



# CO--VENIENT

*We make it better*

## USER MANUAL



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# INTRODUCTION

**Co-venient** is an outdoor workspace designed for students and people who work remotely. There are adjustable benches and a table, so you can work standing or sitting down. The space is solar-powered and provides electricity, lighting, a Wi-Fi access point and four awnings.

This manual is intended for :

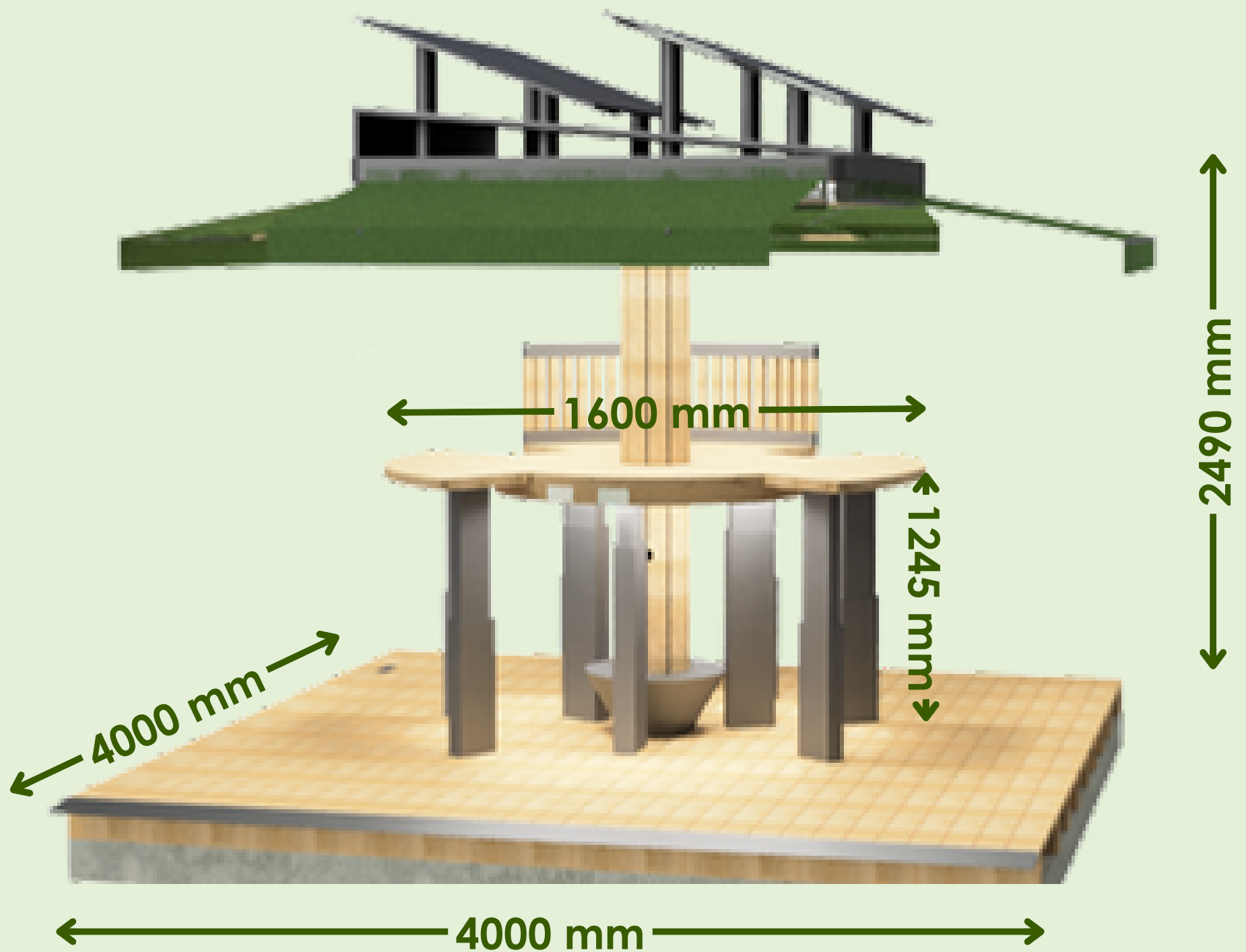
- installers to guide the assembly and installation of the assembly step by step
- users to use and get the most out of the product.

**Please read this manual carefully before using Co-venient.**

In this manual you will find :

- 1.Details of components
- 2.Safety requirements
- 3.Assembly instructions
- 4.User instructions
- 5.Hazards and warnings
- 6.Component maintenance
- 7.FAQ and how to contact us

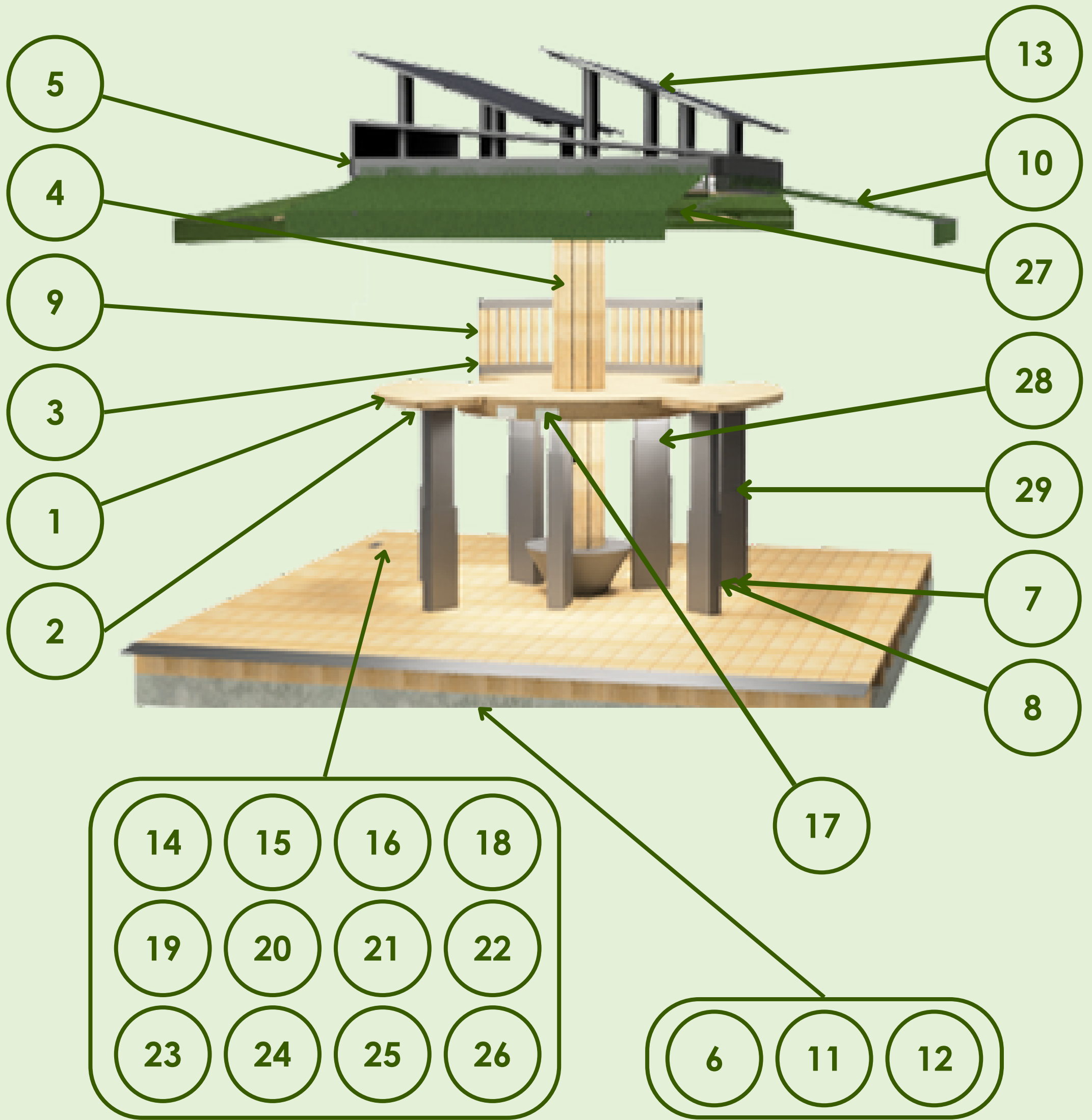
# DIMENSIONS & SPECIFICATIONS



**Co-venient** is built using sustainable and recycled materials :

- **Wood** for the benches, table, and flooring.
- **Recycled metal** from old cars for the main structure.
- **Recycled concrete** made from construction and demolition waste.

# COMPONENTS



# COMPONENTS

PIECE'S NUMBER	PIECE'S NAME	QUANTITY
1	Wood	9
2	Metal support	10
3	Aluminium support (bench back)	1
4	Centre pillar	1
5	Roof	1
6	Concrete base	1
7	Screws packs	2
8	Bolts	5
9	Wood protector	1
10	Awnings	4
11	Gravel (5 m³)	1

# COMPONENTS

PIECE'S NUMBER	PIECE'S NAME	QUANTITY
12	Concrete steel mesh	5
13	Solar panels	2
14	Victron SmartSolar MPPT 150/100	1
15	Extralink LiFePO <sub>4</sub> 40 Ah	3
16	Victron Phoenix 12/500 inverter	1
17	Sockets	1
18	Coolgear CG-CSPDINH- 3	1
19	5 V/3 A buck conv. PTR007236	2
20	Victron Lynx Distributor	1
21	Victron SmartShunt 500	1
22	MikroTik wAP ac V2	1

# COMPONENTS

PIECE'S NUMBER	PIECE'S NAME	QUANTITY
23	ESP32 Dev Board	1
24	Load sensor	3
25	Light sensor	1
26	Humid. + Temp. Sensor	1
27	LED strip	3
28	Linear actuator	3
29	Bewinner actuator	6





# SAFETY REQUIREMENTS

- Assemble the product on a flat, stable surface.
- Protect electrical components from water before switching them on.
- Only qualified personnel can connect the batteries and the system.
- Always disconnect the power supply before performing maintenance.



# ASSEMBLY INSTRUCTIONS

**Foundation** (This phase will be carried out by an external company)

1. Excavate structure site
2. Position steel reinforcement
3. Pour the concrete (by external company)
4. Let it dry

## Electrical box

1. Excavate the location of the electrical box
2. Install the electrical box with all the components inside :
  - Charge controller
  - Lithium - Batteries
  - Inverter
  - DC-DC Converter
  - DC Bus-bar
  - Battery Monitor
  - Wi-Fi Router
  - Microcontroller
  - Sensor
3. Pull electrical conduits to future location of the central metal structure
4. Close the box to protect the components



## **Metal structure**

1. Install the metal structure
2. Position the footrest
3. Position the wooden cladding around the metal structure
4. Plan outlets for the various electrical cables

## **Table and benches**

1. Mark the locations of the various elements (benches, table, actuators, etc.)
2. Position the actuators and secure them to the floor
3. Attach benches and table on the actuators
4. Position the sockets and switch at the edge of the table

## **Roof**

1. Position and fix the lower part of the roof
2. Install the roof
3. Fix the inclined part of the roof

## **Solar panels**

1. Position and screw solar panels top the upper structure

## **Awnings**

1. Fix the four awnings to the roof ceiling



## Lighting and connections

1. Install the LED strips under the roof and under the table
2. Connect all the electrical cables to each other and to the power supply
3. Connect sockets and switches
4. Connect each actuator to the switches
5. Connect the solar panels
6. Connect the LED

## Floor

1. Position and fix the joists on concrete
2. Position and fix the wooden decking on the joists

## Final check

1. Test each element of the system: actuators, lights, sockets, Wi-Fi, awnings.

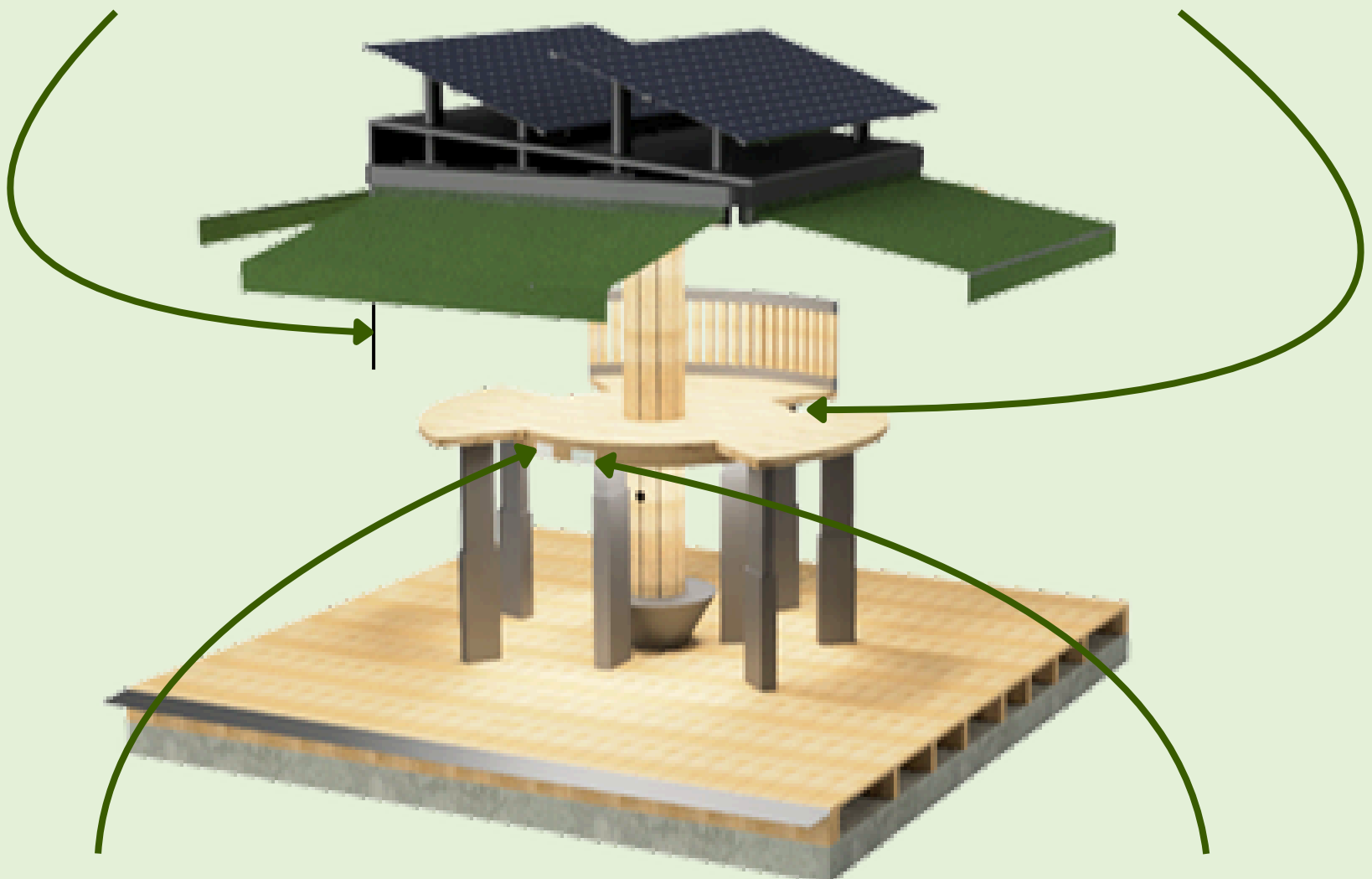
# USER INSTRUCTIONS

## AWNINGS

Use the cranks to open or close each awning. Turn one way to open, the other to close.

## LIGHTING

Use the two switches: one for the ceiling, one for under the table.



## ADJUSTING THE HEIGHT OF THE BENCHES AND TABLE

Each features have their own switch. Press the top to raise, the bottom to lower.

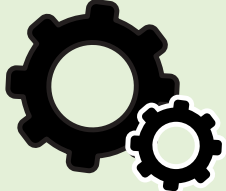




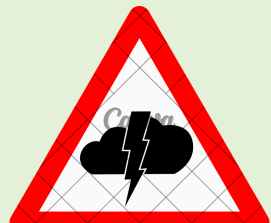

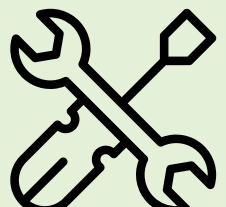
## DEVICE CHARGING

Charge your devices using the double outlet or the 3 USB-C ports.

## WI-FI CONNECTION

- Activate Wi-Fi on the device you want to connect.
- Find available networks.
- Select the "**co\_venient**" network.
- Enter the password: **EPS25\_Co**
- Click "Connect."

# HAZARDS & WARNINGS

Symbol	Hazard	Precaution Measures
	Moving benches and table	Do not sit or touch components while they are moving. Check surroundings before moving any parts.
	Risk of finger pinching	Keeps hands and objects away from moving parts.
	Electrical risks (sockets and box)	Do not open the electrical box. Do not insert metal objects into sockets
	Overloadings or misuse of seating	Do not climb on the table or the benches. Respect weight limits.
	Child safety	Never let children use switches or move the system
	Weather	Do not use the product during storms. Retract the awnings if possible.
	Electrical overload	Do not plug in high-power devices (heaters, hotplates, etc.)
	Mechanical blockage	Never force a stick component. Contact a technician.



# MAINTENANCE

## Every month

- Monitor battery condition
- Inspect visible cables
- Test all switches

## Every 3 months

- Clean solar panels
- Check mounting and structural stability

## Every 6 months

- Test electrical sockets
- Check the electrical box and its sealing

## Every 2 years

- Replace LED strips if they are defective or dim
- Apply a new coat of wood protection to the various wooden components.

# FAQ & CONTACT

## Can I plug in a computer or phone?

Yes. The 230V outlets can charge laptops, phones, and other small devices.

Caution: Do not plug in large household appliances.

## Is the space wheelchair accessible?

Yes. A slope has been created to facilitate wheelchair access. There is also a larger space between the two benches, allowing a wheelchair user to sit and be around the table like everyone else. The various features are easily accessible due to their location.

## Does everything work when there's no sun?

Yes. The system is powered by rechargeable batteries, so you can use the space even in bad weather.

## Need help? Contact us.

**Website :** [co\\_venient.com](http://co_venient.com)

**Email :** [covenant@gmail.com](mailto:covenant@gmail.com)



FIND OUT MORE

