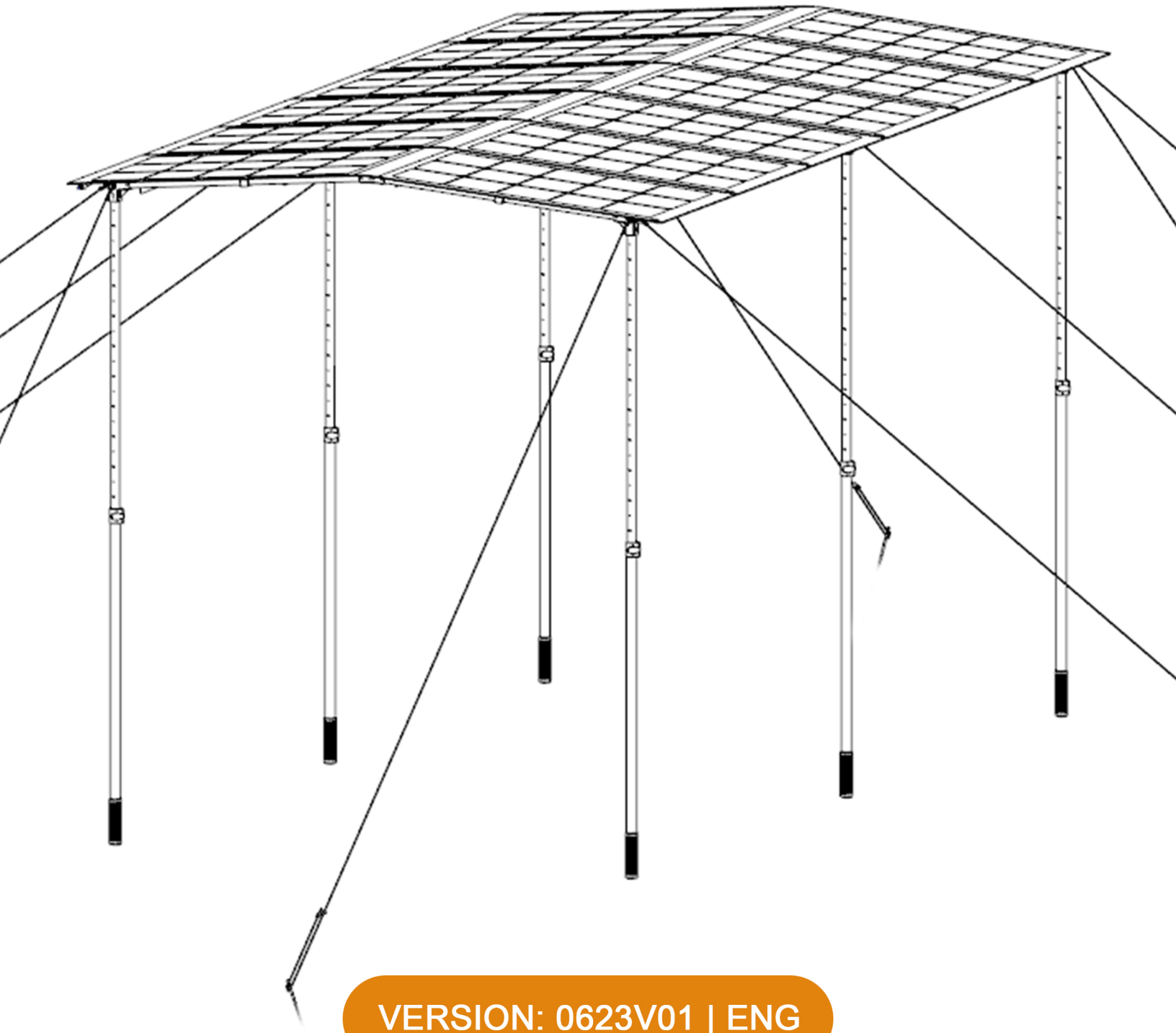
WISTEK

SC-36 | Solar Canopy | Outdoor



VERSION: 0623V01 | ENG

Note: This outdoor Solar Canopy installation manual may be updated without prior notice. To ensure that you get the latest and most accurate installation guide, please visit the following link to download the latest version of the manual before installation: Installation Manual Link

Table of contents

Ⅰ、Instructions for use

1. Brief Description

1.1 Modular design: SC series outdoor portable solar canopys provide 1.2m, 1.8m, 2.4m, 3.6m and other length combinations, you can purchase the corresponding specifications according to your needs.
1.2 Flexible adjustment: 2.4m and 3.6m specifications can be split into 1.2m or 1.8m for use to adapt to different scenarios.

2. Easy installation

2.1 The 1.2m and 1.8m specifications can be installed by 1-2 people.
2.2 For the 2.4m and 3.6m specifications, it is recommended that more than 2 people are required for installation.
2.3 It can be easily constructed without the need for heavy tools or machinery.
2.4 Electrical safety and protection: The series and parallel connection of solar panels and the connection of output voltage to energy storage have met the relevant safety standards. Protective devices and safety measures are adopted to comply with operating specifications to ensure stable operation.

Important Notice
Please read this installation manual and all related video files carefully before starting installation and use. If you have any questions, please contact Wistek customer support.

3. Conditions of Use

SC series solar canopys are made of aluminum alloy or stainless steel, which is strong and durable. Before installation, please choose a flat and sufficient ground to ensure stability and safety.
Please strictly follow the steps in this manual to install, or go to the Wistek official website to download the installation video and SC Solar Canopy Structural Engineering Certificate for more detailed guidance.

3.1 Check regularly. If any joints or pipes are found to be broken, stop using them immediately and replace the damaged parts.
3.2 If the pipe is damaged due to impact, deformation due to heavy pressure, etc., please replace the affected parts immediately to maintain the structural integrity and safety of the canopy.
3.3 The hardware structure of the canopy is limited to the original design purpose. Do not use it to dry clothes or carry additional weight, otherwise it may cause irreparable structural damage and affect the subsequent use of the product.

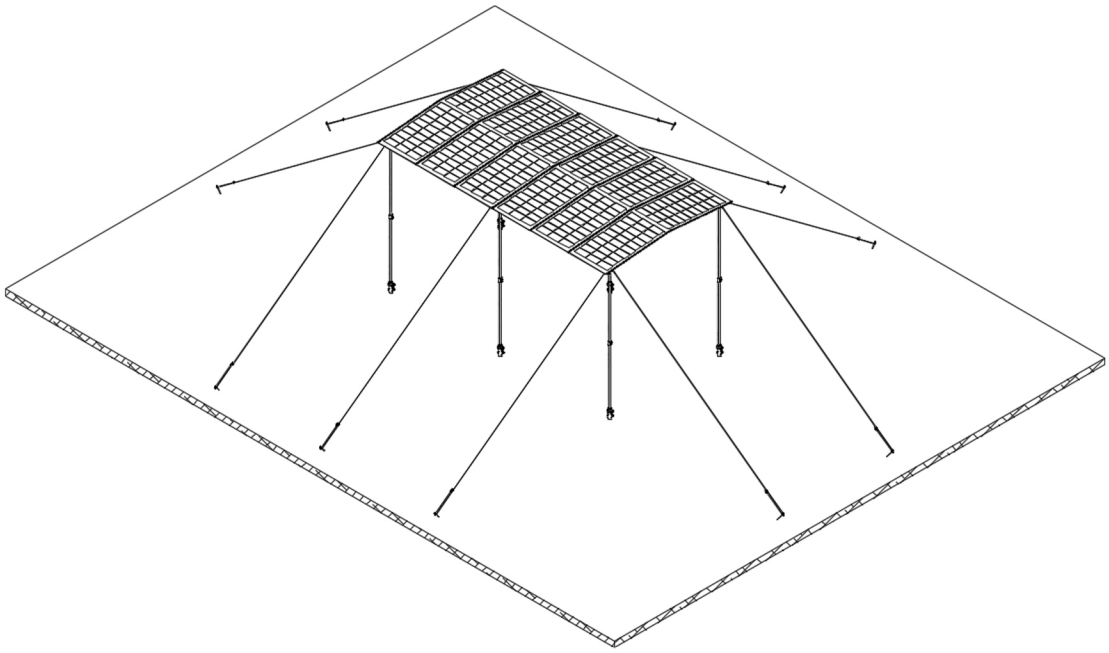
Warning:

The SC Series Solar Canopys are made of aluminum alloy or stainless steel and have an anti-corrosion protective layer. Do not drill or cut, as this will damage the protective layer, causing corrosion and possibly weakening the structural strength and affecting safety. Such modifications will void the warranty and may even cause the structure to collapse, resulting in financial losses. To ensure the durability and safety of the canopy, do not make any modifications.

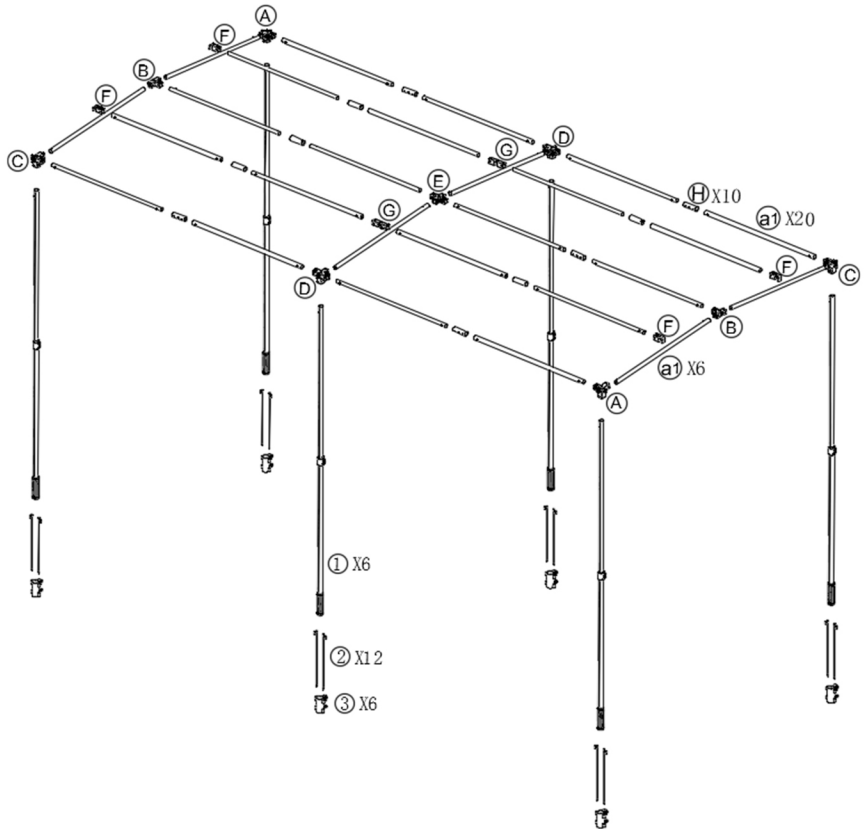
4. Required Tools

4.1 A pipe removal tool is provided with the product
4.2 Other things you need to bring: wooden hammer, rubber hammer

Ⅱ、Product Explosion Diagram

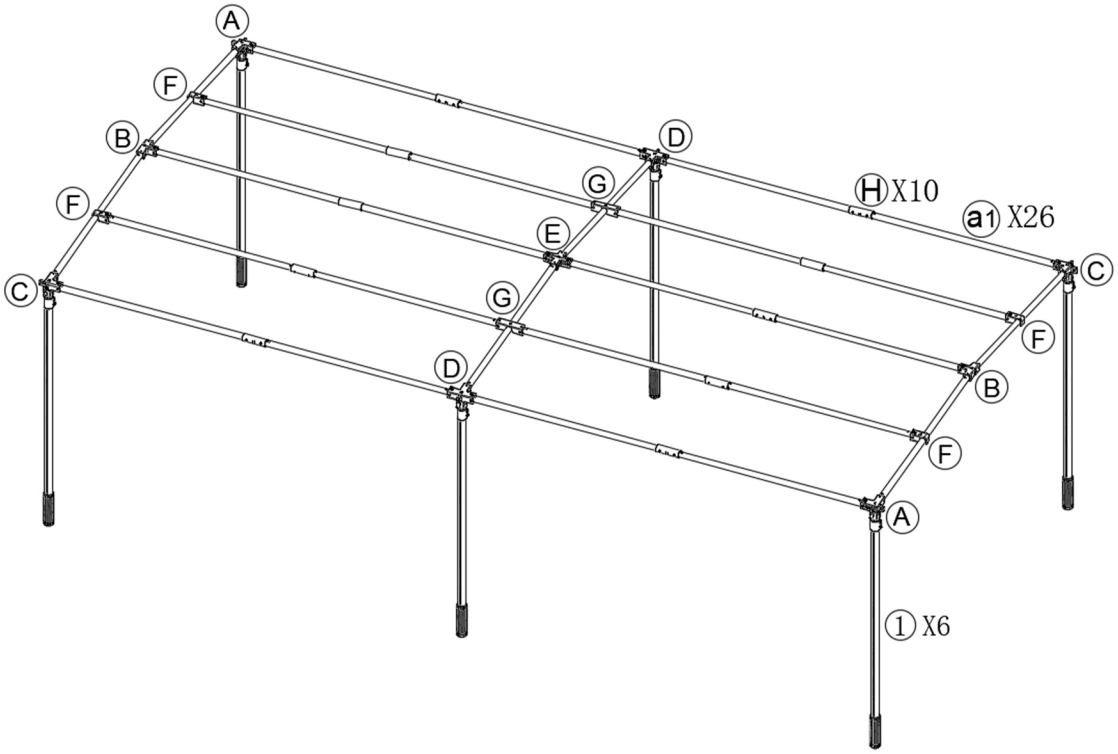


This installation guide takes SC36 as an example to provide installation steps. It is applicable to both SC18 and SC36m.

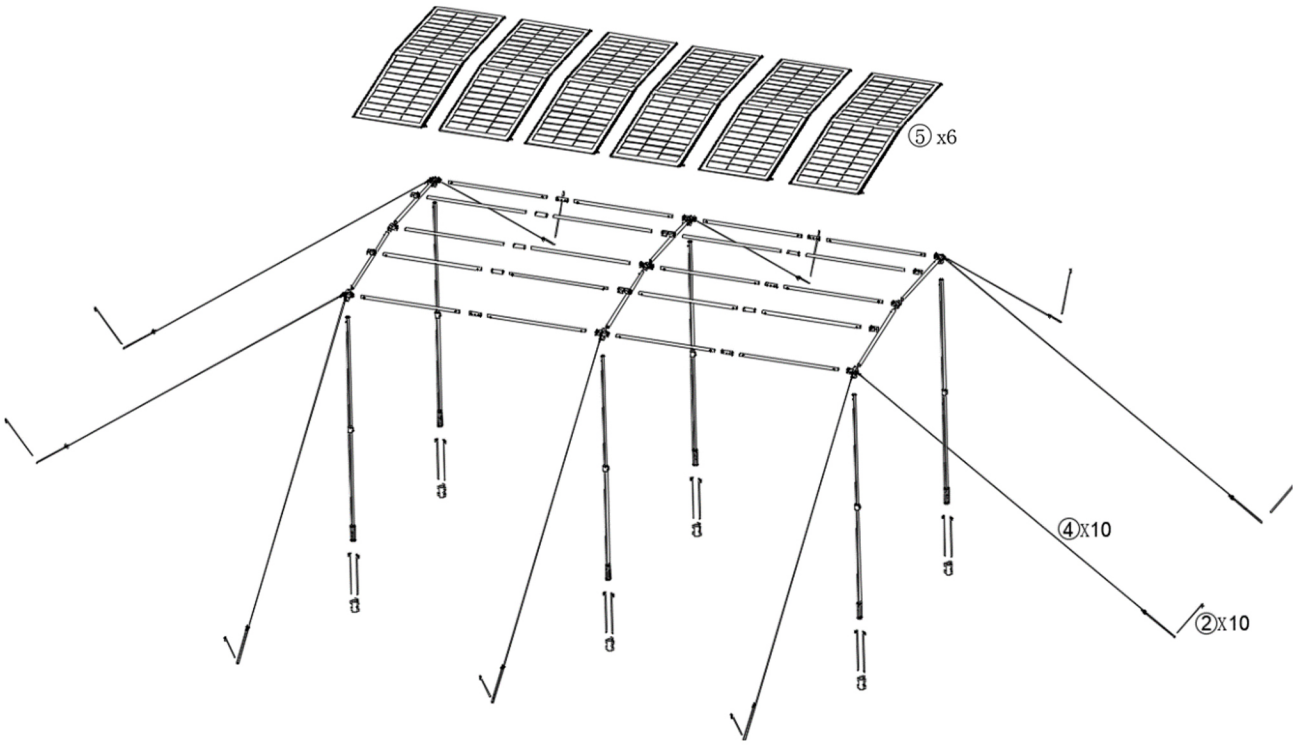


SC36 Exploded View-1

Ⅱ、Product Explosion Diagram

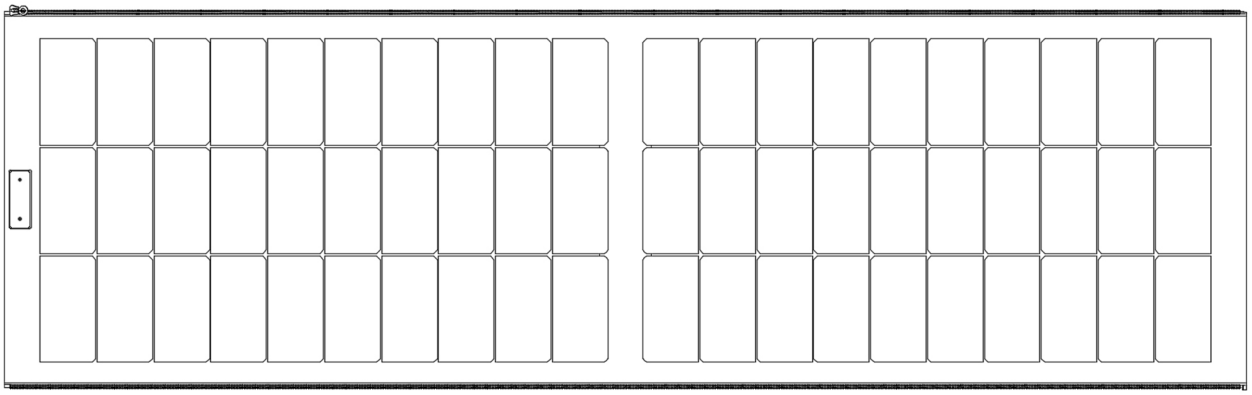


SC36 Explosion Diagram-2

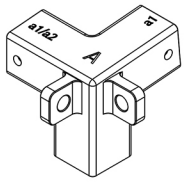


SC36 Exploded View-3

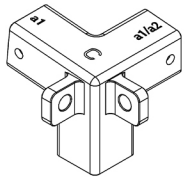
Ⅲ、Product List



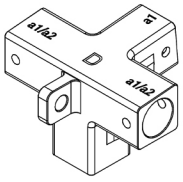
Flexible Solar Panels*6



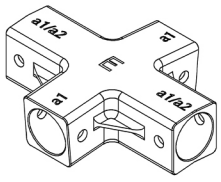
(A) Beveled Right-Angle Tee Connector*2



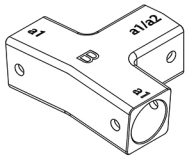
(C) Beveled Right-Angle Tee Connector*2



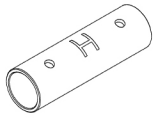
(D) Beveled Right-Angle Cross Connector*2



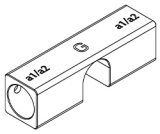
(E) Beveled Cross Connector*1



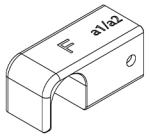
(B) Beveled Tee Connector*2



(H) Straight Connector*10

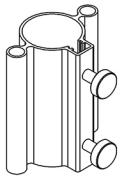


(G) Reinforcement Connector*2

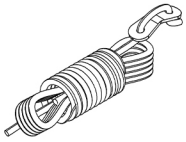


(F) Reinforcement Connector*4

Removal Tool*1

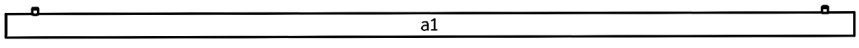


Canopy Rod Holder*6

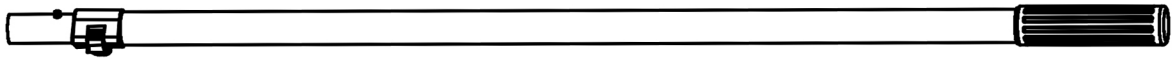


Guy Rope*10

Ground Stakes*22



(a1) Ridge Pole*26



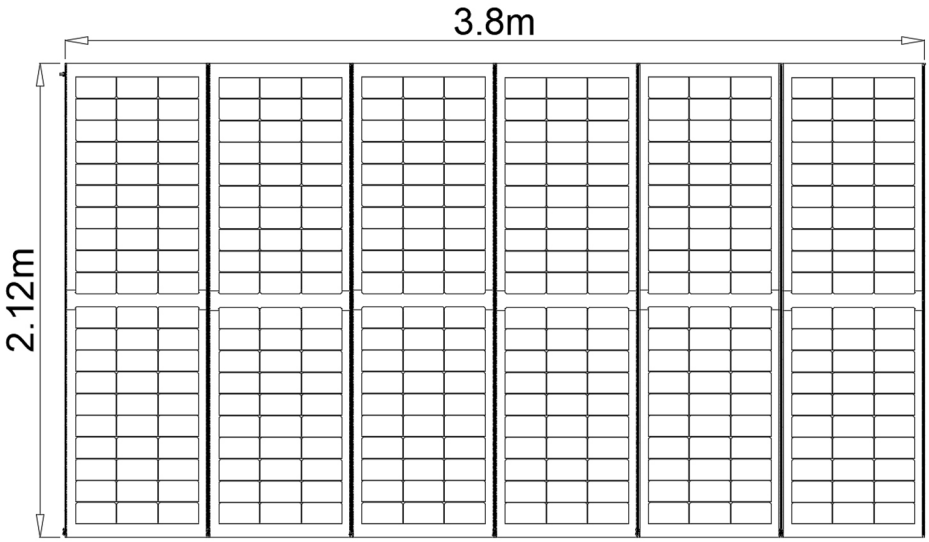
Upright Pole*6

Ⅳ、Installation Instructions

1. Outdoor Site Selection

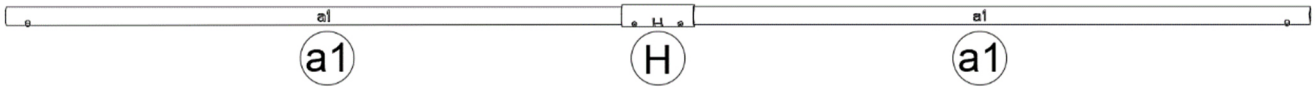
1.1 Please choose a flat lawn that matches the size of the product you purchased for easy construction.
1.2 If the ground is tilted, the height of the columns can be adjusted to ensure that the roof remains level.

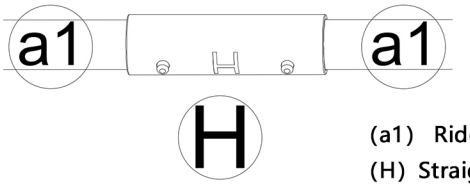
Warning:
1.3 Do not tilt the roof or pillars. After the shed is erected, be sure to use wind ropes to tighten the pillars to keep them vertical, improve wind resistance, and enhance overall stability.
1.4 The maximum load-bearing capacity of the roof is: Kg. Please do not exceed this weight to avoid collapse of the roof.



2. Hardware shelf assembly order

2.1 A1 beam tube assembly installation (Quantity x10)





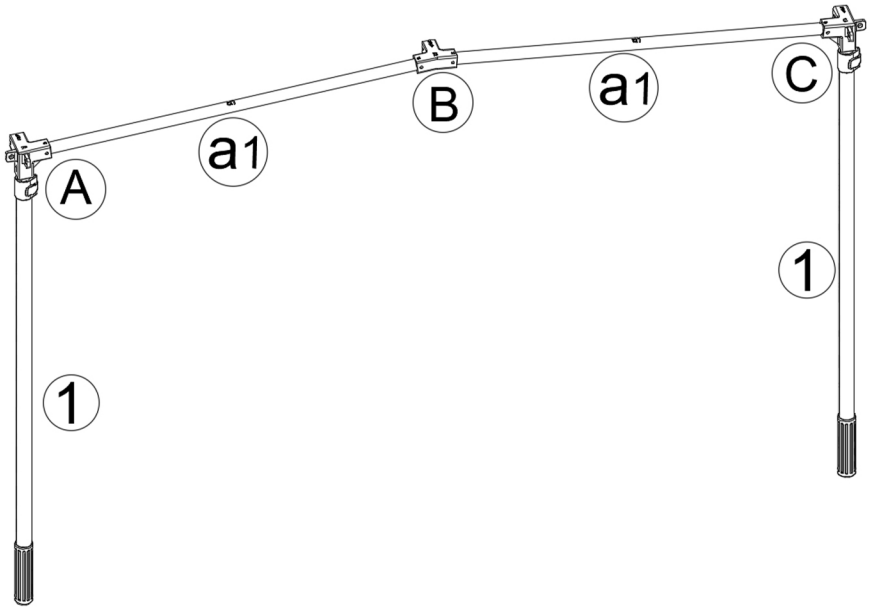
(a1) Ridge Pole x2
(H) Straight Connector x1

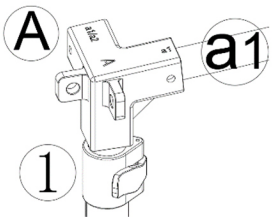
Assembly Instructions:

Please follow the instructions:
●Insert the a1 beam tube into both ends of the H straight-through.
●Make sure the marbles pop out of the holes to secure the beam tube.

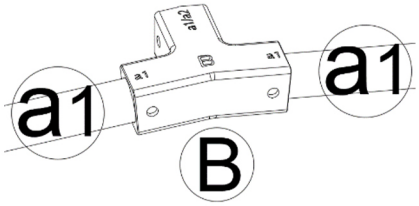
Ⅳ、Installation Instructions

2.2 Side pipe assembly installation （Quantity x2）

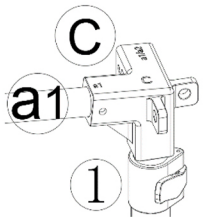




A x1
a1 x1
Upright Pole



B x1
a1 x2



C x1
a1 x1
Upright Pole

Assembly Instructions:

Please follow the instructions:

1. Install the a1 beam tube

●Insert the a1 beam tube into the a1 hole of the A inclined plane right angle tee, B inclined plane tee, and C inclined plane right angle tee.

●Make sure that the marble pops out of the hole to fix the beam tube.

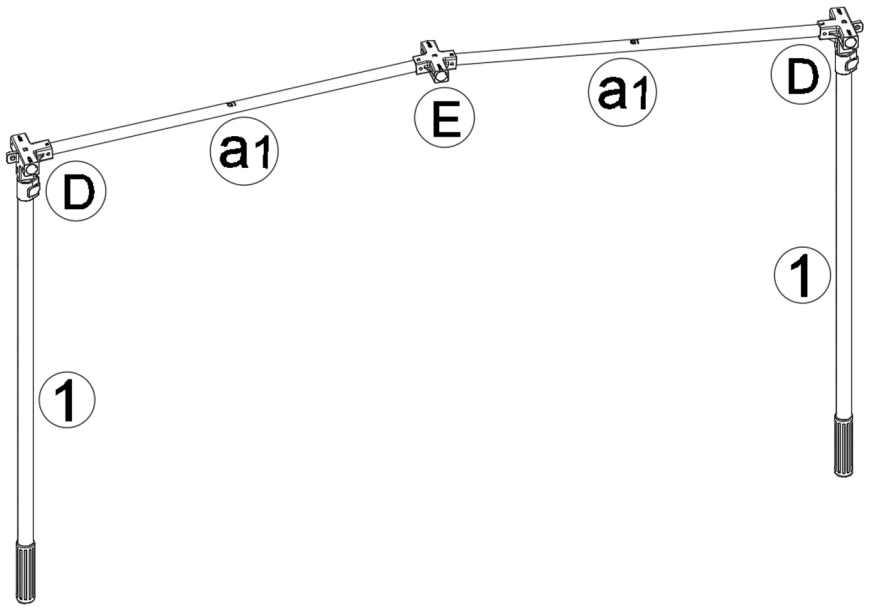
2. Install the column

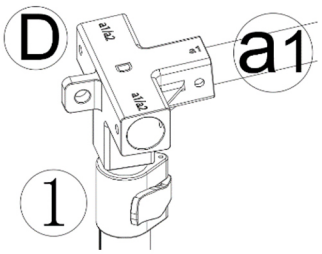
●Insert the column into the remaining holes of the A inclined plane right angle tee and C inclined plane right angle tee.

●Make sure that the marble pops out of the hole to ensure that the column is stable.

Ⅳ、Installation Instructions

2.3 Installation of mid pipe assembly （Quantity x1）

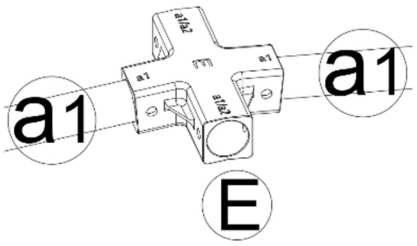




Upright Pole x1

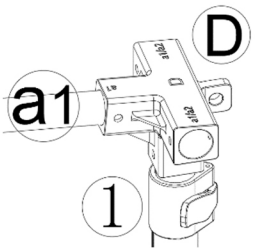
D x1

a1 x1



E x1

a1 x2



Upright Pole x1

D x1

a1 x1

Assembly Instructions:

Please follow the instructions:

1. Install the a1 beam tube

●Insert the a1 beam tube into the a1 hole of the D inclined plane right angle cross and the E inclined plane cross.

●Make sure the marbles pop out of the holes to secure the beam tube.

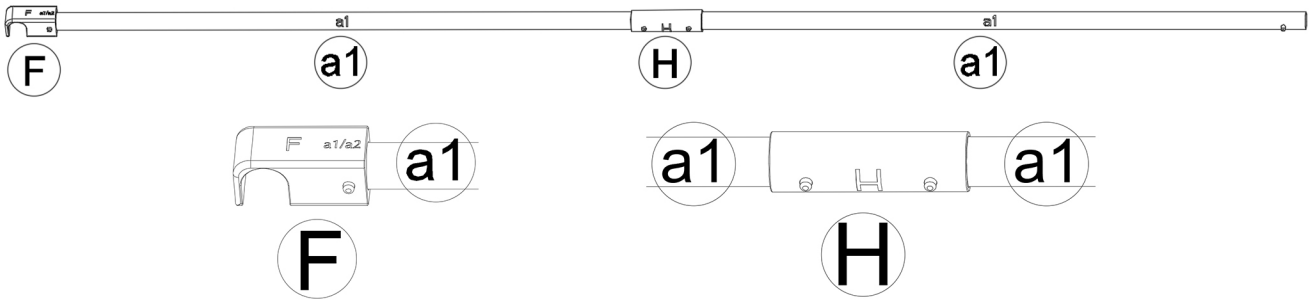
2. Install the columns

●Insert the two columns into the remaining holes of the D inclined plane right angle cross.

●Make sure the marbles pop out of the holes to secure the columns.

Ⅳ、Installation Instructions

2.4 F reinforcement pipe assembly installation (Quantity x2)



a1 x1
F x1

a1 x1
H x1

Assembly Instructions:

Please follow the instructions:

1. Install a1 beam tube to H straight

●Insert a1 beam tube into both ends of H straight.

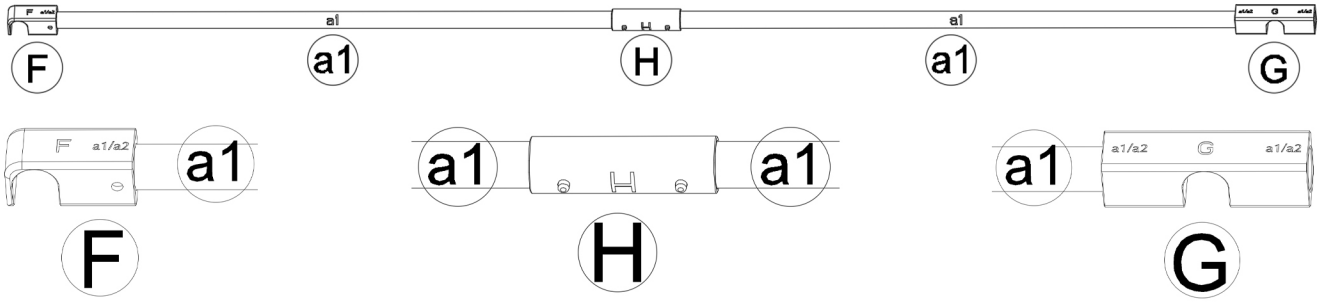
●Make sure the marbles pop out of the holes to secure the beam tube.

2. Connect the a1 beam tube to the F reinforcement joint

●Insert either end of the a1 beam tube into the a1/a2 hole of the F reinforcement joint

●Make sure the marble pops out of the hole to ensure a secure connection

2.5 G, F reinforcement pipe assembly (Quantity x2)



a1 x2
F x1

Hx1

a1 x2
G x1

Assembly Instructions:

Please follow the instructions:

1. Install a1 beam tube to H straight-through

●Insert a1 beam tube into both ends of H straight-through.

●Ensure that the marbles pop out of the holes to secure the beam tube.

2. Connect a1 beam tube to F reinforced joint

●Insert either end of a1 beam tube into a1/a2 holes of F reinforced joint.

●Ensure that the marbles pop out of the holes to ensure a secure connection.

3. Connect G reinforcement joint

●Insert any a1/a2 hole of G reinforcement joint into the remaining a1 beam tube end.

●Make sure the marble pops out of the hole to secure the connection.

●Note: The U-shaped openings of F reinforcement joint and G reinforcement joint need to keep the same direction.

Ⅳ、Installation Instructions

2.6 Hardware shelf construction

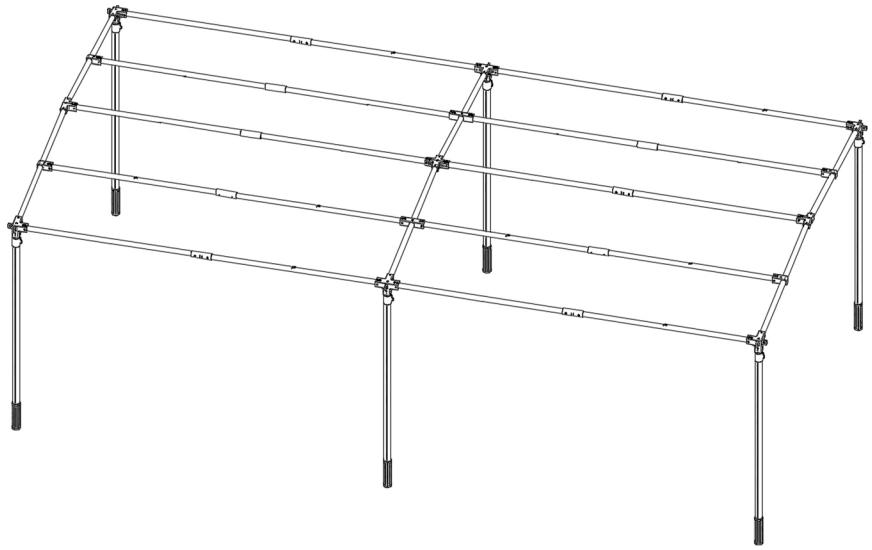


Figure 1- Rendering

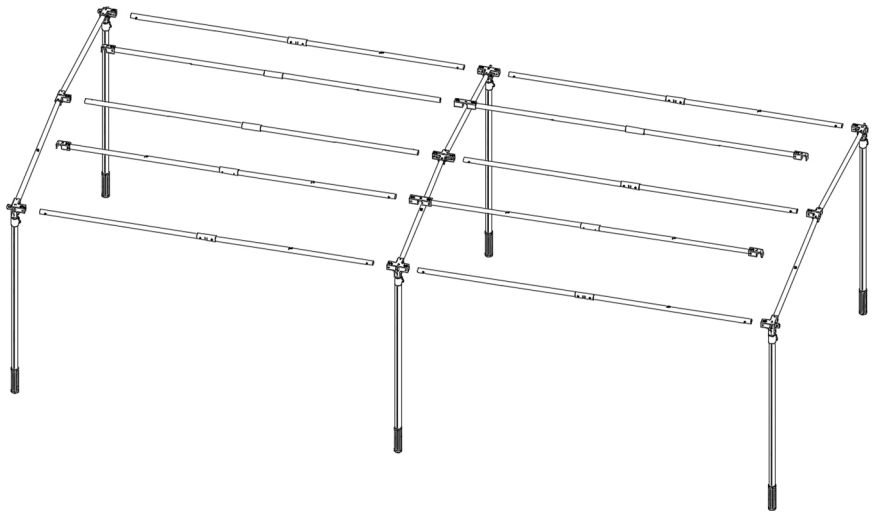


Figure 2 - Assembly diagram

Assembly Instructions:

Please follow the instructions:

1. Reference rack construction effect

- Figure 1 shows the completed rack effect.

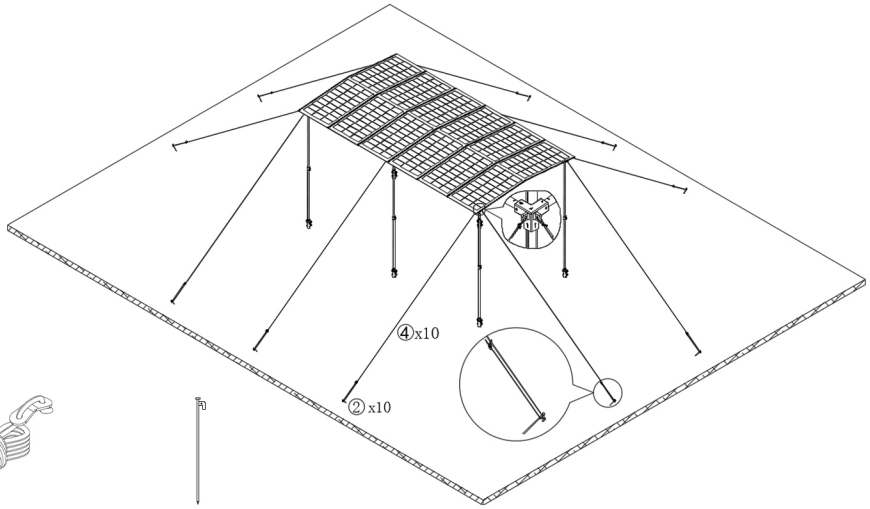
2. Component assembly

- Assemble components 2.1 to 2.5 in sequence according to Figure 2.

Tip: To facilitate the installation of solar panels, it is not advisable to raise the rack for the time being.

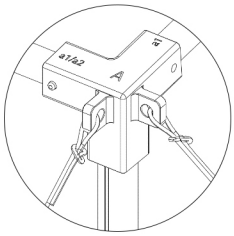
Ⅳ、Installation Instructions

2.7 Shed raised, guy rope tied

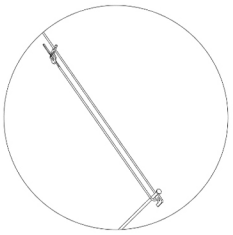


Guy Rope x10

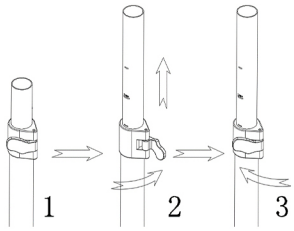
Ground Stakes x10



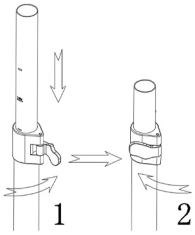
How to tie the rope and the joint



How to tie the rope and ground nails



Column lifting steps each time



The column is lowered each time

Assembly Instructions:

1. Fix the wind ropes
- Tie 10 wind ropes to the wind rope holes of A inclined right angle tee, C inclined right angle tee, and D inclined right angle four-way, and tie the knots.

2. Steps for lifting the columns each time (requires 2 or more people to cooperate)
- Each person is responsible for 1-3 columns, and only raises 10-15cm each time to ensure consistent scales.
- After each rise, lock the column buckle to prevent the awning from falling. (Refer to the steps in the figure above)

3. Adjust the height of the roof
- The height can be adjusted according to personal preference, but the roof must be kept horizontal.
- All 6 columns must be locked to ensure stability.

4. Tighten the wind ropes and fix the ground nails
- Pull the wind rope diagonally, leaving 10-20cm for the ground nails to fix.
- Drive the ground nails into the ground at a 45° angle opposite to the awning, and tighten 10 wind ropes in sequence to ensure they are secure.

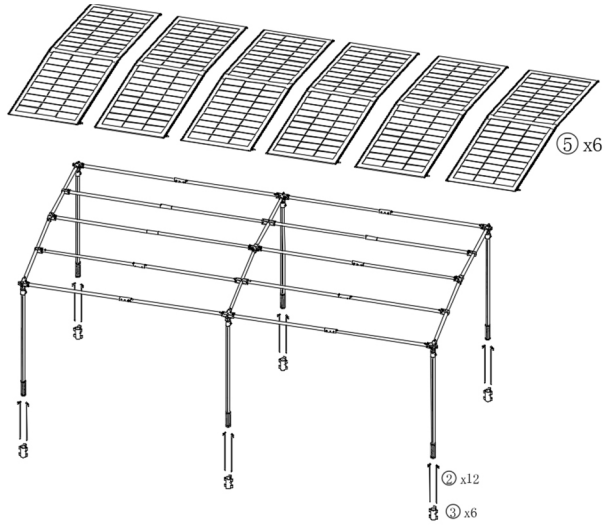
Tips:

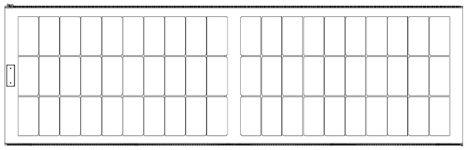
①Each column can only be raised (lowered) 10~15cm at a time, and it should be raised (lowered) in sequence for multiple times. It is forbidden to raise (lower) a single column too much at a time to avoid damaging the stability of the awning structure.

②The knot of the wind rope should be tied tightly, and the tent ground nails should be driven into the ground 4/5 deep and fixed at a 45° angle in the opposite direction of the awning to improve wind resistance and ensure stability.

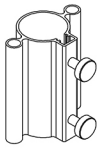
Ⅳ、Installation Instructions

2.8 Solar panel, fixing base and ground nail assembly





Flexible solar panels x6



Canopy Rod Holder x6

Ground Stakesx12

Assembly Instructions:

1. Fix the columns
●Insert the 6 fixing bases into the bottom of the 6 columns in sequence, make sure they are flush with the ground, and keep the 6 columns vertical.
2. Install the ground nails
●Insert 12 tent ground nails into the small holes on both sides of the 6 fixing bases.
●Use a wooden hammer or a rubber hammer to hammer in the ground nails to fix the base and enhance wind resistance.
(Avoid using a metal hammer to prevent damage to the columns)
3. Install the solar panels
●Place the 6 solar panels on the top of the rack in sequence.
●Close the zippers between the solar panels in sequence to ensure a tight connection to form an overall structure to achieve sunshade, rain protection and power generation functions.
4. Fix the solar panel
●Wrap the Velcro on the back of the solar panel and stick it to the A1 beam tube to ensure stability.
5. Series and parallel connection of solar panels
●Choose the appropriate series or parallel connection method according to the input voltage (V) of the portable power supply (energy storage device) (The voltage of a single solar panel is 34.2V)
6. Arrange the connection wires
●Fix the extension connection wire from the solar panel to the portable power supply (energy storage device) on the A1 beam tube.
●Use the Velcro on the solar panel to wrap the connection wire with the A1 beam tube to make the overall wiring neat and beautiful.

Warning:
① Before connecting the photovoltaic line of the solar panel, make sure the MC4 connector is dry to avoid water ingress and malfunction.
② When connecting the solar panel to the portable power supply, you need to select the correct series-parallel mode according to the input power of the portable power supply. If the voltage is too low, the device will not work, and if the voltage is too high, the device may be damaged.
③ It is forbidden to use iron hammers or steel hammers to fix the ground nails to avoid damaging the pillars. It is recommended to use wooden hammers or rubber hammers.

V、Disclaimer

Disclaimer

The installation manual outlines the installation procedures and usage standards for the SC Series Solar Canopys. Please read carefully before installation to ensure correct operation.The limited warranty terms for the SC Series Solar Canopys can be viewed on the Wistek official website: www.wis-tek.com

Please observe the following safety measures:

- Please follow the instructions to correctly connect the solar panels in series and parallel. During routine maintenance, do not damage or interfere with the system's joint path to ensure normal operation.
- Only use original or recommended parts from Wistek.
- Choose a flat surface before installation to ensure stability.
- Wistek solar canopys are made of aluminum alloy or stainless steel and are sprayed with a protective layer to extend the service life. Drilling or cutting steel parts is strictly prohibited, otherwise it may cause corrosion, structural damage, and void the warranty.
- During regular inspections, if any joints or pipes are found to be broken, stop using them immediately and replace the damaged parts.
- Before disassembly or movement, disconnect the power supply in the following order:

1. Turn off the AC
2. Disconnect the solar panel plug
3. Unplug the energy storage plug

- Check the technical documentation of the module, inverter, rapid shutdown device (RSD), rack and other non-Wistek components to ensure compatibility and meet the warranty terms.

1-year warranty, lifetime after-sales service

We guarantee to all end users, agents and wholesalers that if the bracket is oxidized, the oxide layer will not fall off or crack within 5 years from the date of purchase. In addition to the oxide layer, a 10-year quality guarantee is provided from the completion of installation.

Man-made damage and corrosion are not covered by after-sales service. For the installation, cleaning and maintenance of the bracket, please refer to the architectural aluminum profile specification AAMA 609&610-02, which can also be found at www.wis-tek.com. We will provide service for any damage during transportation, storage and installation, except for man-made damage.

We are not responsible if the customer does not follow the correct operating steps in the manual during installation, or makes changes, rework, repairs without our authorization, or if the bracket is damaged due to the customer's design error. This quality guarantee claim applies to the bracket system. The relevant solar panels and flash panels should be guaranteed by the corresponding suppliers.