

Installation Manual for Dual-Cell Aluminum Pergola

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Watch the installation video as well!

#### **Before Starting**

- This may take 5-7 hours and at least 3 people are recommended to install this pergola.
- Make sure you read and review this entire manual thoroughly before starting to assemble your pergola.
- Verify that you have received all the parts listed on pages 4 and 5. Refrain from discarding any packaging until you have confirmed the presence of all components.
- Select a soft surface as the assembly area for your pergola
- Ensure that all plastic bags, tools, and fittings are kept out of the reach of small children and pets.
- To maintain the warranty validity, refrain from modifying the pergola, using alternative tools, or substituting parts during assembly.
- Kindly consider recycling the packaging materials whenever feasible.

### **Important Safety Guidelines**

- Leave your remote control inside. The remote control is not waterproof.
- For your safety, DO NOT attempt to climb or walk on the roof of the pergola under any circumstances.
- Due to the weight of the pergola parts, it is crucial to have three or more healthy adults assisting in the assembly process to ensure safe handling. Lift with the correct posture and technique to prevent injury.
- Check for underground utilities before digging or driving anchors into the ground.
- Exercise caution regarding overhead lines and ensure there is a minimum clearance of 6ft from any overhead electrical wires.
- Structures may require a building permit. As the purchaser or installer of this product, it is advised to consult local planning, zoning, and building inspection departments to adhere to relevant building codes and zoning requirements.
- For your safety, wear gloves during installation to minimize the risk of injury.
- Always follow the safety warnings provided with your tools and remember to use safety glasses.
- Regularly check all nuts and bolts at least twice a month during the usage season and tighten as needed.
- To avoid suffocation, keep all plastic bags away from babies, children & pets. To avoid choking, keep all small parts away from babies, children & pets.
- We hold no responsibility for any damages caused due to normal wear and tear, incorrect assembly, misuse and/or negligence. It is essential to adhere to the provided instructions and guidelines for safe usage.

## **Tools Required**

- Work Gloves
- Hard Hat
- Safety Goggles
- Hearing Protection
- Utility Knife
- Rubber Mallet
- Tape Measure
- Waterproof Silicone Sealant
- Caulk Gun
- Impact Drill
- Rotary Hammer
- Rotary Hammer M8 Drill Bit
- 2x Step Ladder
- Level
- Adjustable Wrench
- 3/16 Allen Wrench (Size 5)
- 7/32 Allen Wrench (Size 6)

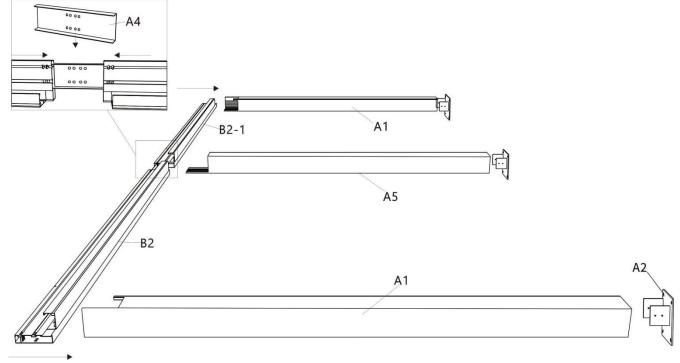
Part List				
Parts code	Image	Description	Size	Qty
A1		Post	6"x6"	4
A2		Post Base Plate	7.3"x7.3"	6
А3	Ton A	M12 Wedge Anchor Bolt	M12x 5"	24
A4	00 00	Beam Connection Plate	1.2"x5.1"x15.7"	2
A5		Connection Post	6"x6"	2
B1-B4		Beam (w/Gutter)	4.7"x6.7"	6
B5	Es. and	Center Beam	5.1"x7.1"	2
В6		Louver	1.7"x7.1"	32-48
D1		Connecting Rod	1"x0.6"	4
D2		Louver Slot Cap		64-96
D4		Motor		2
D5		Base Motor Bracket		2
D6		Connection Motor Bracket		2
D7		Motor Cover		2
D8		Screw		108-140

D9		Hex Screw		10
D10		Ceiling Fan		2
D11		LED Light		7
D12		Corner Top Cover		4
D13	0 0	Side Top Cover		2
D14		Top Cover Screws	M4x5/8"	52

**Step 1: Connect Length Beams** 

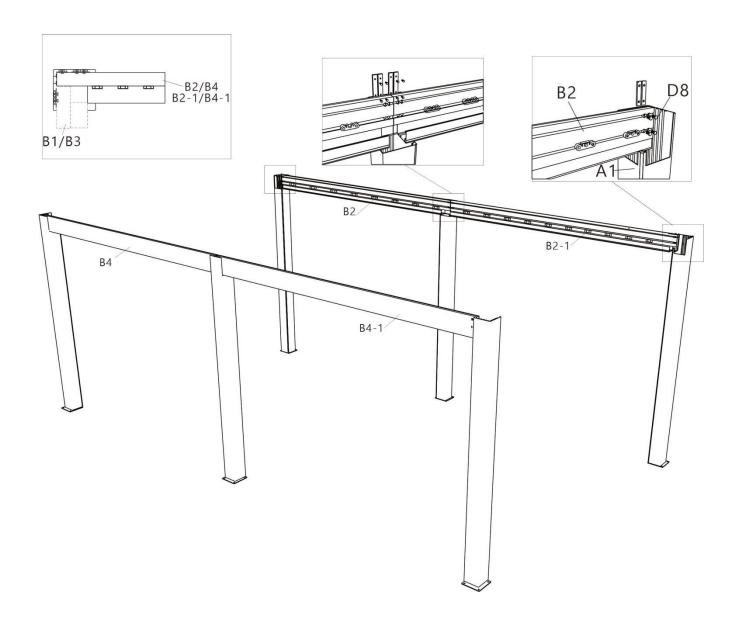
Parts code	Image	Qty
A1		4
A2		6
A4	00 00 00 00	2
A5		2

B2, B2-1		2
B4, B4-1		2
D8		24
D3	(allo)	64-96



- 1. Before starting, get an understanding of the layout of the location and which side you would like the motor positioned (the beam with the motor side will already have screws in place). This will determine the orientation of your pergola. By looking at the edge of the beam and how far the D3 Louver Slot (pre-installed) is to the edge compared to the other side, will tell you which side the louver will open from. It is recommended that you lay each beam out and make sure they are in the correct orientation before installing the posts. You may want to test by inserting a louver and the central beam to get an understanding of the orientation.
- 2. Lay the posts on the ground and lay out the posts according to the sequence A1 > A5 > A1. Make sure the post rain holes are facing away from the center. Connect the A2 Post Base Plate to each A Post. The lip of the A2 Post Base Plate should be facing away from the center.
- 3. Connect B2 Length Beams together with the A4 Beam Connection Plate in between (The plate goes on the inside of the beam). Slide the fasteners into the grooves of the B2 Beams and then insert and tighten the D8 Screws. You may need to use a rubber mallet to knock the pieces in place.
- 4. Perform the same steps for B4 Length Beams. NOTE: Always install length beams (Beams with the D3 Louver Slots) first and then install width beams.

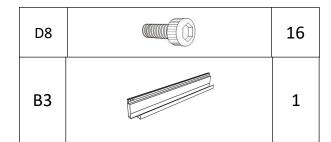
**Step 2: Connect Posts to Length Beams** 

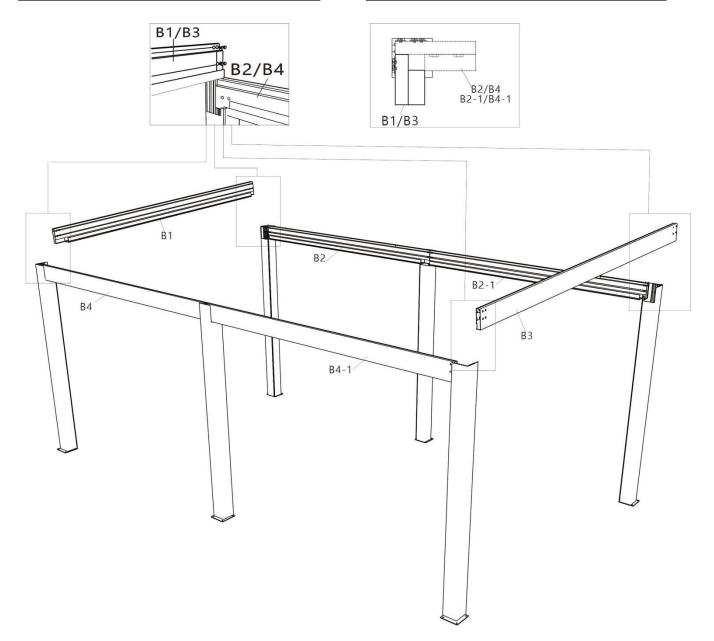


- 1. Attach the connected Length Beams to the A1 and A5 Posts. Do so by loosening the D8 beam screws affixed to the fasteners a little bit and then sliding the fasteners into the grooves of the A1 and A5 Posts. Tighten the D8 Screws once the Beams are in place.
- 2. Repeat these steps for all connected length beams and posts.
- 3. Afterwards, stand both length sides of the pergola up. NOTE: Be very careful and make sure you have someone or something to hold the sides in place as they are not stable yet and are prone to falling over and injuring someone.

**Step 3: Install Width Beams** 

Parts code	Image	Qty
B1		1

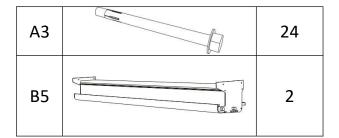


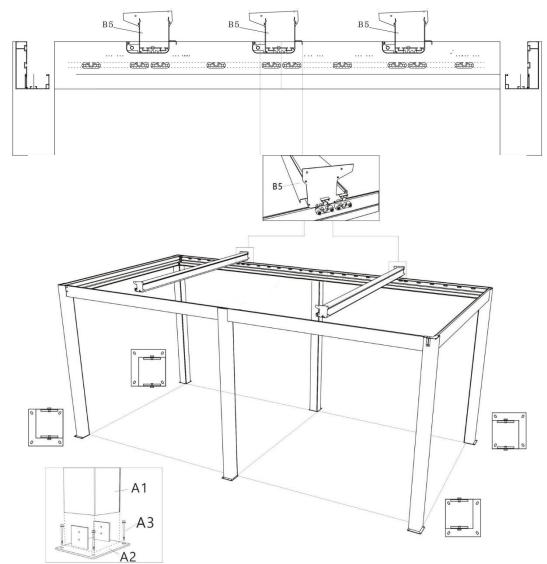


1. Insert the B1 and B3 Width Beams by loosening the D8 screws from the fasteners and sliding the beams into the grooves of the A1 Posts. Tighten the D8 Screws once the Beams are in place.

**Step 4: Install Center Beams and Anchor Post Bases** 

Parts code	Image	Qty
A2		6

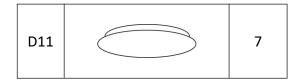




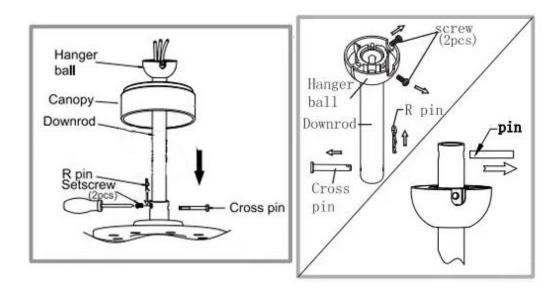
- 1. Install both B5 Center Beams into the D3 Louver slots as shown in the above figure. Pay close attention to the orientation of the B5 Center Beam. NOTE: The central beams with the fan hole will go into the middle of the cells.
- 2. Establish a fixed post by anchoring one of the posts using the A3 Wedge Anchor Bolts (Pre-drill holes into the concrete using a rotary hammer and a drill bit).
- 3. Next, measure each post for plumb with a level while also making sure the unit is square by measuring the distance between each of the posts. Use a rubber mallet to adjust the posts as needed.
- 4. Once all the posts are plumb and square, anchor all the posts. You may also choose to wait until after the louvers and motor is installed before anchoring all the posts.
- 5. Next, seal gutter connections with waterproof silicone sealant.

Step 5: Install the Fan and LED Lights

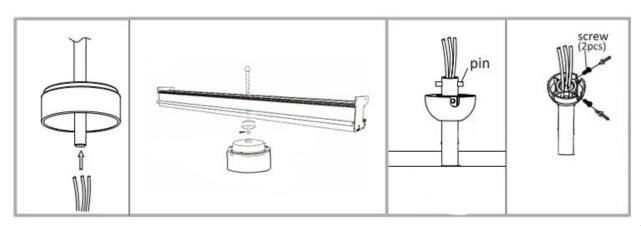
Parts code	Image	Qty
D10		2



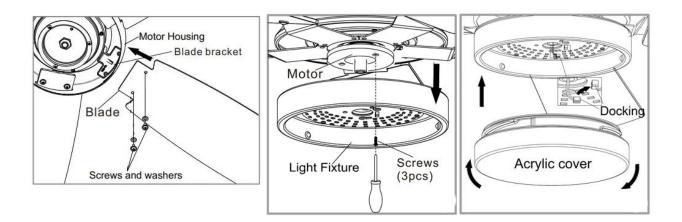
- 1. Remove the solar panel cover from the B5 Center Beam.
- 2. Next, assemble the D10 Fan. Remove the pin and screws from the bottom of the down rod and the hanger ball.



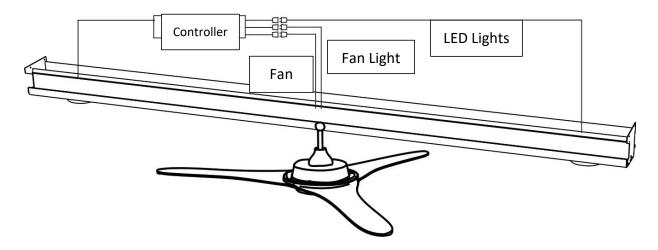
- 3. Next, pass the wiring from the top of the housing through the canopy cover and then through the downrod. Reinsert the pin and fasten the downrod with screws.
- 4. Insert the downrod through the hole on the underside of the middle of the B5 Center Beam. Pull the wiring through the hanger ball and then fasten the hanger ball to the downrod with the pin and screws. Then turn the hanger ball until it fits snuggly inside the frame.



5. Install the fan blades with the provided screws. Next, attach the LED Fixture and fasten with screws. Then, plug in the LED board. Finally, twist the LED acrylic cover on.



- 6. Twist the LED acrylic cover on for both beam LED lights on each side of the fan.
- 7. Connect the fan (two wires) and LED Light power cable to the controller based on the colored label.
- 8. Perform these steps for the other B5 Center Beam.

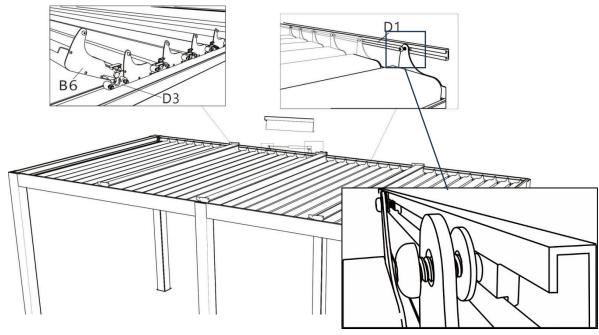


#### **Step 6: Install the Louvers**

Parts code	Image	Qty
D1		4
D2		64-96
D5	0 0	2

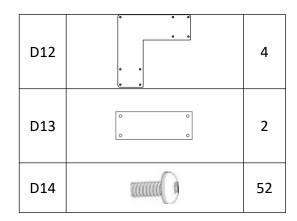
D7	2
В6	32-48
D8	64-96
D9	10

- 1. Snap both sides of the B6 Louvers into the D3 Louver Slots (pre-installed). NOTE: Pay attention to the orientation of the louver and you may need to use a rubber mallet to knock the Louvers into place. Snap the D2 Louver Slot Cap over each D3 Louver Slot. You may need to knock the Cap in place as well with a mallet. Follow the same steps for all B6 Louvers.
- 2. Attach both D5 Base Motor Bracket to the top of the Beam where the motor will go using the D9 Hex Screws on the inside and the D14 Top Cover Screws from the top. Loosely fasten the D7 motor cover using the D9 Hex Screws. Make sure it is loose enough that you can slide the cover up and down the beam.
- 3. Next, connect the D1 Connecting Rod to all the B6 Louvers by screwing the D8 Screws into the screw fixtures in the D1 Connecting Rod. Make sure to place a washer between the B6 Louver lip and the D1 Connecting Rod. Perform the same step for the other side and the other cell.
- 4. NOTE: Leave two screw fixtures for each motor (2 motors). The placement of the screw fixtures can be seen in next step.

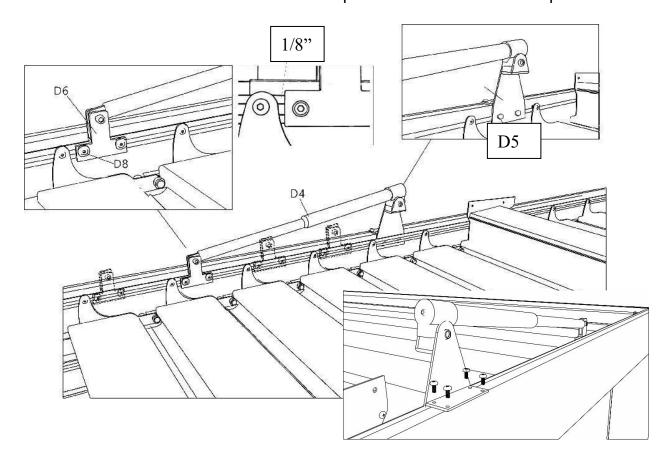


**Step 7: Mount the Motor** 

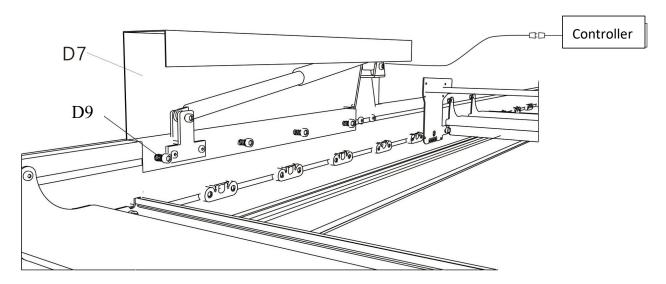
Parts code	Image	Qty
D4		2
D6		2
D8		4



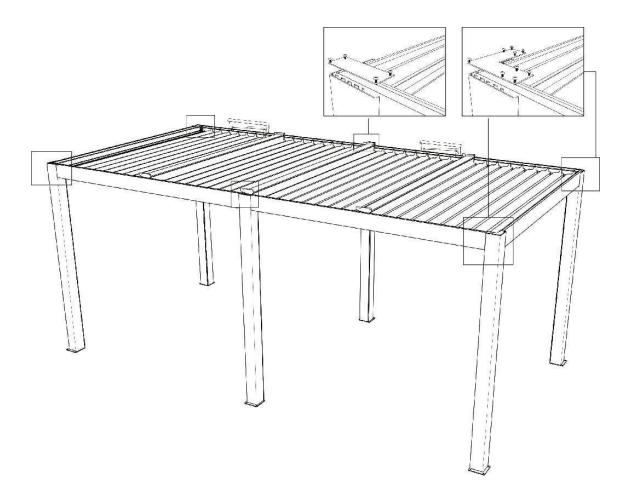
- 1. Extend the D4 motor to its longest state. Plug the motor into the controller first and use the remote control to extend it. Afterwards, unplug the motor.
- 2. Attach the D4 motor to each D5 and D6 brackets. The front D6 Connecting Bracket is connected to the D1 Connecting Rod using the D8 Screws connected to the two screw fixtures that were left open in the previous step. NOTE: Make sure to leave a 1/8" gap between the D6 bracket and the louver lip.
- 3. The back D5 Base Motor Bracket is attached to the top of the Beam using the D9 Hex Screws from the side and the D14 Top Cover Screws from the top.



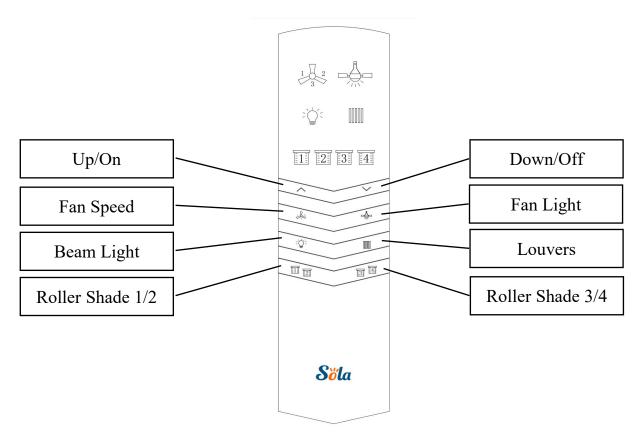
- 4. Slide the D7 Motor Cover over the motor and fasten it to the beam using D9 Hex Screws.
- 5. Connect the D4 Motor power cord to the controller.
- 6. Repeat step 1-5 with the motor for the other cell.
- 7. Finally, place the solar panel cover back on each of the B5 Center Beam. Make sure you connect the solar panel power cable to the controller. Screw the cover in place and caulk around the solar panels.



8. Affix the D12 and D13 Top Covers to the corners using the D14 Top Cover Screws.



#### **Remote Control Operating Instructions**



Wake the Remote Control: Press any button to wake up the remote control.

**Turn on the Fan:** Press the Fan Speed button. The fan speed indicator will light up on the LCD screen. Pressing the Up/On button will toggle through the 3 speeds of the fan. Pressing the Down/Off button will turn off the fan.

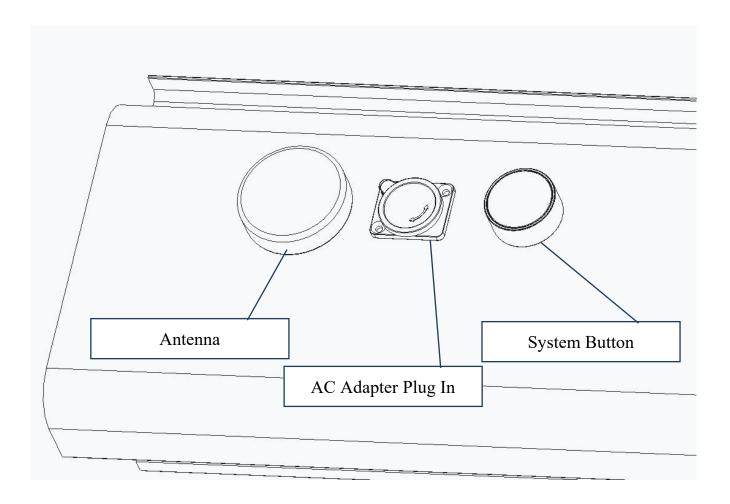
**Turn on the Fan Light**: Press the Fan Light button. The fan light indicator will light up on the LCD screen. Pressing either the Fan Light button again or pressing the Up/On button will turn on the fan light. When the fan light is on, pressing either the Fan Light button or pressing the Down/Off button will turn off the fan light.

**Turn on the Beam Light**: Press the Beam Light button. The beam light indicator will light up on the LCD screen. Pressing either the Beam Light button again or pressing the Up/On button will turn on the beam lights. When the beam lights are on, pressing either the Beam Light button or pressing the Down/Off button will turn off the beam lights.

**Control the Louvers**: Press the Louvers button. The louvers indicator will light up on the LCD screen. Pressing the Up/On button will open the louvers. Pressing the Up/On button again during movement will pause the louvers in your desired position. Pressing the Down/Off button will close the louvers.

Control the Roller Shades: Press the desired Roller Shade button. The selected Roller Shade will light up on the LCD Screen. Each time you press the Roller Shade button, it will cycle through selections. (For example, pressing the Roller Shade 1/2 button once will select the 1<sup>st</sup> Roller Shade, pressing the button again will select the 2<sup>nd</sup> Roller Shade, and pressing a third time will select both 1<sup>st</sup> and 2<sup>nd</sup> Roller Shades.) Once you have the desired Roller Shade selected, press the Down/Off button to move the Roller Shade down. Pressing the Down/Off button again during movement will pause the Roller Shades in your desired position. Pressing the Up/On button will lift the Roller Shades.

## **Control System Functions**



- System Button: Used for pairing the pergola system to a remote control, Power ON/OFF, Error detection, low battery warning, and adapter charging indicator. Please refer to the Pergola System Operating Instructions for further details.
- AC Adapter Plug In: Using the AC Adapter provided, plug in your control system to charge the battery if it ever runs out of power
- Antenna: Antenna for receiving signals from the remote control