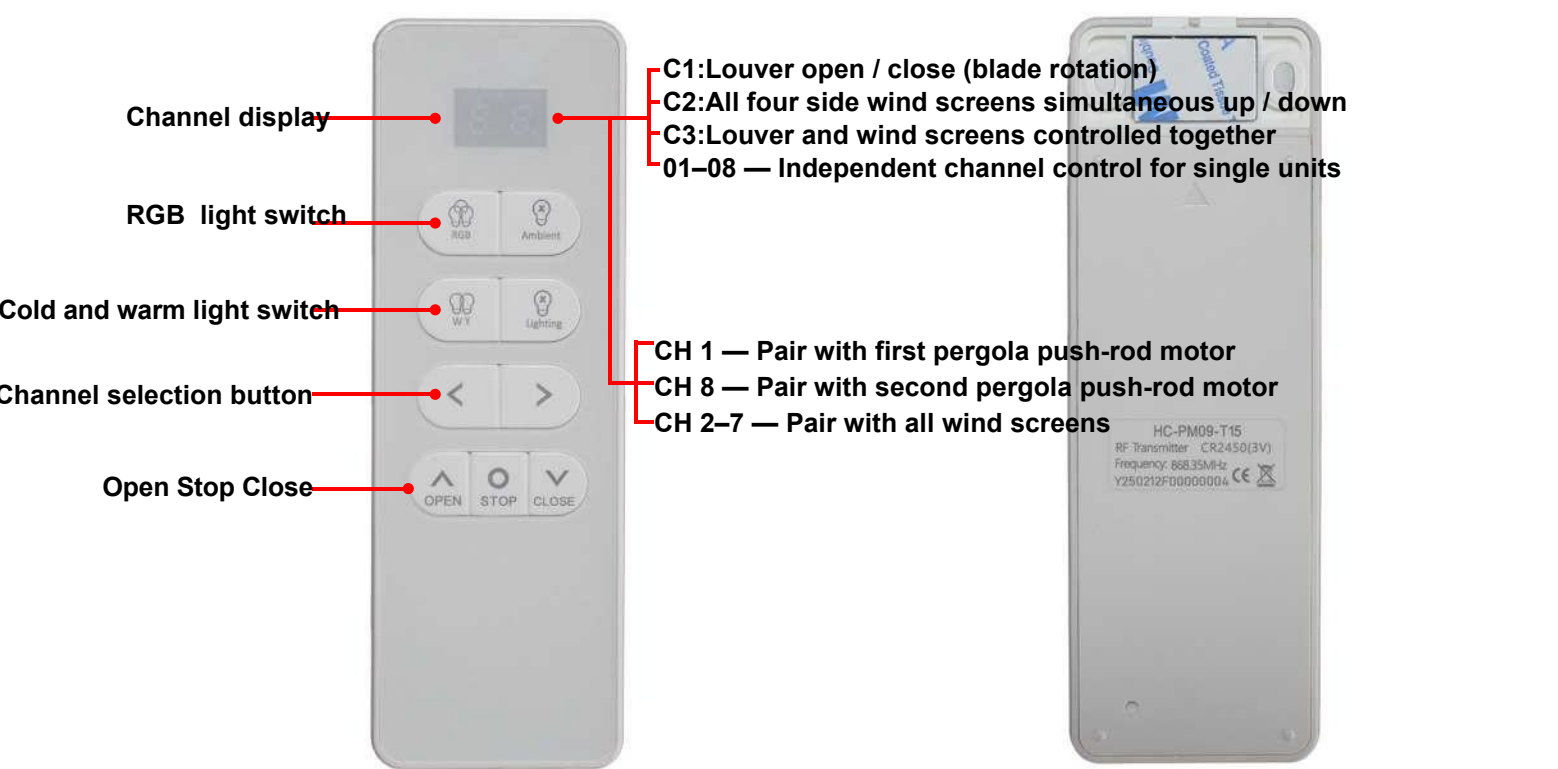
② When it is heavy snowy, open the blade 90 degree.



Controller Wiring Diagram



Remote Control Instructions



Remote Control & PCB — Pairing and Unpairing

A. Pairing Remote with Pergola PCB (Controller)

1. Power on, then begin pairing within 30 seconds.
2. Press and hold the "U2" button on the back of the remote for 2 seconds — the motor will beep "beep-beep-beep".
3. Press and hold the "Stop" button on the front of the remote for 2 seconds — the motor will emit one long "beep" — pairing successful.

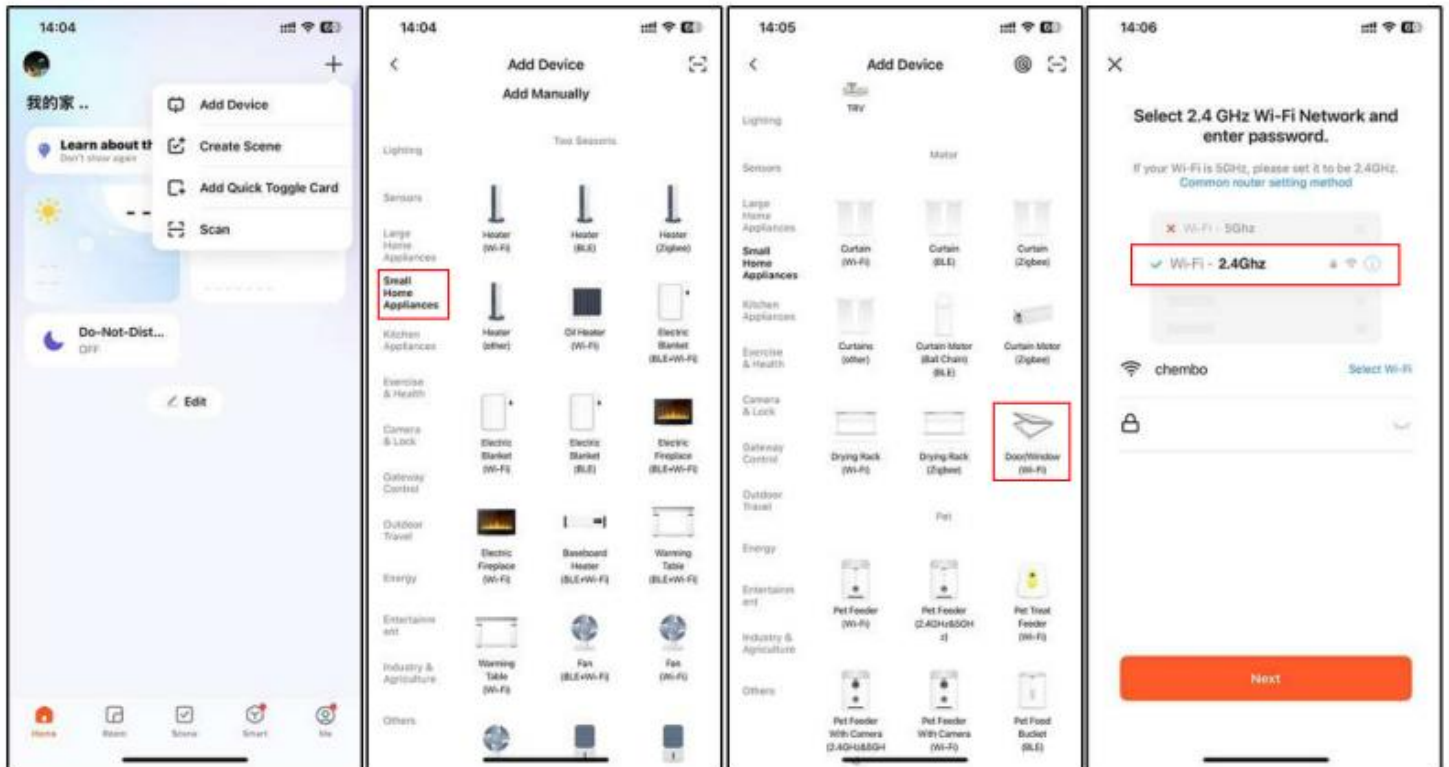


B. Unpairing Remote from Pergola PCB (Controller)

1. Select the correct channel, Press and hold the "U2" button on the back of the remote for 7 seconds — the indicator light will flash rapidly.
2. Press the "Stop" button for 2 seconds.
3. Press the "Down" button for 2 seconds — unpairing successful.



Tuya Wifi Connecting

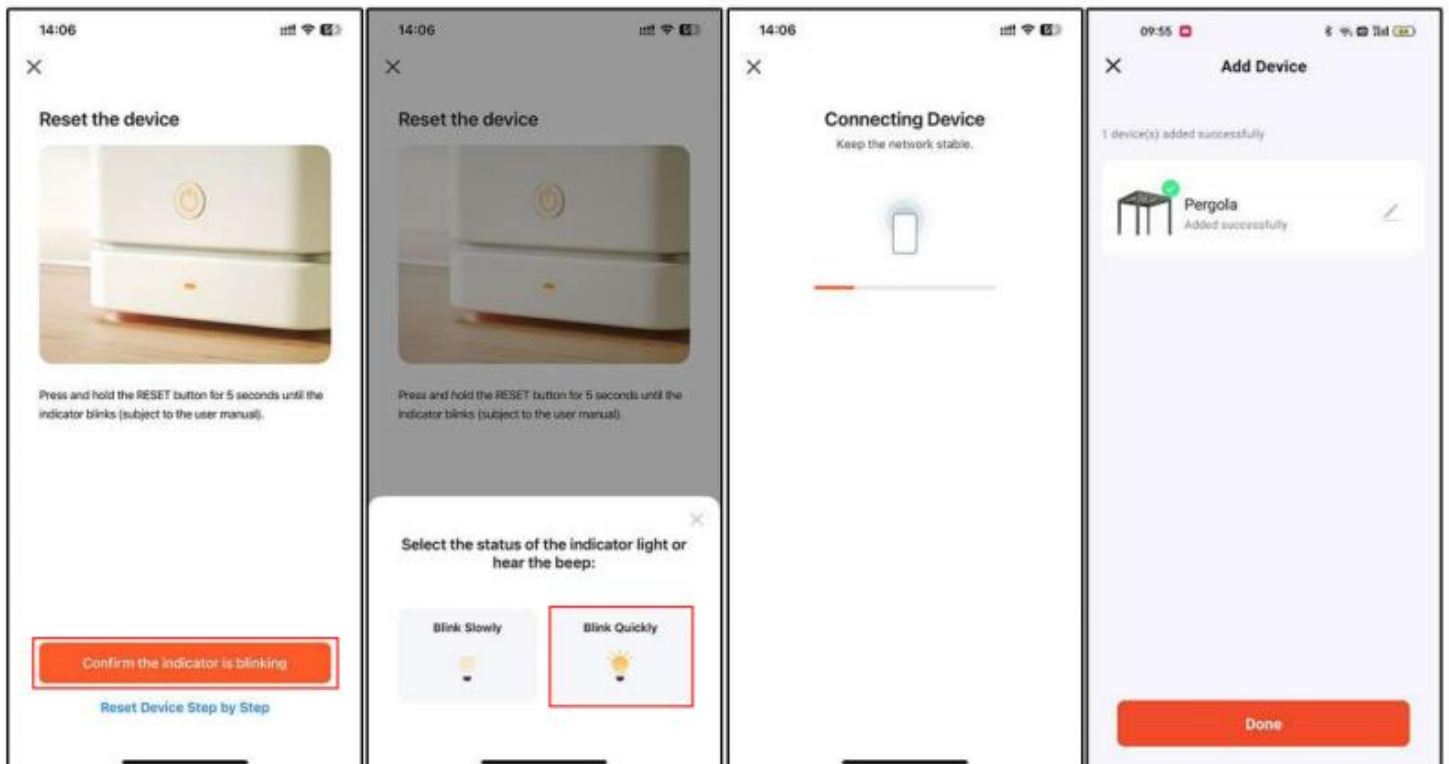


Step 1: Open Tuya App and click Add Device.

Step 2: In the left list find 'Small Home Appliances'

Step 3: In the right list find 'Door/Window(Wi-Fi)' under the catalog 'Motor'

Step 4: Enter the Wi-Fi and password you want to connect to.



Step 5: Open the power of the pergola.

Step 6: Click the 'Blink Quickly'.

Step 7: Connecting, the controller will make a beeping sound.

Step 8: Tuya Wi-Fi connection is successful.