



SC-12 | Solar Canopy | Outdoor



VERSION: SC12V1.0 | ENG

Note: This outdoor solar canopy installation manual is subject to change 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: [www.wistekenergy.com](http://www.wistekenergy.com)

# Table of contents

I .Instructions for use .....	2
II.Product Explosion Diagram .....	3
Product Explosion Diagram .....	4
III.Product List .....	5
IV.Installation Instructions .....	6
Side Tube Assembly .....	7
F. Reinforcement Tube .....	8
Hardware Structure Assembly .....	9
Raising the Canopy & Attaching Guy Ropes .....	10
Solar Panel, Canopy Rod Holder & Ground Stake Assembly .....	11
V.Disclaimer .....	12

# I .Instructions for use

## 1. Brief Description

1.1 Modular design: SC series outdoor portable solar canopies 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 solar canopy 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 solar canopy can be installed by 1-2 people.

2.2 For the 2.4m and 3.6m solar canopy, 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/parallel wiring of solar panels and the power output connection to energy storage devices comply with 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 canopies are made of aluminum alloy or stainless steel, which is strong and durable. Before installation, please choose flat and level ground with sufficient space 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 Solar Canopy Structural Engineering Certificate for more detailed guidance.

3.1 Check regularly. If any joints or tubes are found to be broken, stop using it immediately and replace the damaged parts.

3.2 If the tubes are 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 structure is intended solely for its 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:**

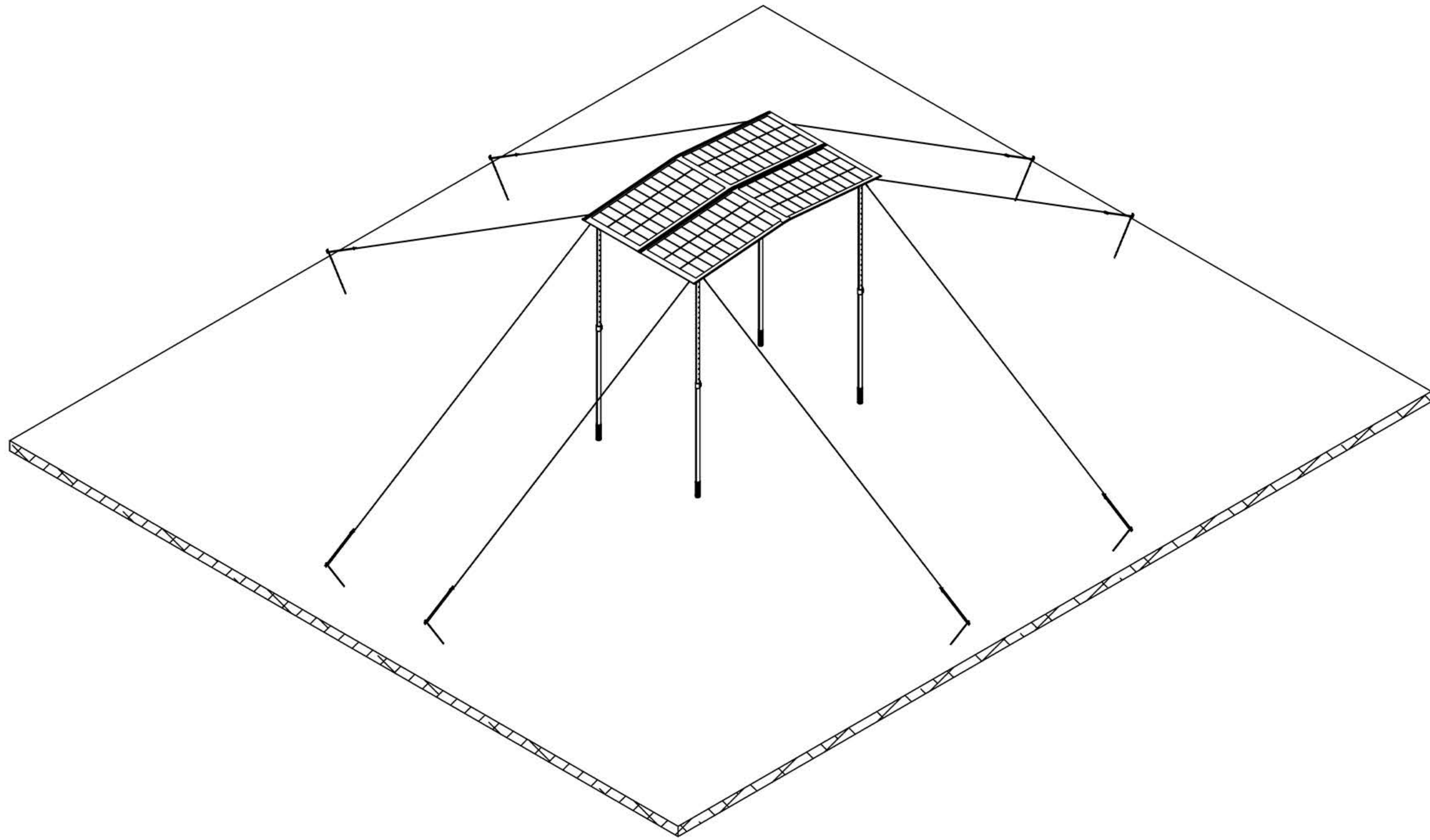
The SC Series Solar Canopies are made of aluminum alloy or stainless steel and have an anti-corrosion protective layer. Do not drill or cut, as this will damage the protective layer, causing corrosion and potentially compromising structural integrity and affecting safety. Such modifications will void 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

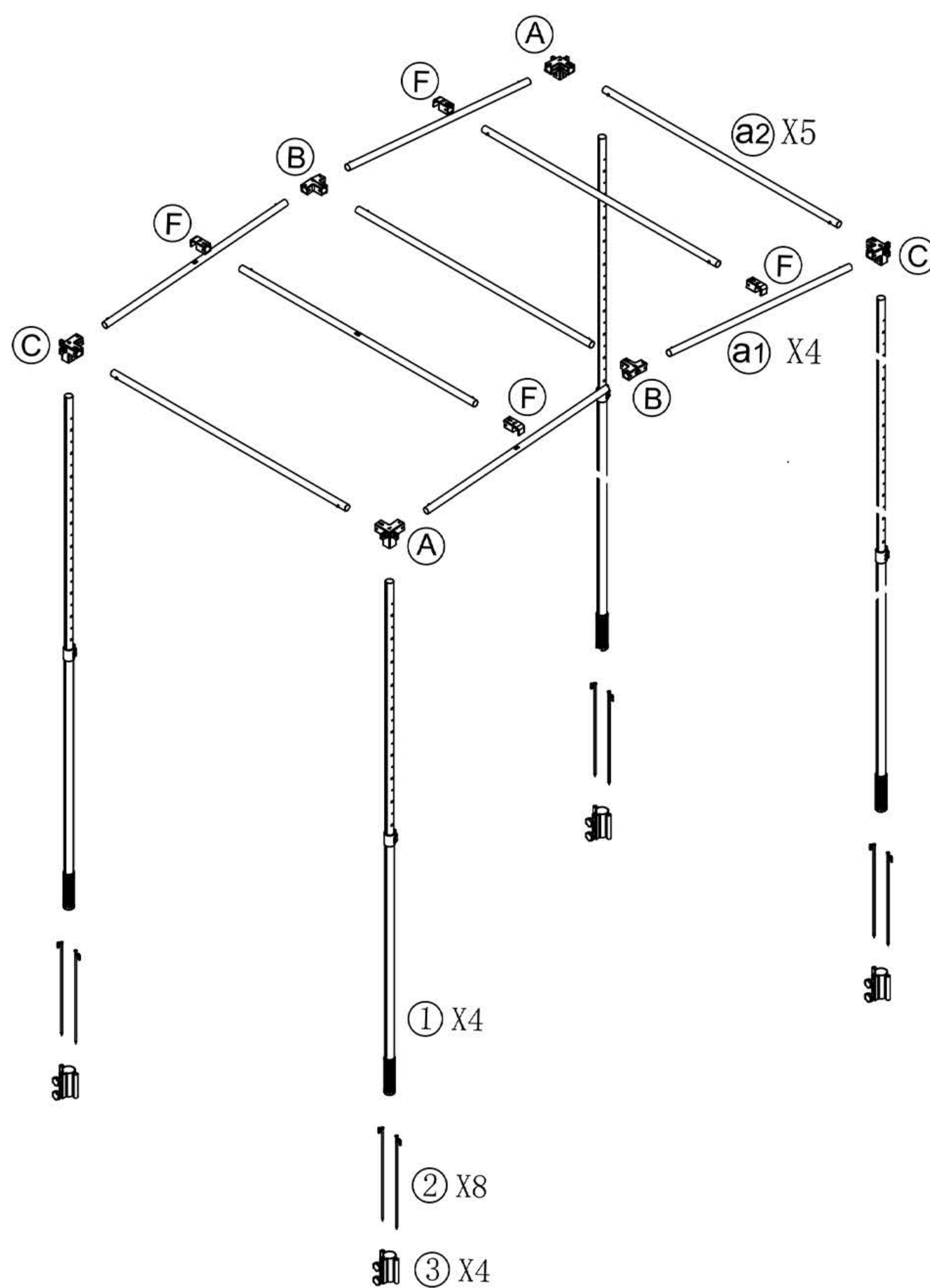
4.1 A tube removal tool is provided with the product.

4.2 Other things you need to bring: wooden hammer, rubber hammer.

# II. Product Explosion Diagram

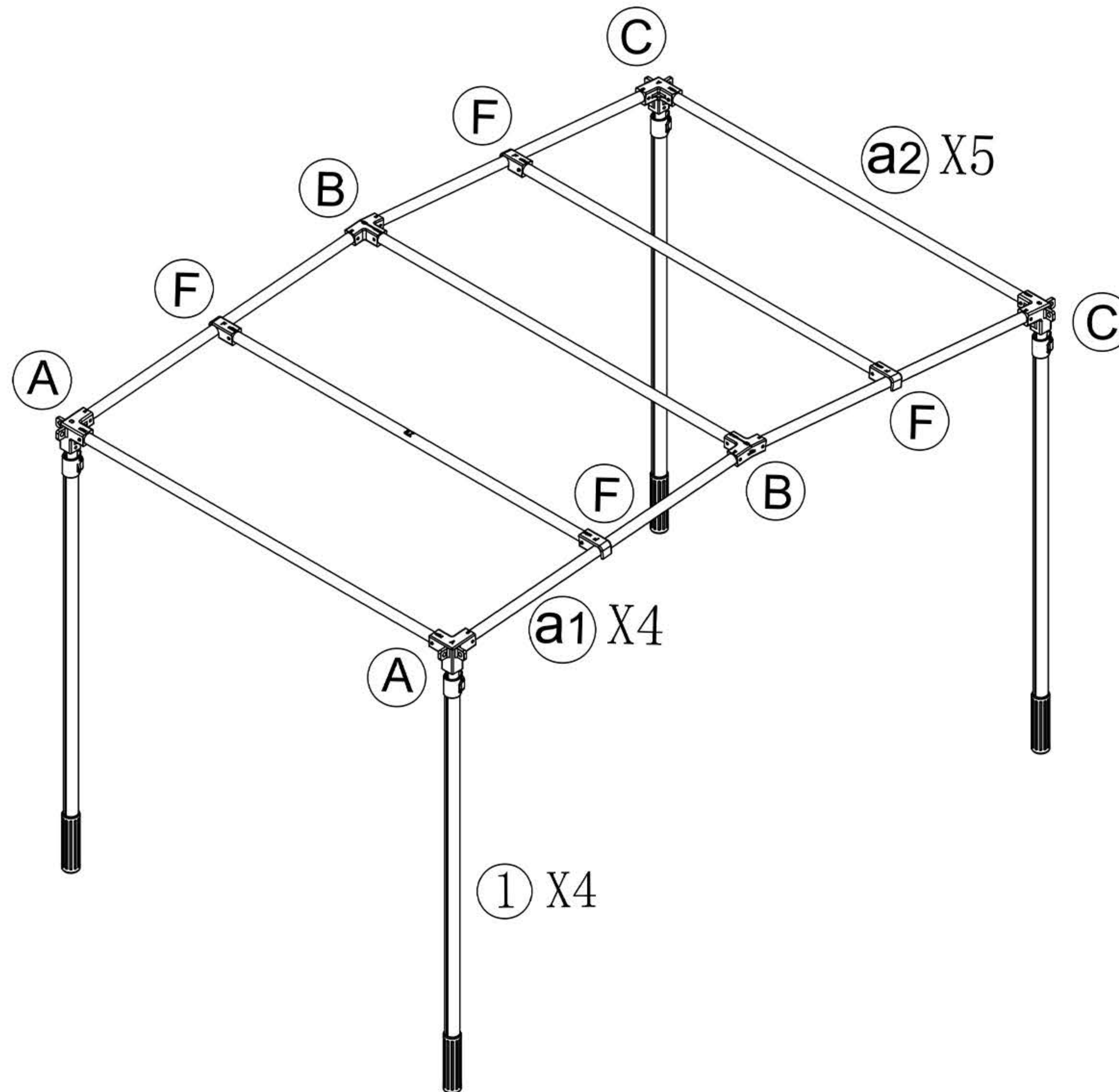


## SC12 Installation Manual

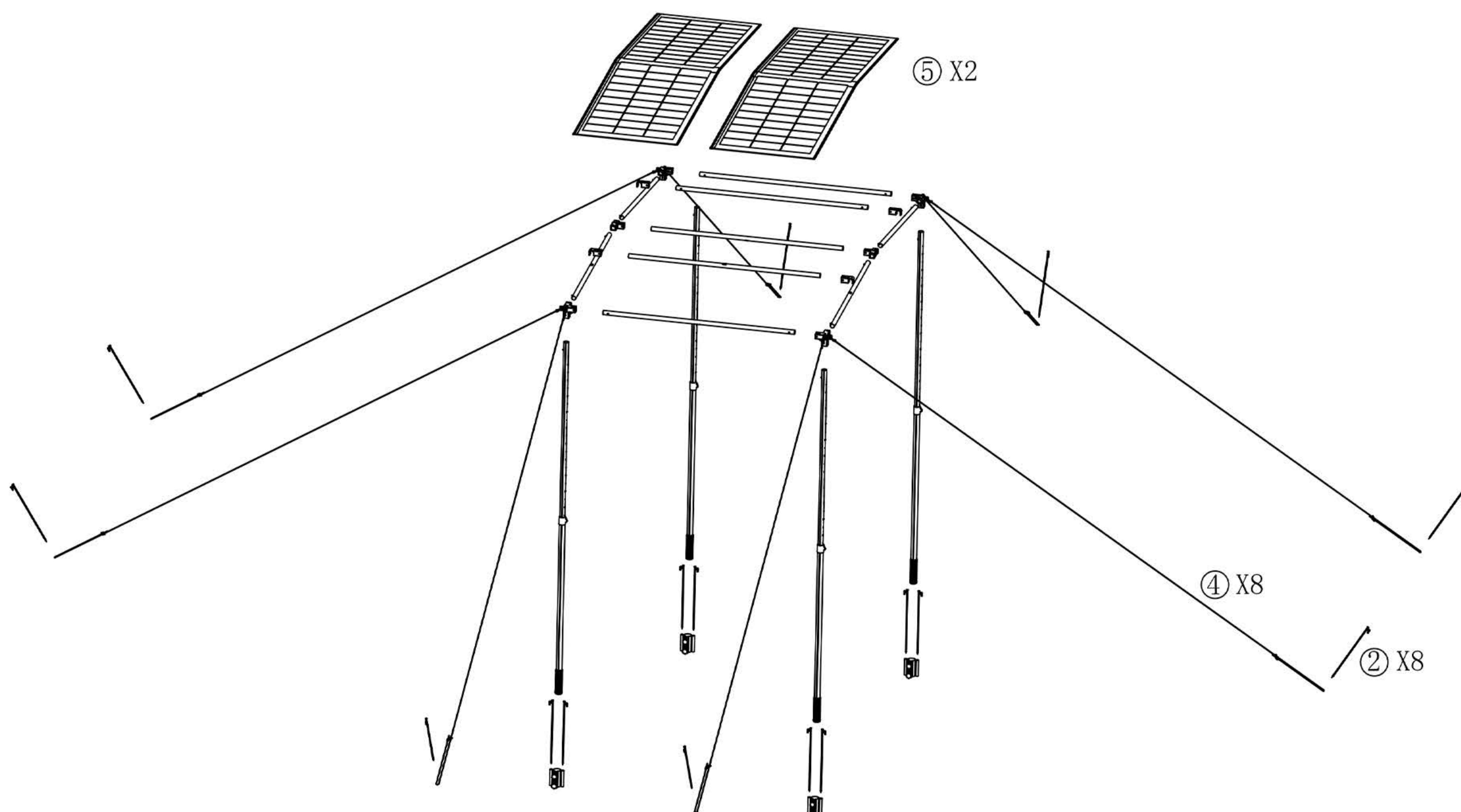


### SC12 Exploded View-1

# II. Product Explosion Diagram

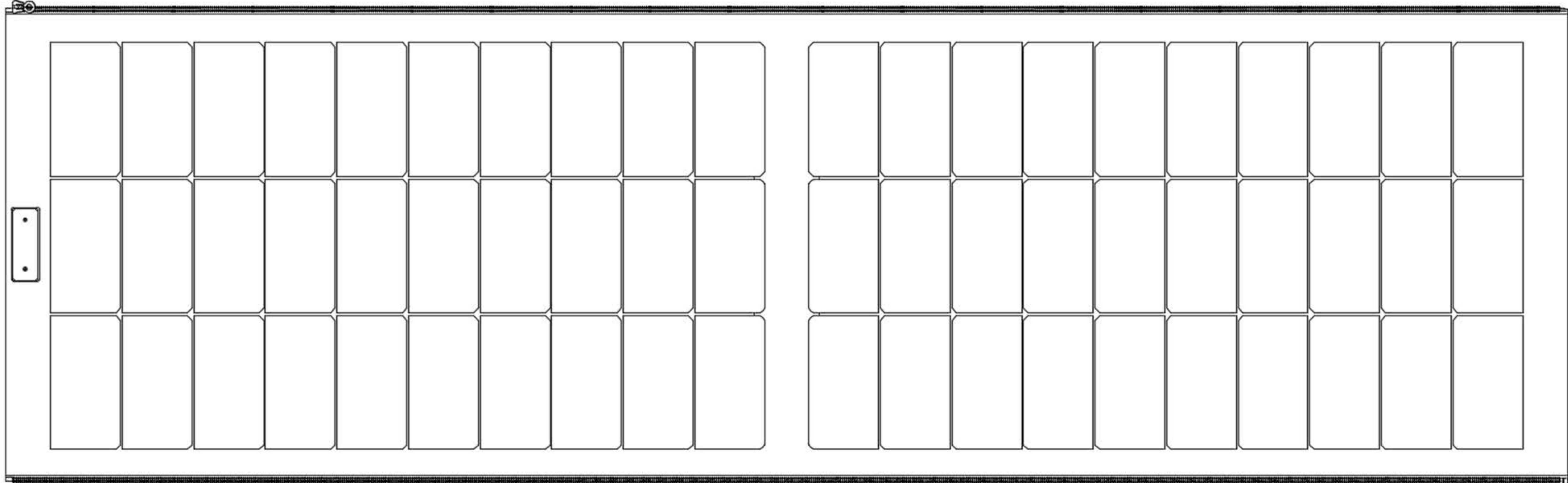


SC12 Explosion Diagram-2

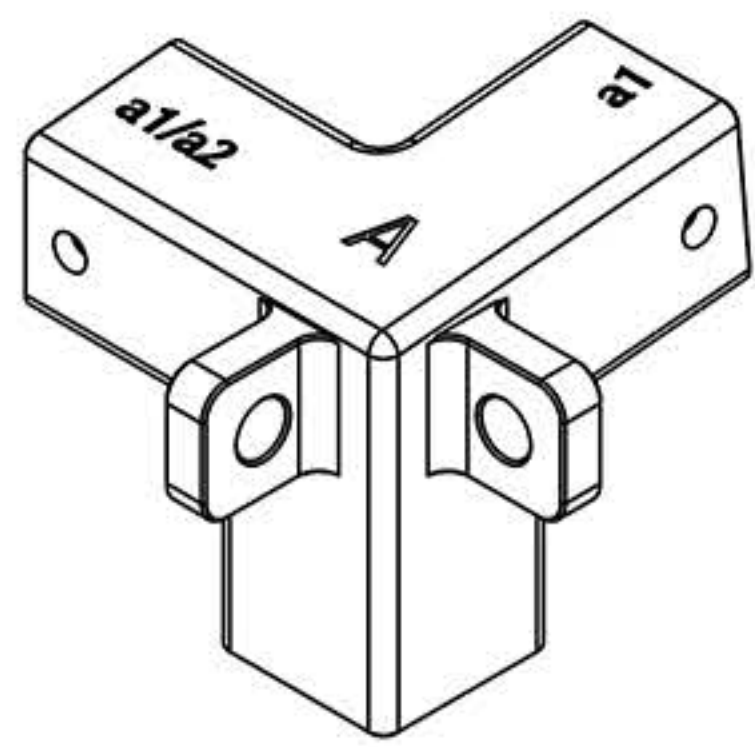


SC12 Exploded View-3

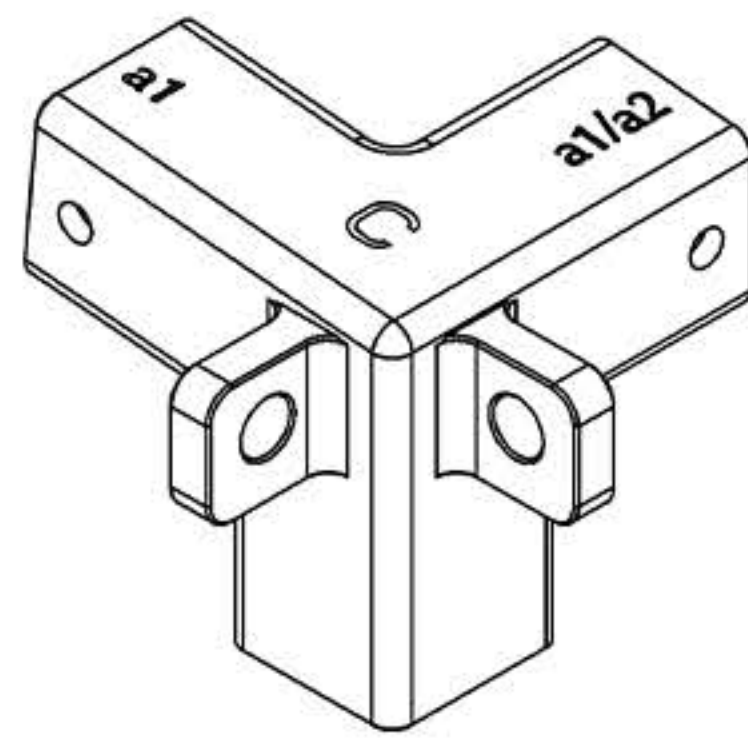
# III. Product List



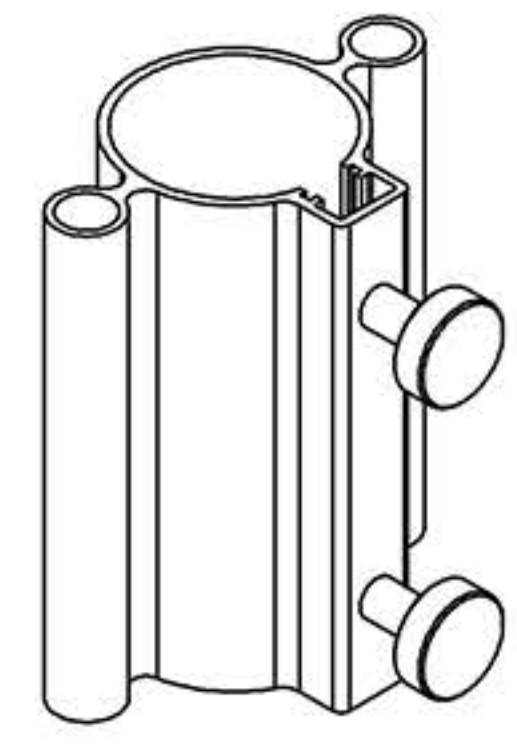
Flexible Solar Panels\*2



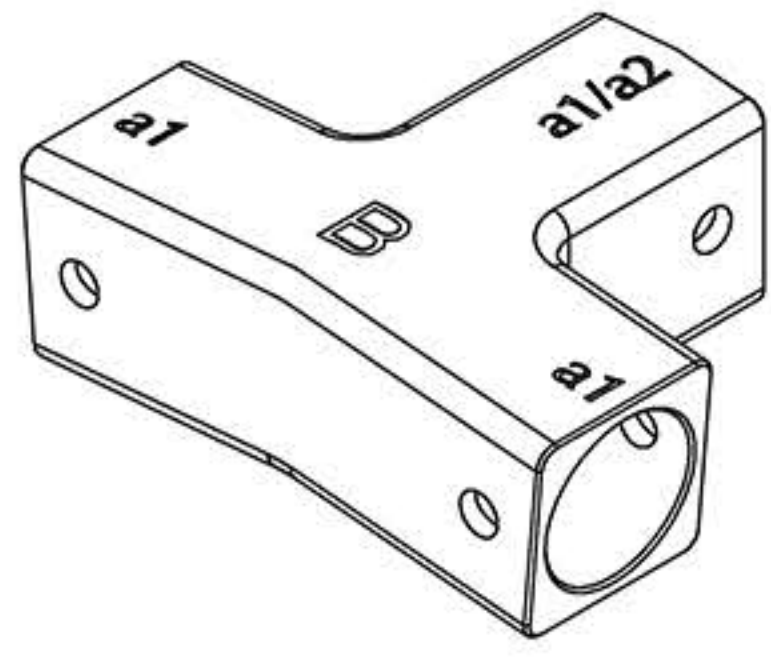
(A) Beveled Right-Angle Tee Connector\*2



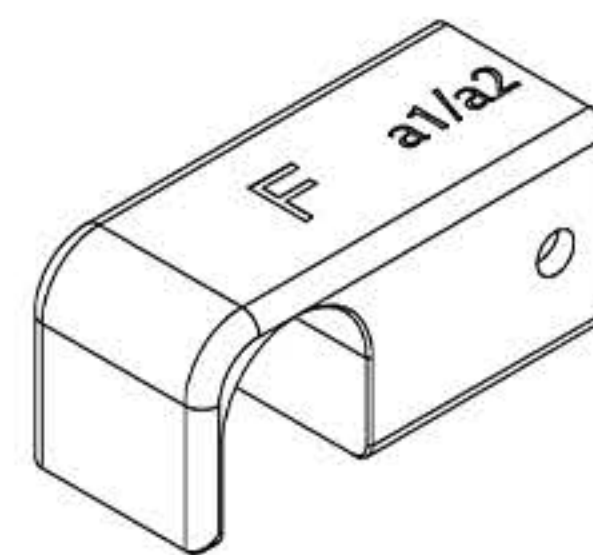
(C) Beveled Right-Angle Tee Connector\*2



Canopy Rod Holder\*4



(B) Beveled Tee Connector\*2



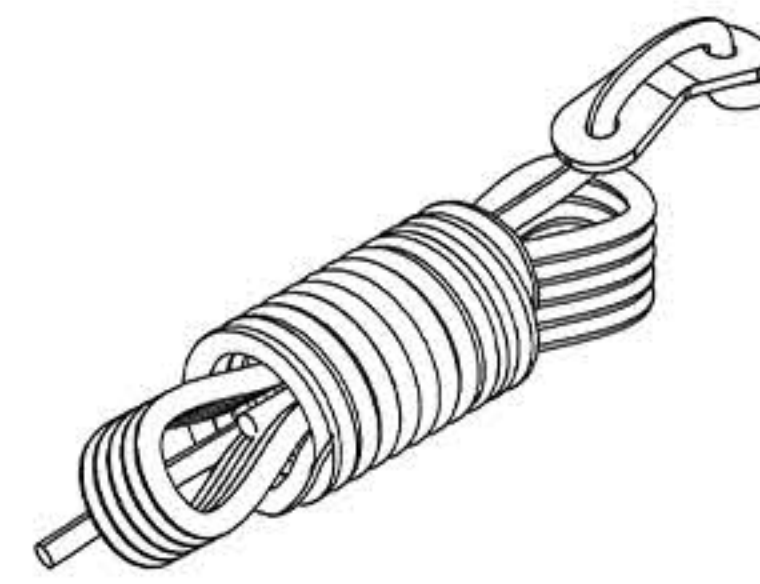
(F) Reinforcement Connector\*4



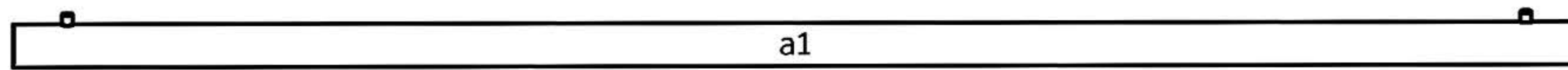
Ground Stakes\*16



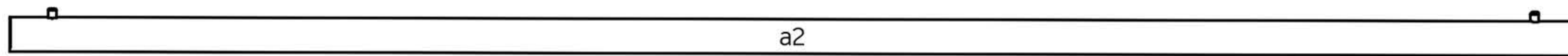
Removal Tool\*1



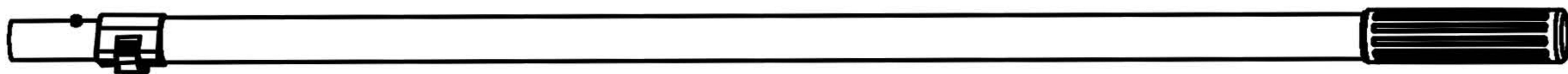
Guy Rope\*8



(a1) Ridge Tube\*4



(a2) Ridge Tube\*5



Upright Tube\*4

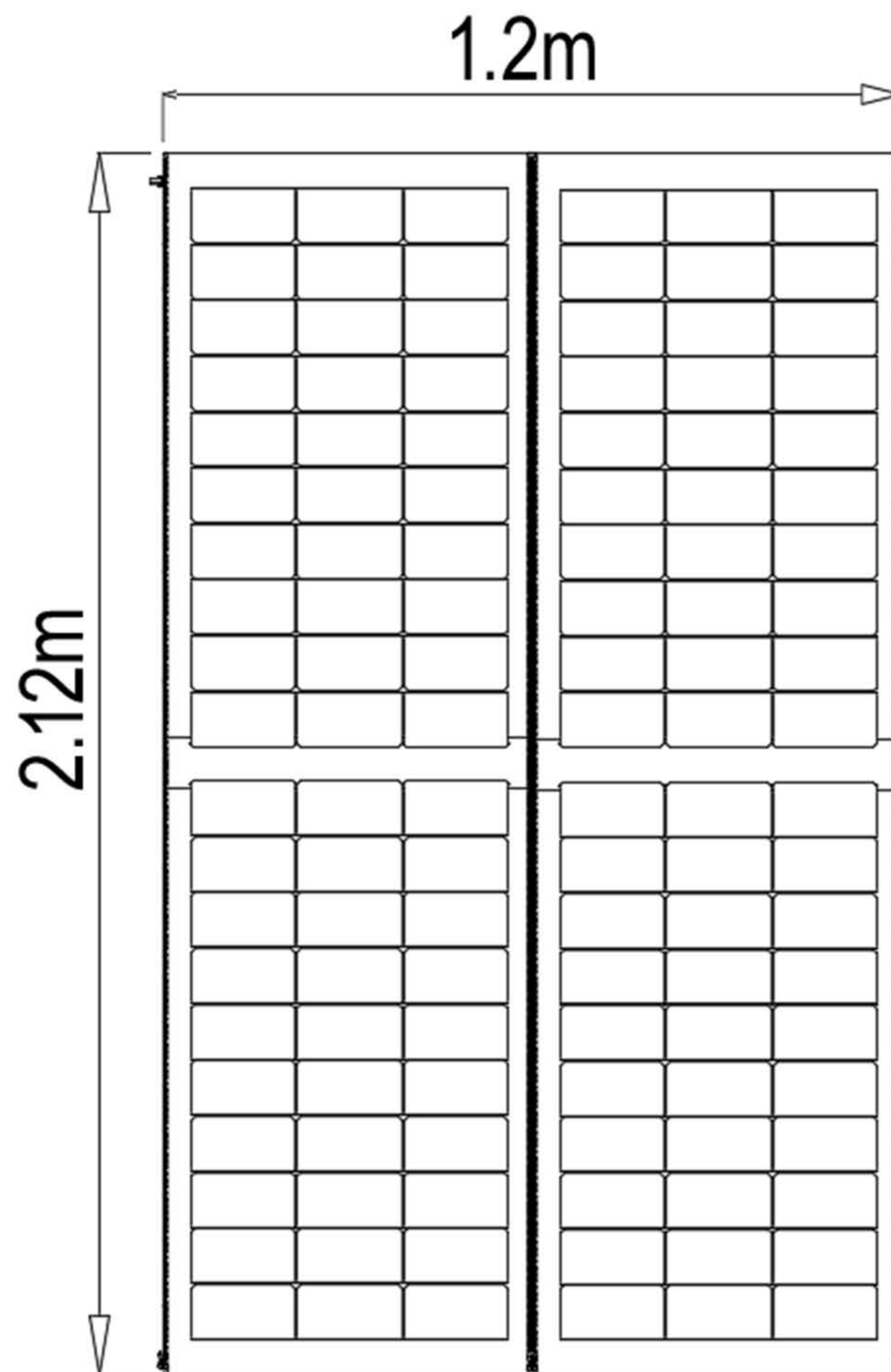
# IV. Installation Instructions

## 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 upright pole can be adjusted to ensure that the roof remains level.

**Warning:**

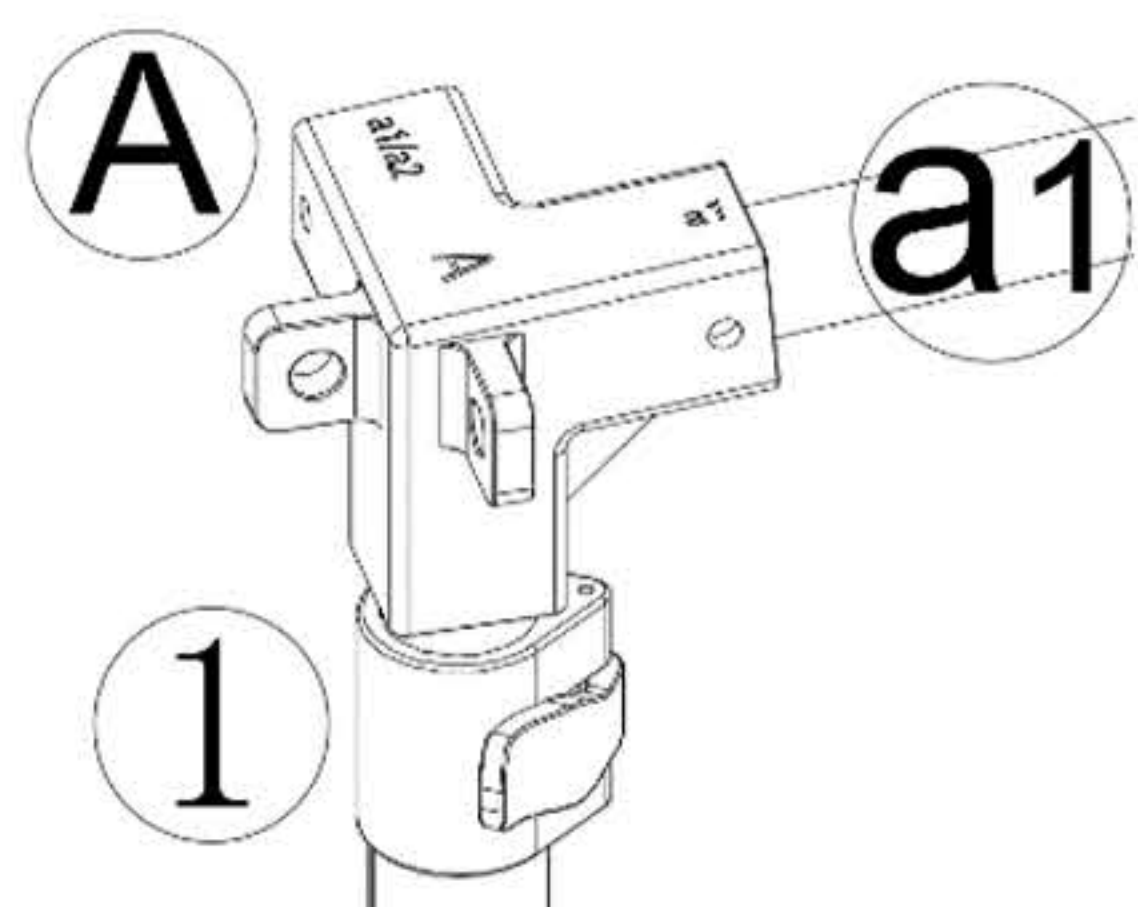
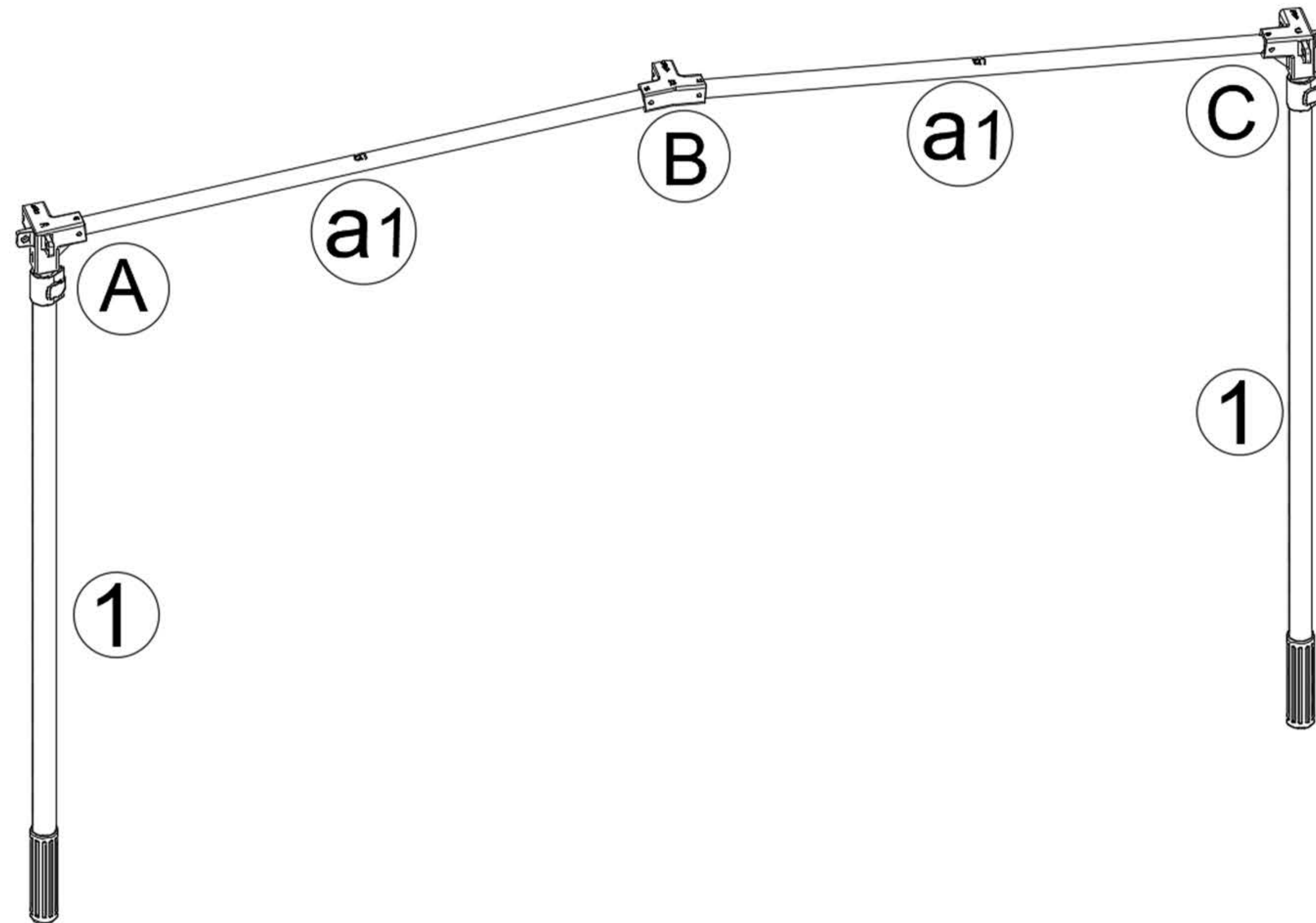
- 1.3 Do not tilt the roof or pillars. After the shed is erected, be sure to use guy ropes to tighten the pillars to keep them vertical, improve wind resistance, and enhance overall stability.



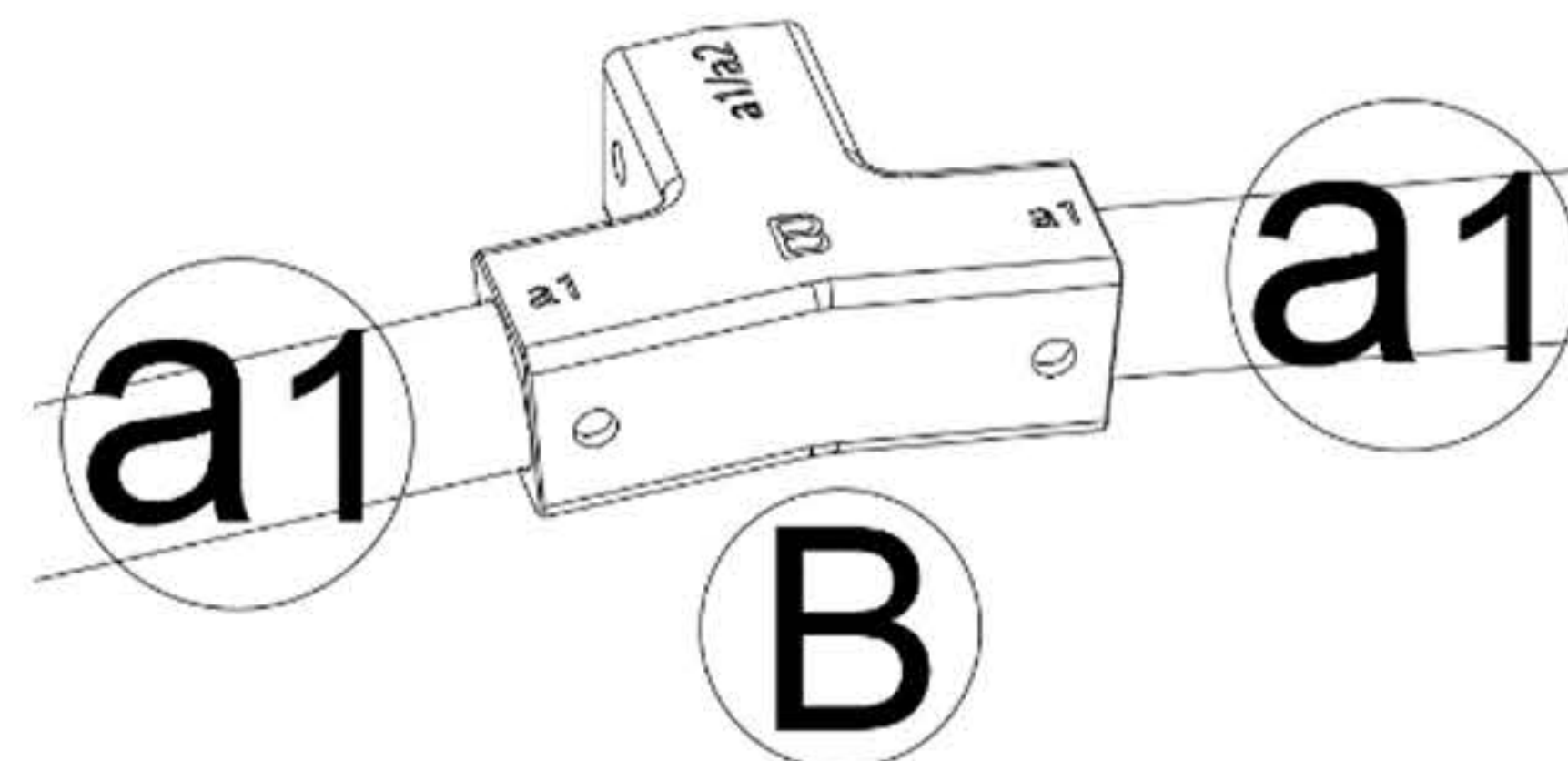
## IV. Structure Assembly

### 2. Hardware Structure Assembly

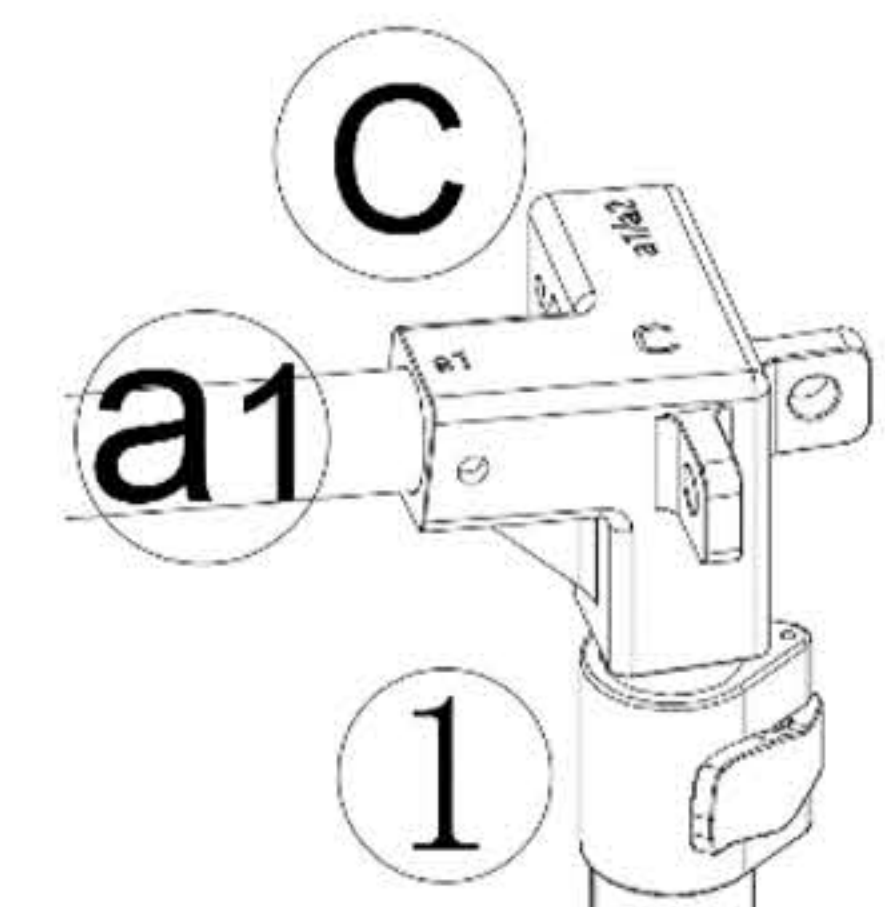
#### 2.1 Side tube assembly (\*2)



A x1  
a1 x1  
Upright Tube



B x1  
a1 x2



C x1  
a1 x1  
Upright Tube

### Assembly Instructions:

Please follow the instructions:

#### 1. Install the a1 ridge tube

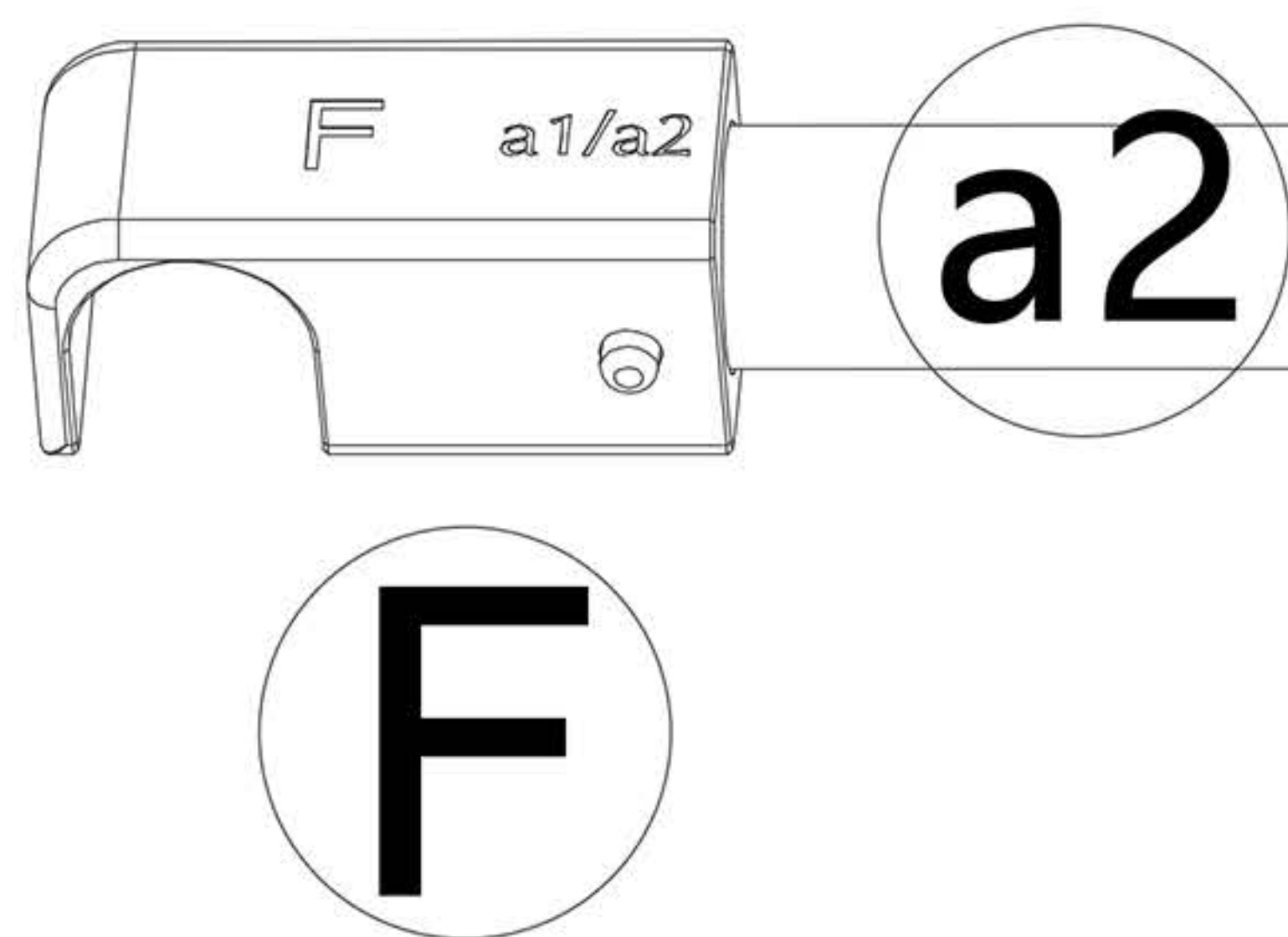
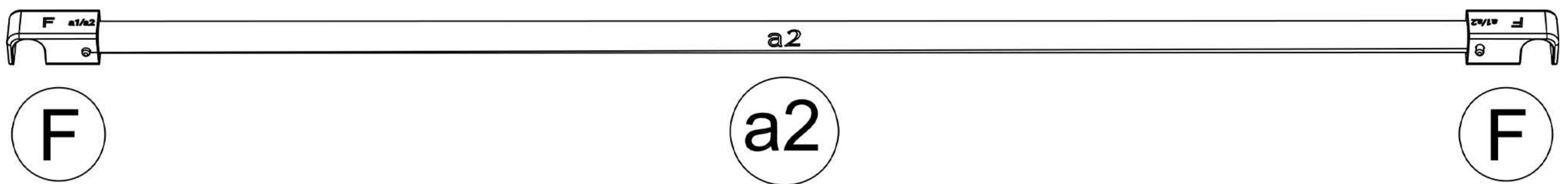
- Insert the a1 ridge tube into the a1 hole of the (A) Beveled Right-Angle Tee Connector, (B) Beveled Tee Connector, and (C) Beveled Right-Angle Tee Connector.
- Make sure that the marble pops out of the hole to fix the ridge tube.

#### 2. Install the ridge tube

- Insert the ridge tube into the remaining holes of the (A) Beveled Right-Angle Tee Connector and (C) Beveled Right-Angle Tee Connector.
- Ensure the spring-loaded ball detent clicks into the hole to secure the ridge tube in place.

# IV. Installation Instructions

## 2.2 F reinforcement tube assembly installation (\*2)



a2 x1

F x2

### Assembly Instructions:

Please follow the instructions:

1. Install a2 ridge tube to F reinforcement connector

- Insert a2 ridge tube into both ends of F reinforcement connector.
- Ensure the spring-loaded ball detent clicks into the hole to secure the ridge tube in place.

# IV. Installation Instructions

## 2.3 Hardware structure construction

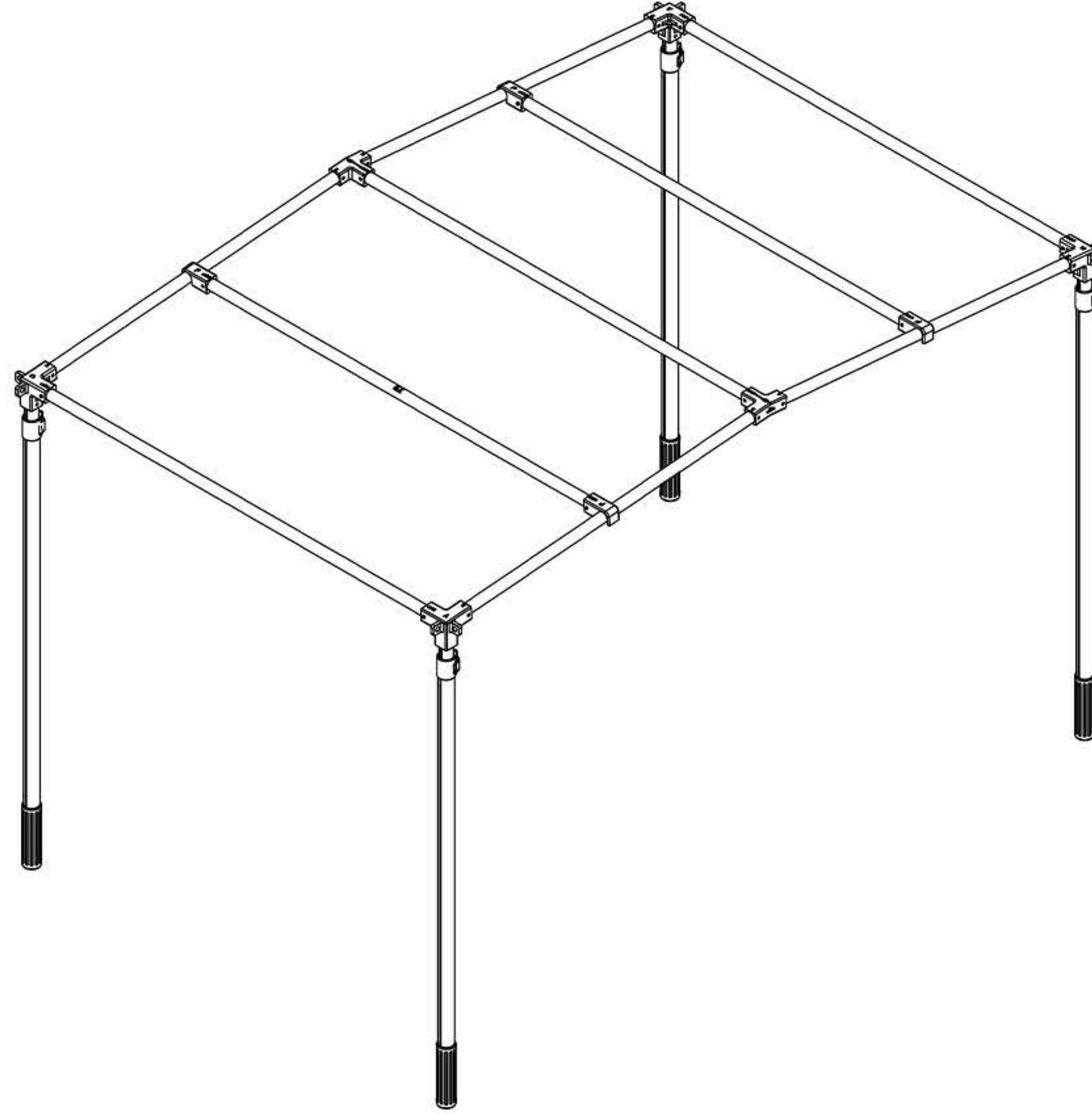


Figure 1- Rendering

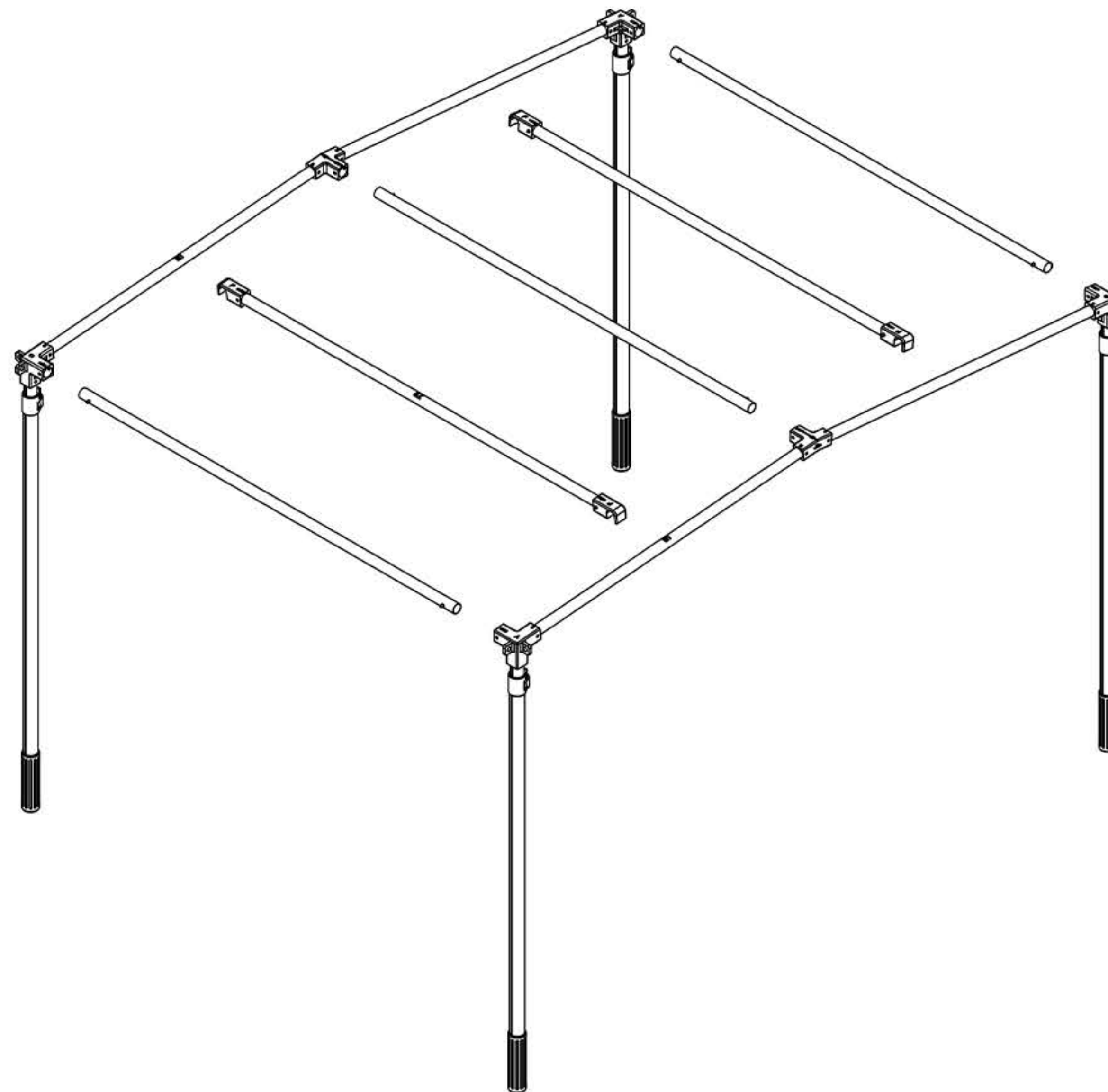


Figure 2 - Assembly diagram

### Assembly Instructions:

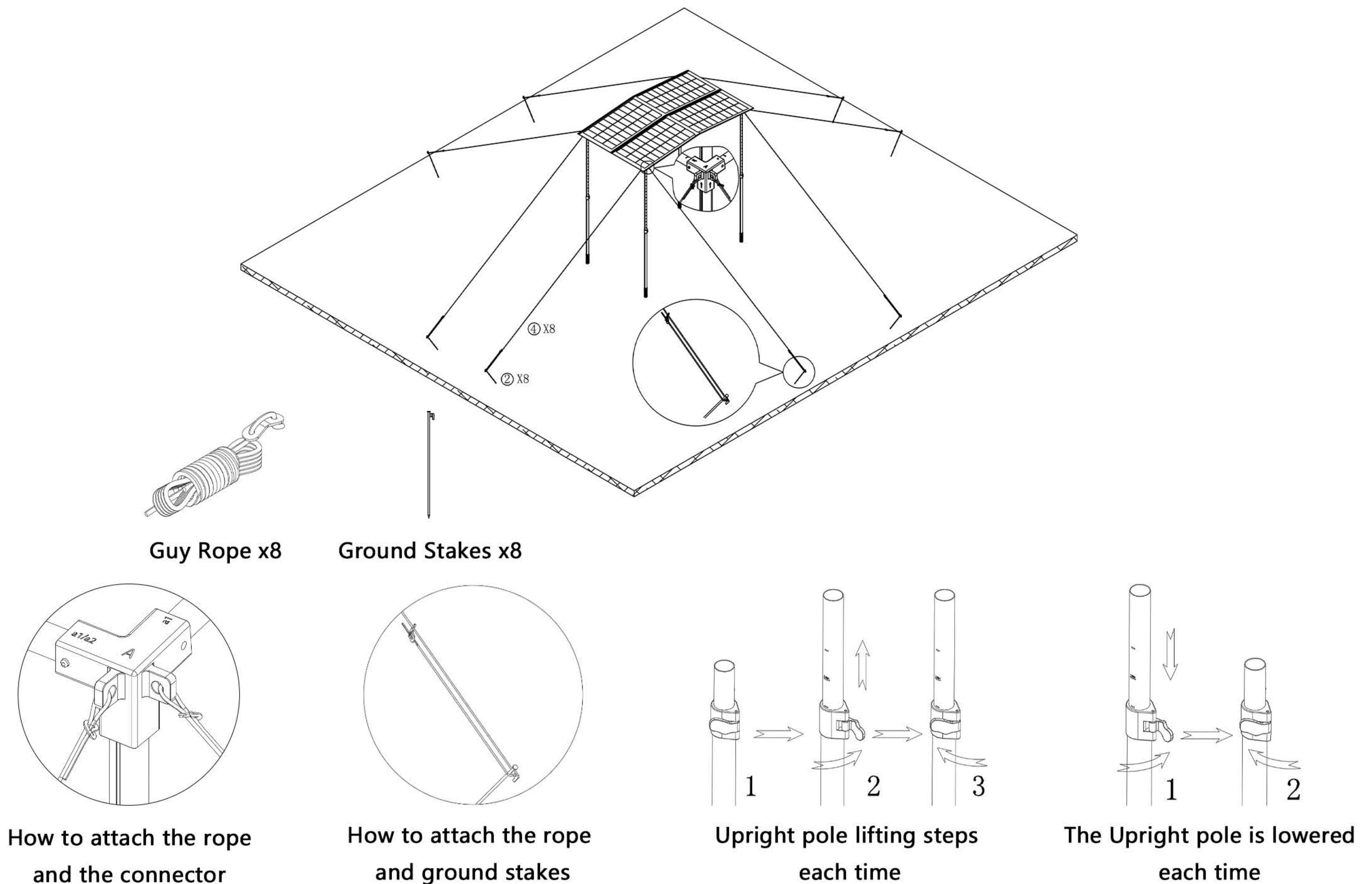
Please follow the instructions:

1. Reference structure construction effect
  - Figure 1 shows the completed structure effect.
2. Component assembly
  - Assemble components 2.1 to 2.3 in sequence according to Figure 2.

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

# IV. Installation Instructions

## 2.4 Rising the canopy & attaching guy rope



## Assembly Instructions:

### 1. Fix the guy ropes

- Tie 8 guy ropes to the guy rope holes of (A) Beveled Right-Angle Tee Connector, (C) Beveled Right-Angle Tee Connector, and (A) Beveled Right-Angle Tee Connector (or matching part)

### 2. Steps for lifting the upright pole each time (requires 2 or more people to cooperate)

- Each person is responsible for 1-2 upright tube, and only raises 10-15cm each time to ensure consistent scales.
- After each rise, lock the upright tube buckle to prevent the canopy 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 4 upright tube must be locked to ensure stability.

### 4. Tighten the guy ropes and fix the ground stakes

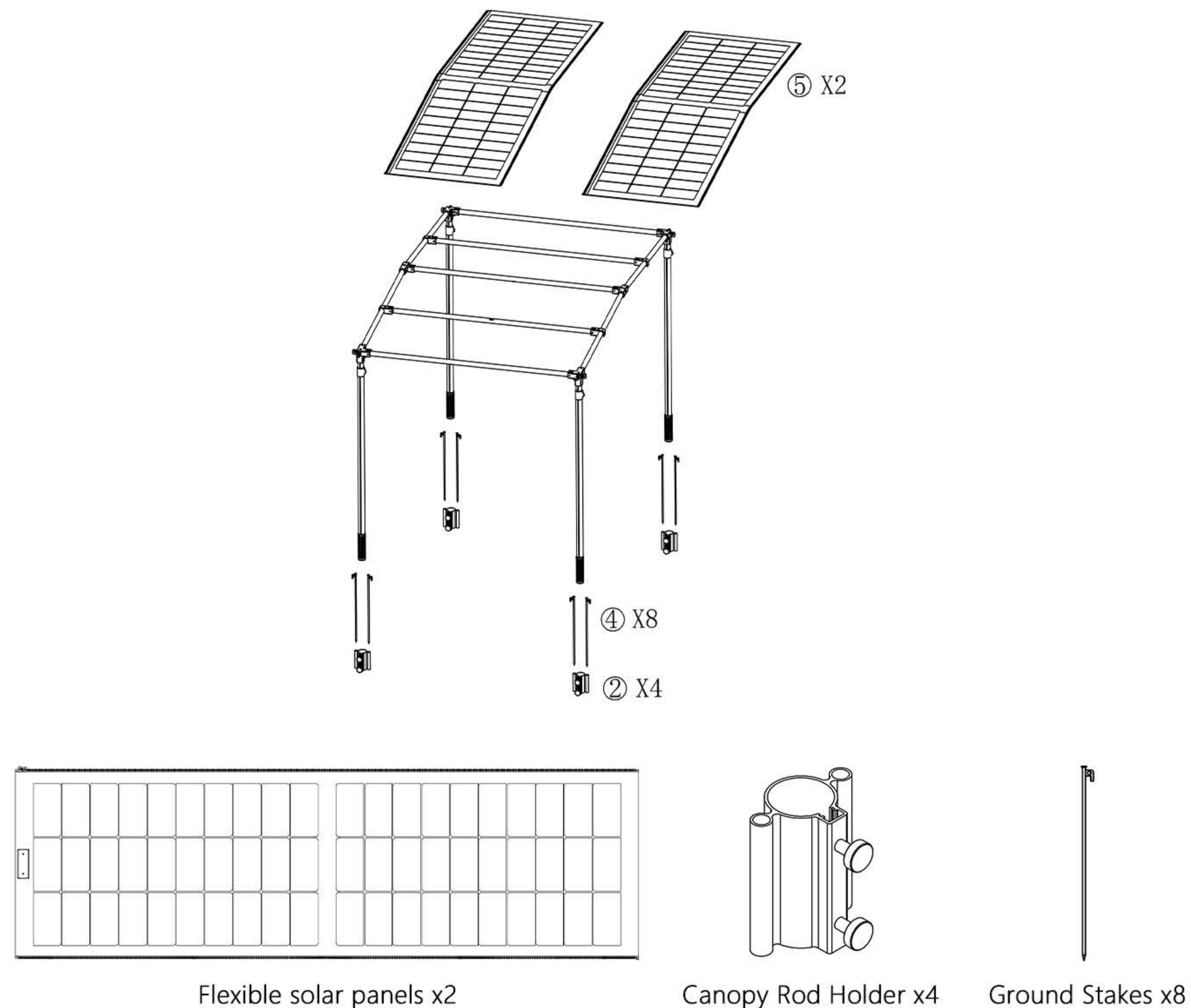
- Pull the guy rope diagonally, leaving 10-20cm for the ground stake to fix.
- Drive the ground stakes into the ground at a 45° angle opposite to the canopy, and tighten 8 guy ropes in sequence to ensure they are secure.

### Tips:

- ① Each upright tube 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 canopy structure.
- ② The knot of the guy rope should be attached tightly, and the ground stake should be driven into the ground 80% of its length into the ground and fixed at a 45° angle in the opposite direction of the canopy to improve wind resistance and ensure stability.

# IV. Installation Instructions

## 2.5 Canopy rod holder & ground stake assembly



### Assembly Instructions:

1. Fix the upright tubes
  - Insert the 4 fixing bases into the bottom of the 4 upright tube in sequence, make sure they are flush with the ground, and keep the 4 upright tubes vertical.
2. Install the ground stakes
  - Insert 8 stakes into the small holes on both sides of the 4 fixing bases.
  - Use a wooden hammer or a rubber hammer to hammer in the ground stakes to fix the base and enhance wind resistance. (Avoid using a metal hammer to prevent damage to the upright tubes)
3. Install the solar panels
  - Place the 2 solar panels on the top of the structure 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 ridge 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 station (energy storage device) (The voltage of a single solar panel is 36V)
6. Arrange the connection wires
  - Fix the extension connection wire from the solar panel to the portable power station (energy storage device) on the a1 ridge tube.
  - Use the Velcro on the solar panel to wrap the connection wire with the a1 ridge 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 station, you need to select the correct series-parallel mode according to the input power of the portable power station. 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 stakes 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 Canopies. Please read carefully before installation to ensure correct operation. The limited warranty terms for the SC Series Solar Canopies can be viewed on the Wistek official website: [www.wistekenergy.com](http://www.wistekenergy.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 connector path to ensure normal operation.
- Only use original or recommended parts from Wistek.
- Choose a flat surface before installation to ensure stability.
- Wistek solar canopies 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 tubes are found to be broken, stop using them immediately and replace the damaged parts.
- Before disassembly or movement, disconnect the power station in the following order:
  1. Shut down the AC output
  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.

## Warranty & 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.wistekenergy.com](http://www.wistekenergy.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 solar panels should be guaranteed by the corresponding suppliers.