



TERRA SUMMER

## TABLE OF CONTENTS

WARNINGS	03
PREPARATION OF THE INSTALLATION SURFACE	04
VERIFYING YOUR PERGOLA'S ANCHOR POINTS	05
TOOLS REQUIRED	06
INSIDE THE BOX	07
TIPS AND TRICKS / COMPONENTS	08
INSTALLATION	
1 - Building the Front and Back Arches	09
2 - Front Arch Assembly	10
3 - Preparation of the Blades Support Rafters	11
4 - Frame Assembly	12
5 - Installation of the First and Last Blades	14
6 - Checking for Squareness	15
7 - Fastening to the Ground	16
8 - Installation of the Tray and Cover Profile	17
9 - Installation of the Intermediate Blade	18
10 - Installation of the Piston Blade	19
11 - Installation of the Maneuvering Profile on the Piston Side	20
12 - Installation of all Other Blades	22
13 - Installation of the Tray Cover	23
ELECTRICAL REQUIREMENTS	24
FAQS / MAINTENANCE TIPS FOR LOUVERED PERGOLAS	25

## WARNINGS

**ATTENTION!** PLEASE READ THIS USER'S MANUAL BEFORE USING AND INSTALLING THE PRODUCT. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

- The installation of a pergola must be done with care because of its requirements and necessitates a certain level of skill to:
  - Measurement and levelling of the supports and the structure.
  - Drilling in the ground and installation of chemical sealant or adapted fasteners.
  - Work at height and handling of heavy loads.
  - Electrical connection in the case of an electrically operated pergola.

If you have any doubts about the correctness and safety of your installation, call a professional.

- The pergola must be installed according to the building code in your area. A minimum of four people are required with personal protective equipment (PPE) and the proper materials. If you have any problems, please consult a qualified person on this product for assistance.
- Observe the safety instructions to prevent damage from improper use! Observe all warnings in the manual.
- This is a product that presents a risk of falling and serious injury. All assembly steps must be carefully followed. A faulty fastening or incorrect installation can lead to the pergola falling or breaking.
- It is important for the safety of everyone to follow these instructions.
- It is strictly forbidden to climb on the pergola's blade deck.
- It is strictly forbidden to climb on the structure of the pergola.
- It is the installer's responsibility to secure the pergola to the ground.
- The manufacturer assumes no responsibility for damage to the pergola or its contents caused by natural disasters or special events.
- In case of frost, the blades must be in the open position. In case of heavy snowfall, remove the snow from the pergola. Do not allow snow to accumulate on the pergola's blade deck under any circumstances.

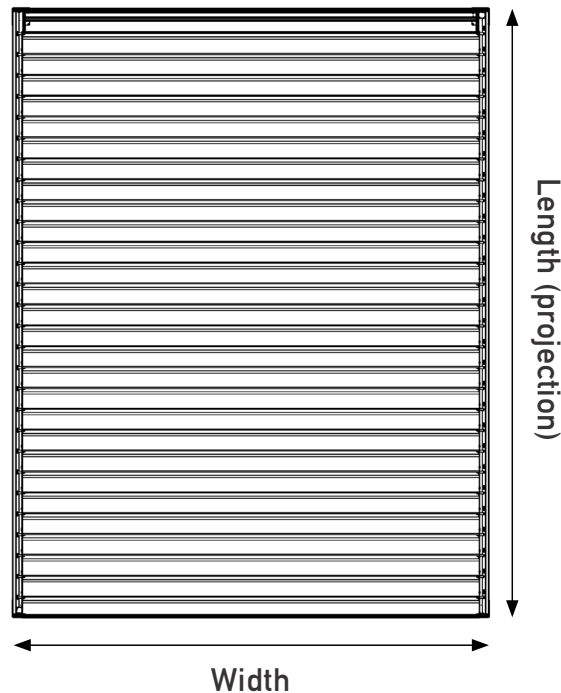
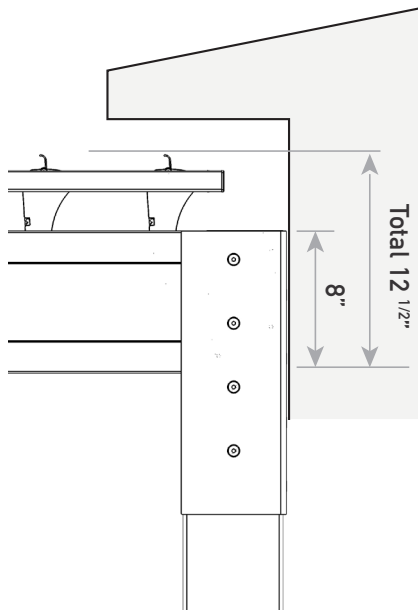
## PREPARATION OF THE INSTALLATION SURFACE



Determine the installation location of the pergola by referring to the dimensions on your order form.

Determine the installation location of the front and back of your pergola.

Make sure that the installation location is free from interference and that the clearance height allows for the installation of the pergola and the opening of the blades.



NO. OF BLADES	LENGTH (overall)
6	49 <sup>1</sup> / <sub>4</sub>
7	56 <sup>1</sup> / <sub>8</sub>
8	63 <sup>1</sup> / <sub>16</sub>
9	69 <sup>15</sup> / <sub>16</sub>
10	76 <sup>13</sup> / <sub>16</sub>
11	83 <sup>11</sup> / <sub>16</sub>
12	90 <sup>9</sup> / <sub>16</sub>
13	97 <sup>1</sup> / <sub>2</sub>
14	104 <sup>3</sup> / <sub>8</sub>
15	111 <sup>1</sup> / <sub>4</sub>
16	118 <sup>1</sup> / <sub>8</sub>
17	125 <sup>1</sup> / <sub>16</sub>
18	131 <sup>15</sup> / <sub>16</sub>
19	138 <sup>13</sup> / <sub>16</sub>
20	145 <sup>11</sup> / <sub>16</sub>
21	152 <sup>5</sup> / <sub>8</sub>
22	159 <sup>1</sup> / <sub>2</sub>
23	166 <sup>3</sup> / <sub>8</sub>
24	173 <sup>1</sup> / <sub>4</sub>
25	180 <sup>3</sup> / <sub>16</sub>
26	187 <sup>1</sup> / <sub>16</sub>
27	193 <sup>15</sup> / <sub>16</sub>
28	200 <sup>13</sup> / <sub>16</sub>

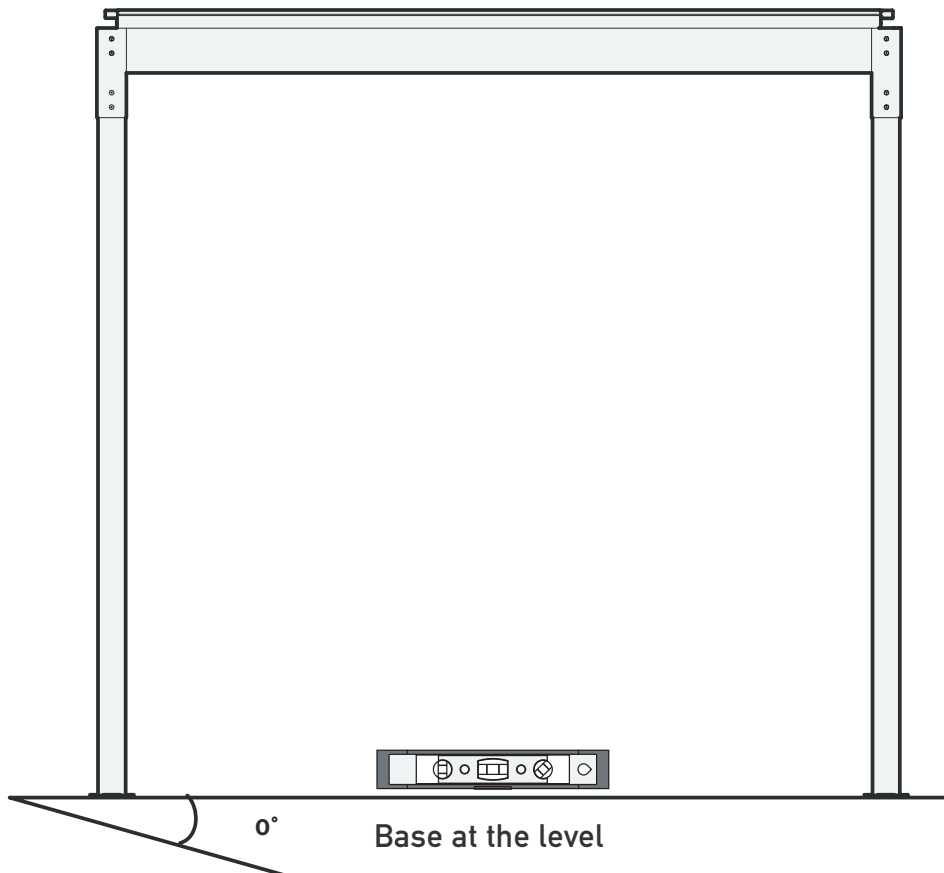
## VERIFYING YOUR PERGOLA'S ANCHOR POINTS



The four posts of the pergola must be securely anchored to prevent the pergola from falling over. We recommend the following footings for the posts:

- On a concrete slab at least 4" thick covering the entire space covered by the pergola;
- On four reinforced concrete bases (one for each post) with a minimum dimension of 26" x 26" x 26" (500 kg);
- On sonotubes (one for each post) of 16" diameter x 48" deep, depending of the frost levels in your area.

These are recommendations only, please check with frost levels in your area.



Anchor bolts recommended at least two per foot plate of 3/8 diameter x 4" long with a pull-out resistance of 500 kg - 1100 lbs each.

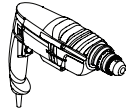
If the basis are not made, make sure using a laser level that the anchor points of the posts will all be level with each other, thus all at level zero.

If the preparation is already done and the anchor points are not all at level zero, shim the anchor points so that they are all at level zero and all level with each other.

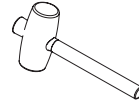
## TOOLS REQUIRED



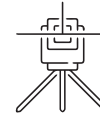
Wrench No.13  
No.: 2



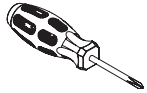
Drill



Rubber Mallet



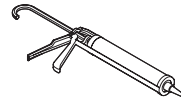
Laser level



Phillips  
Screwdriver



Concrete drill bit  
(minimum 3/8")



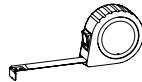
Caulking gun with  
clear silicone



Stepladders (x2)



Allen Keys  
No.5, No.6



Measuring Tape



Pencil



Do Not Use Impact Drill Tools.

## ACCESSORIES REQUIRED FOR PISTON WIRING

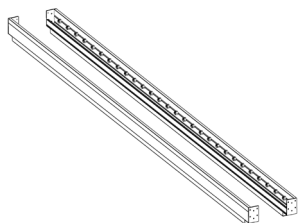
1X cable extension 14/2 NMWU - 15 amps. Suggested length: 20 feet

1X 2 way IP68 waterproof connector

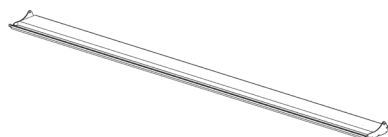
## IN THE BOX



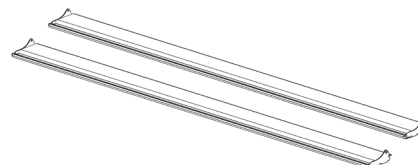
**BEFORE BEGINNING THE INSTALLATION**, check the content of the packages received.  
If any element is missing, contact our technical department as soon as possible  
(do not assemble the structure if any element is defective).



**BLADE SUPPORT RAFTER**  
No.: 1 right + 1 left



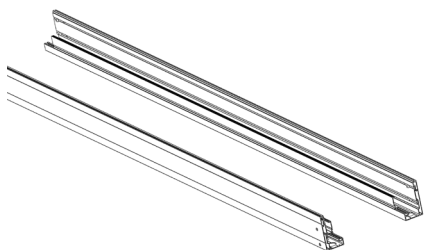
**BLADES**  
No.: Varies according to length



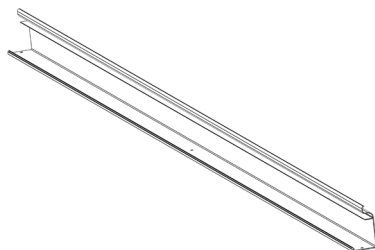
**PISTON BLADE AND INTERMEDIATE BLADE**  
No.: 1 of each



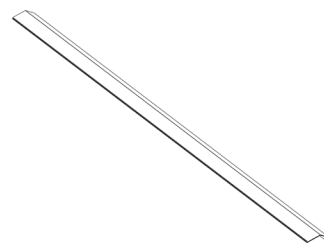
**MANEUVERING PROFILE**  
No.: 1 right profile + 1 left profile  
on the piston side



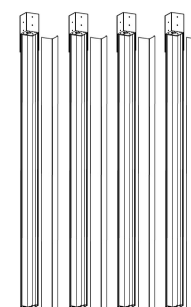
**FRONT AND BACK PROFILES**  
No.: 2



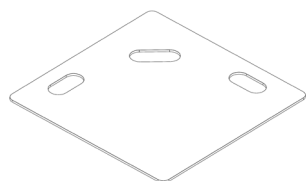
**TRAY PROFILE**  
No.: 1



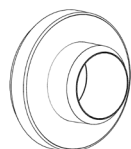
**TRAY COVER**  
No.: 1






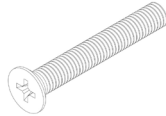

**POSTS AND COVERS**  
No.: 4



**ADJUSTMENT SHIMS**  
No.: 12 total  
(4X 3 different thicknesses)



**BLADE CLIPS**  
No.: Varies according to length

HARDWARE					
	ROUND HEAD SCREW M8X20MM	FLAT HEAD SCREW M8X20MM	ROUND HEAD SCREW M8X12	FLAT HEAD SCREW M5X35	SELF-TAPPING SCREW 10-16 X 3/4"
	No.: 12 + 2 per blade	No.: 16 • Step 4D	No.: 4 • Step 2B	No.: 4 • Step 7B	No.: 4 • Steps 8B, 13B
	• Steps 2B, 11E, 12B				

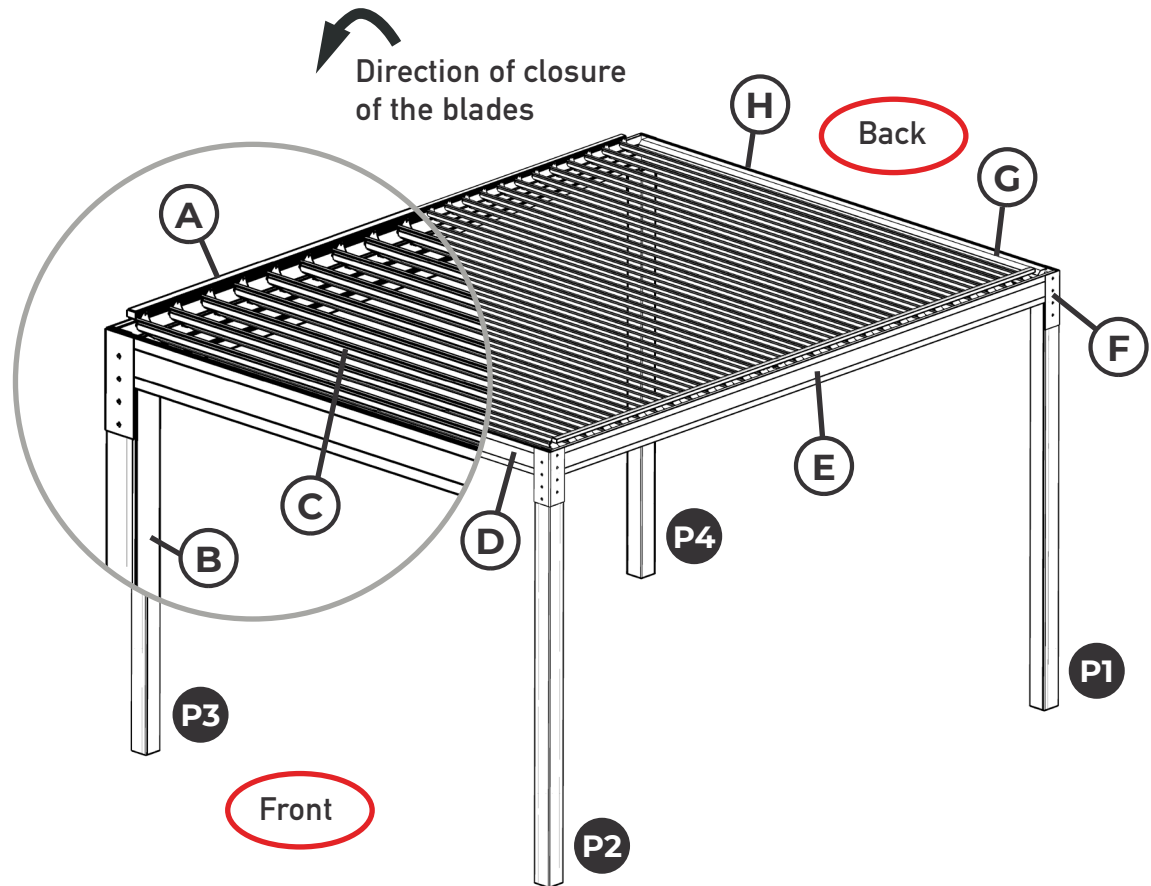
## TIPS AND TRICKS

# 3 RULES

- WORK IN A TEAM OF AT LEAST FOUR PEOPLE TO INSTALL YOUR PERGOLA.
- TAKE THE TIME TO PLAN YOUR INSTALLATION, COUNT ABOUT ONE DAY.
- MAKE SURE THE PERGOLA IS FREE AND CLEAR OF OBSTRUCTIONS ONCE THE BLADES ARE OPEN.

## COMPONENTS

- A. Maneuvering profile
- B. Post
- C. Blade
- D. Front profile
- E. Blade support rafter
- F. Reinforcement panel
- G. Tray and cover profiles
- H. Rear profile





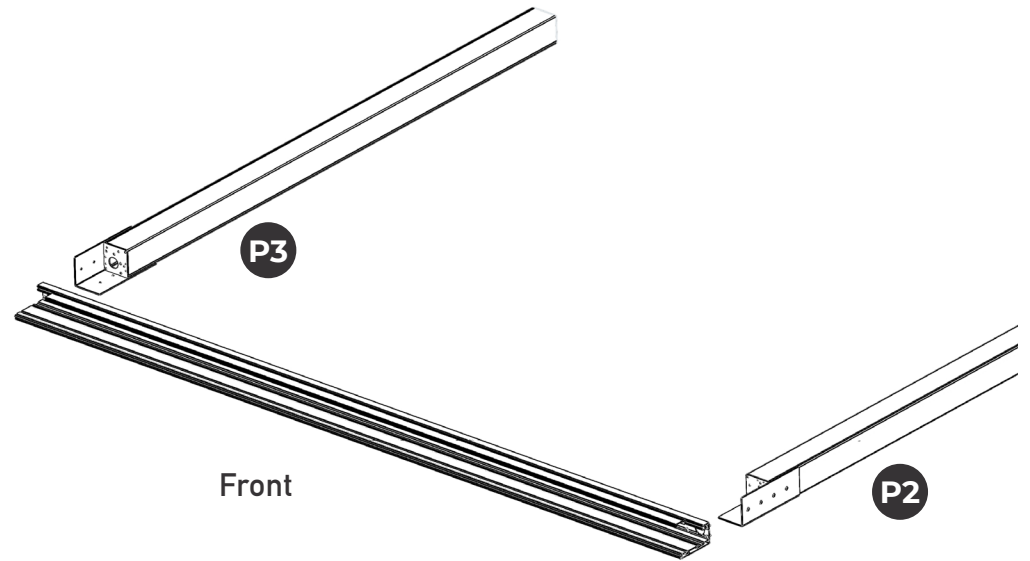
# INSTALLATION

## 1

### BUILDING THE FRONT AND BACK ARCHES

#### A

Place the two front posts and the front profile on the cardboard protection on the ground. Make sure that the inserts on the posts are facing the outside of the pergola.



# 2

## FRONT ARCH ASSEMBLY (EXAMPLE WITH RIGHT POST)

### A

Apply silicone around the P3 post hole and in the corners.

### B

Attach the post to the gutter profile.

Make sure that the posts are properly attached to the cassette with the 3 M8X20MM screws (round head) and 1 M8X12MM screw aligned with the holes of the panel.

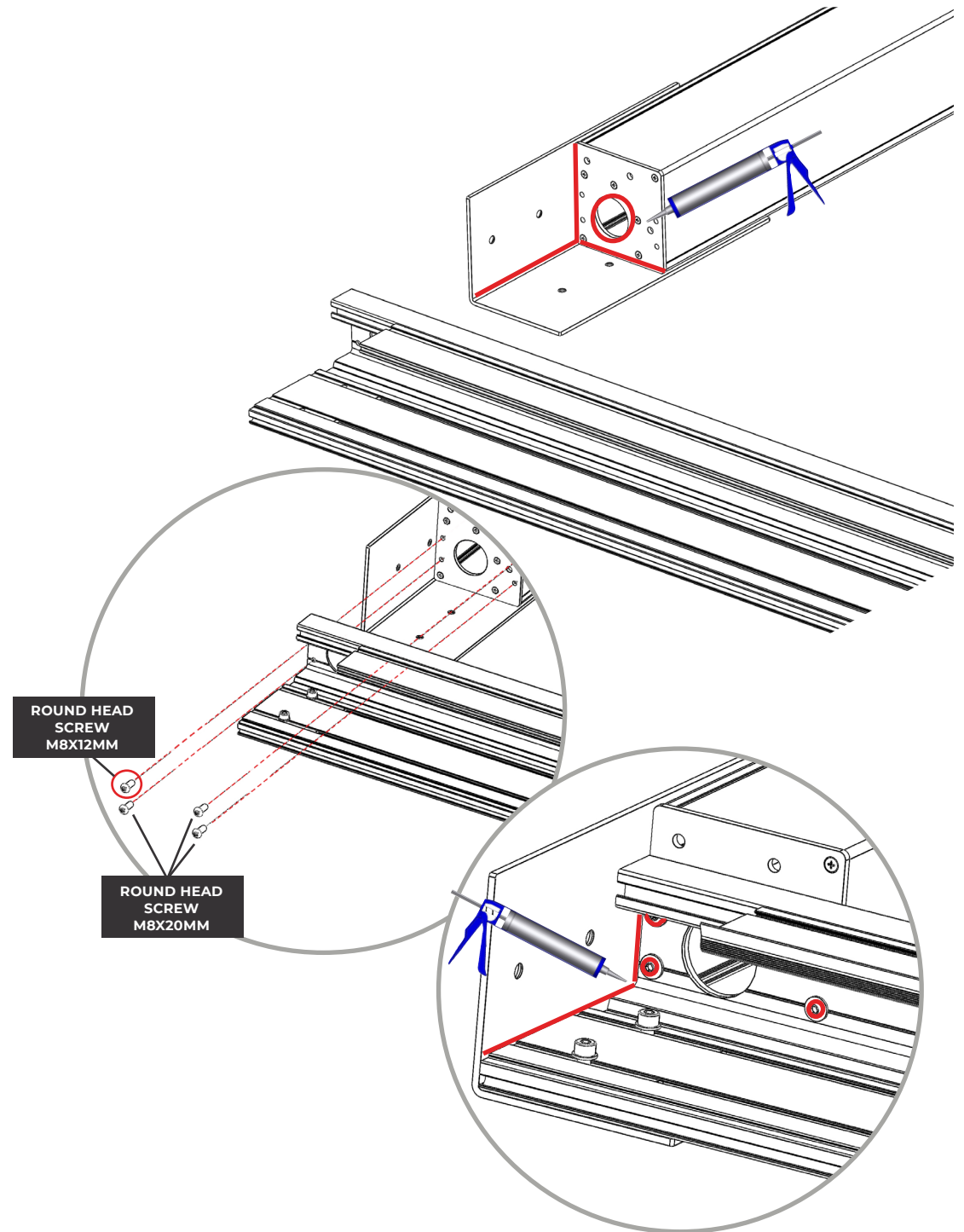
### C

Apply silicone on the head of the 4 screws and at the junction of the profile and the end cap.

Repeat steps 2A, 2B and 2C with post P2.

### D

Repeat steps 2A, 2B and 2C with the back arch and posts P1 and P4.

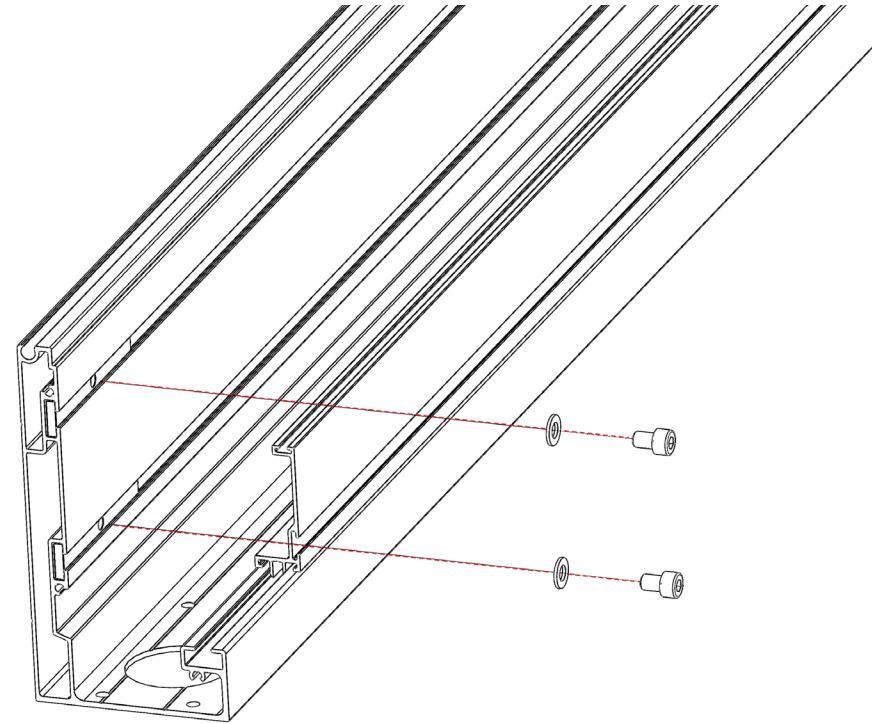


# 3

## PREPARATION OF THE BLADES SUPPORT RAFTERS

### A

Remove the screw from the front and back arches.

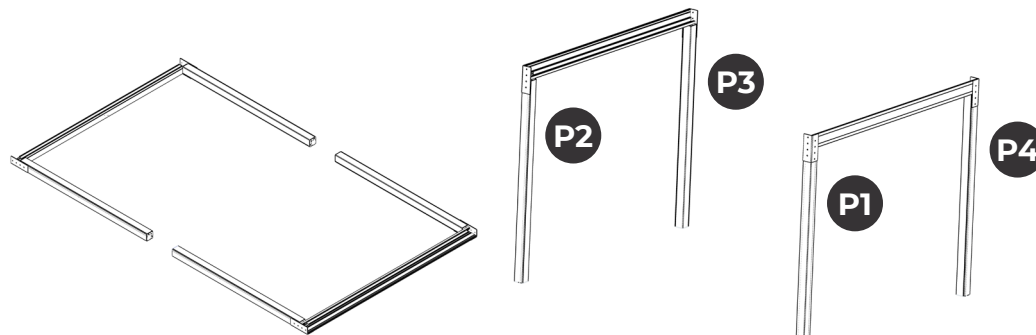


# 4

## FRAME ASSEMBLY

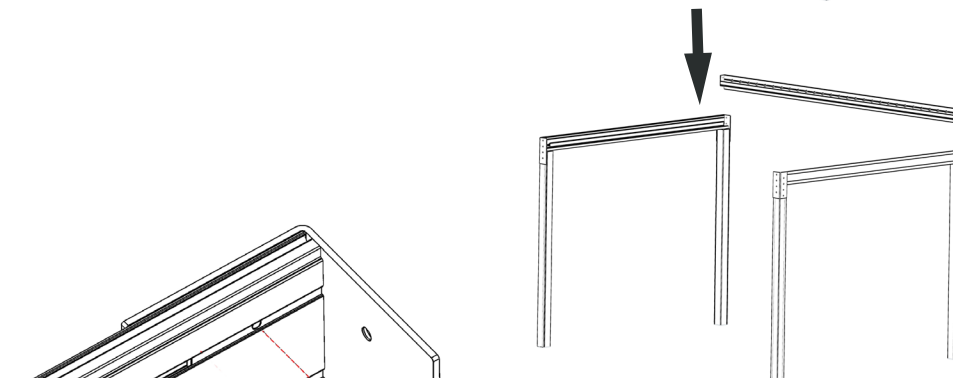
### A

Lift the front and rear arches to the vertical position.



### B

Place the rafter on the arch, following the colour identification of each corner.

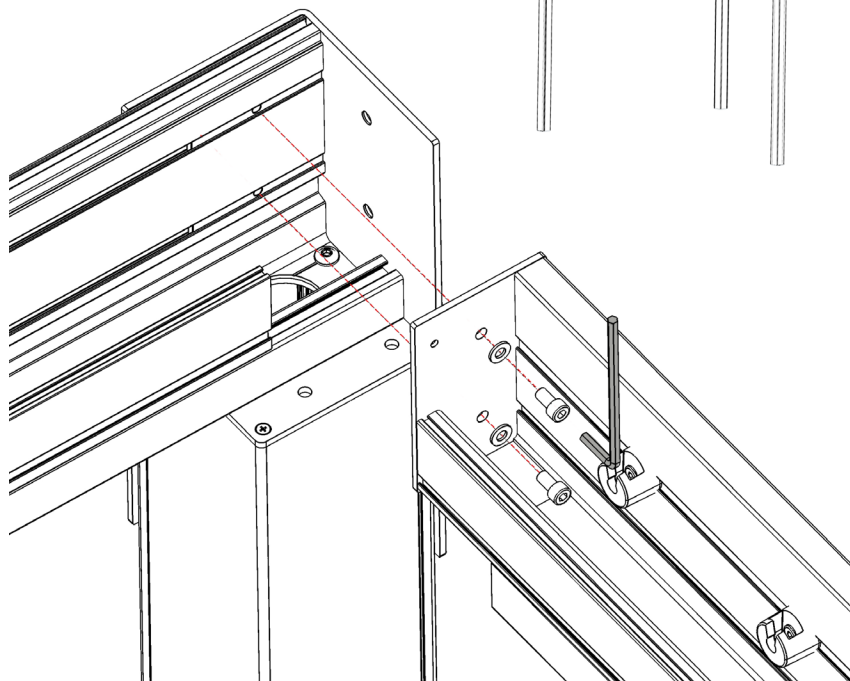


### C

Secure the screws previously removed in step 3A, for all four corners.



Make sure that the frames are properly fastened. Risk of falling.



# 4

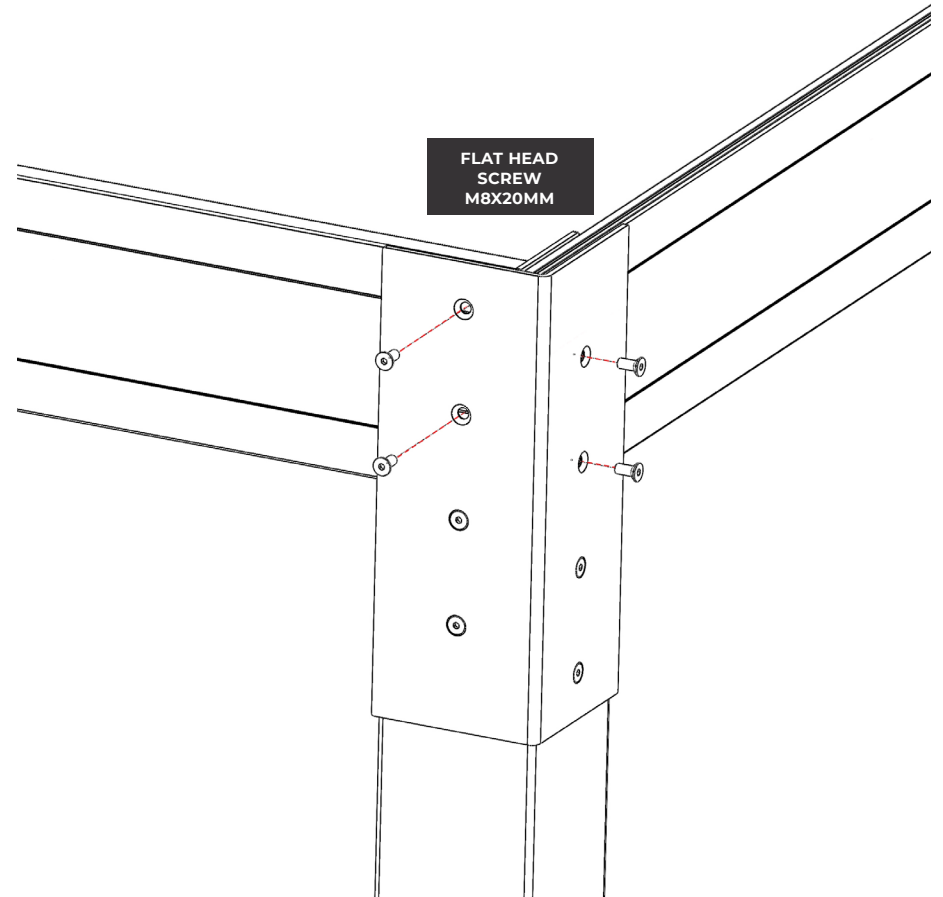
## FRAME ASSEMBLY ... CONTINUED

### D

Tighten the end cap with the 4 M8X20MM screws on each corner of the pergola.



Only if necessary, slightly loosen the 4 bottom screws to help align the holes and inserts.

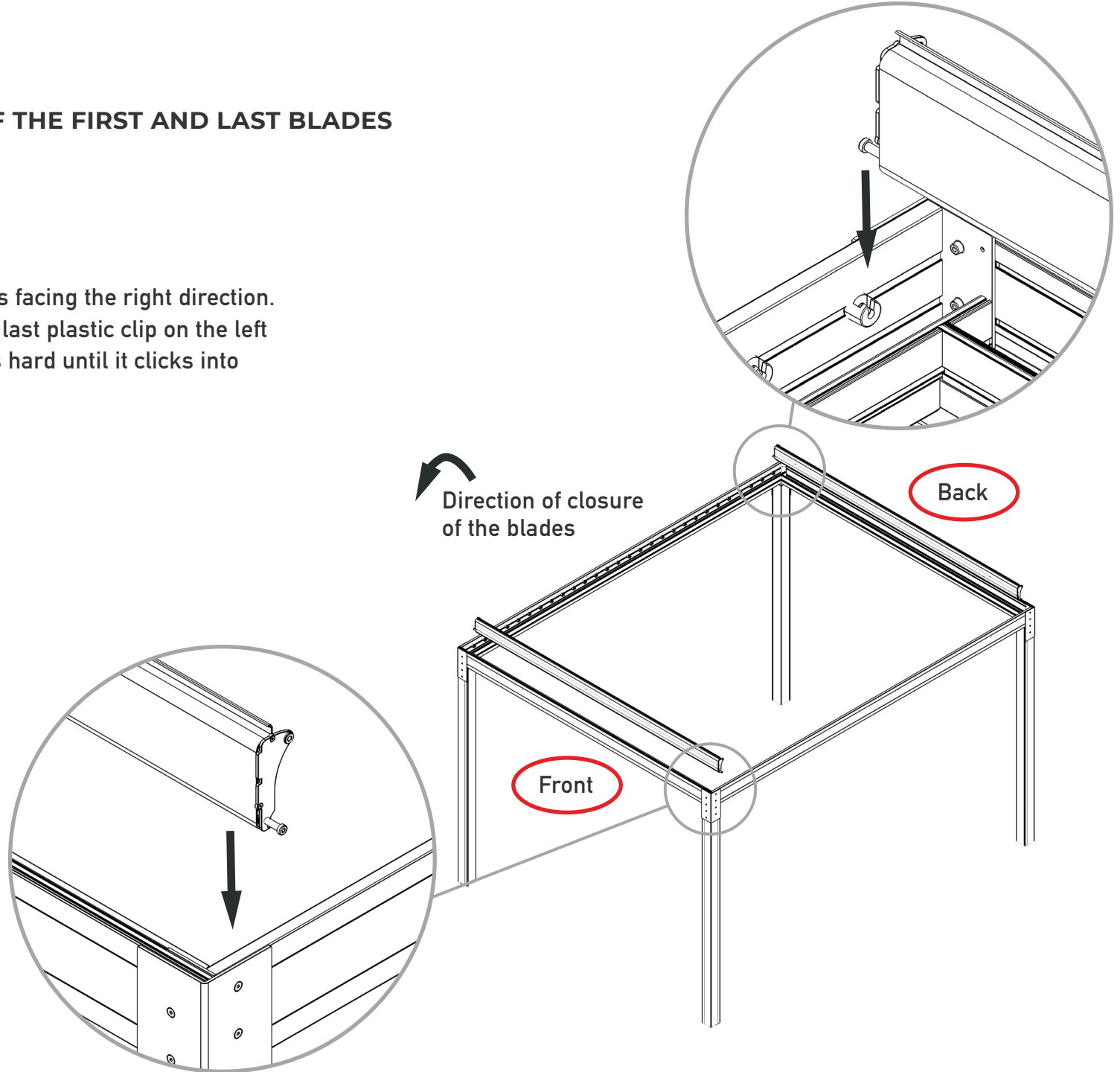


# 5

## INSTALLATION OF THE FIRST AND LAST BLADES

### A

Make sure the blade is facing the right direction. Insert the pin into the last plastic clip on the left and right rafter. Press hard until it clicks into place.



# 6

## CHECKING FOR SQUARENESS



This step is very important.

### A

Before continuing with the assembly of your pergola, make sure that the widths A are equal, as well as the lengths B and diagonals C.

A maximum tolerance of  $\frac{1}{4}$ " is allowed between the C diagonals for the proper functioning of the pergola.

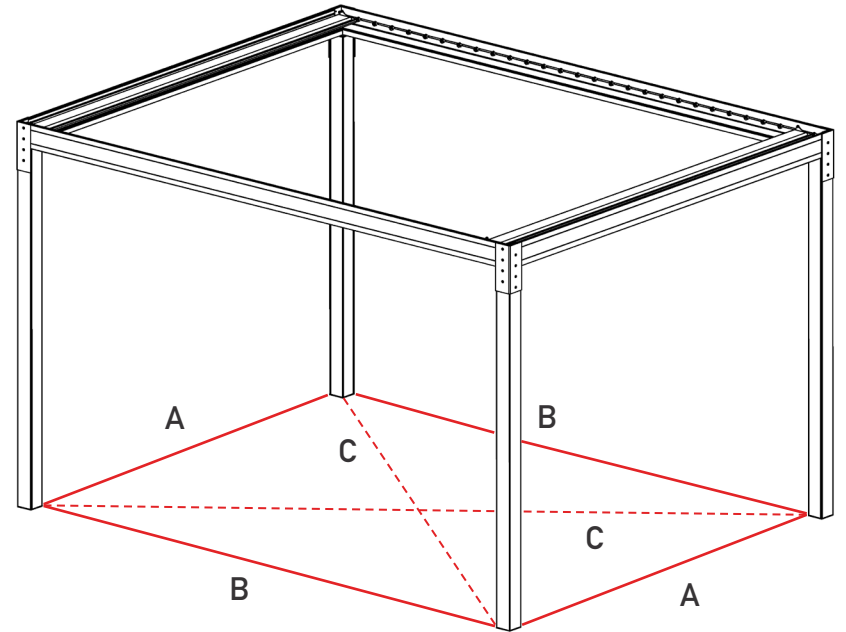
If the diagonals are not equal:

- Move posts P2 and P3 or P1 and P4.

If you have difficulty moving the posts:

- 1 Slightly loosen the rafter screws.
- 2 Tighten the rafter screws from step 4D.
- 3 Check the squareness again.

When squareness is achieved, check and tighten all screws.

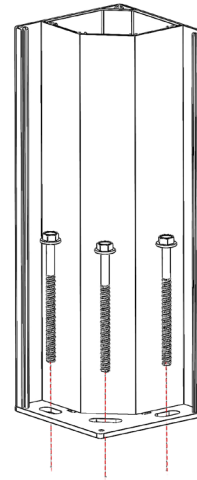


# 7

## FASTENING TO THE GROUND

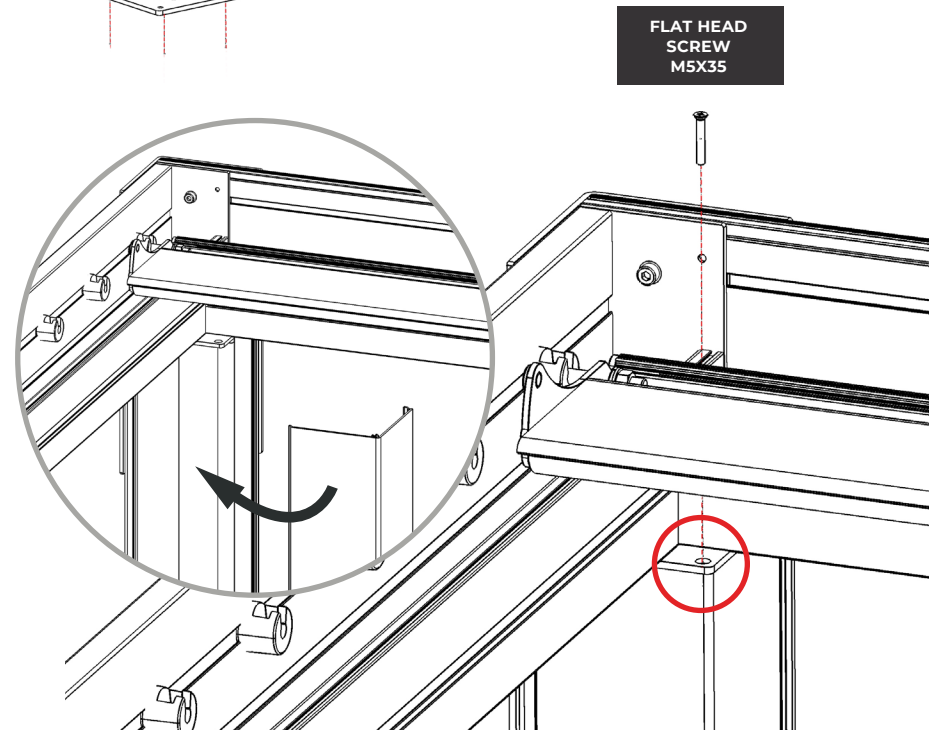
### A

Attach the appropriate anchors according to the type of basis.



### B

Close the post by clicking the profile and put the screw in the mounting hole.





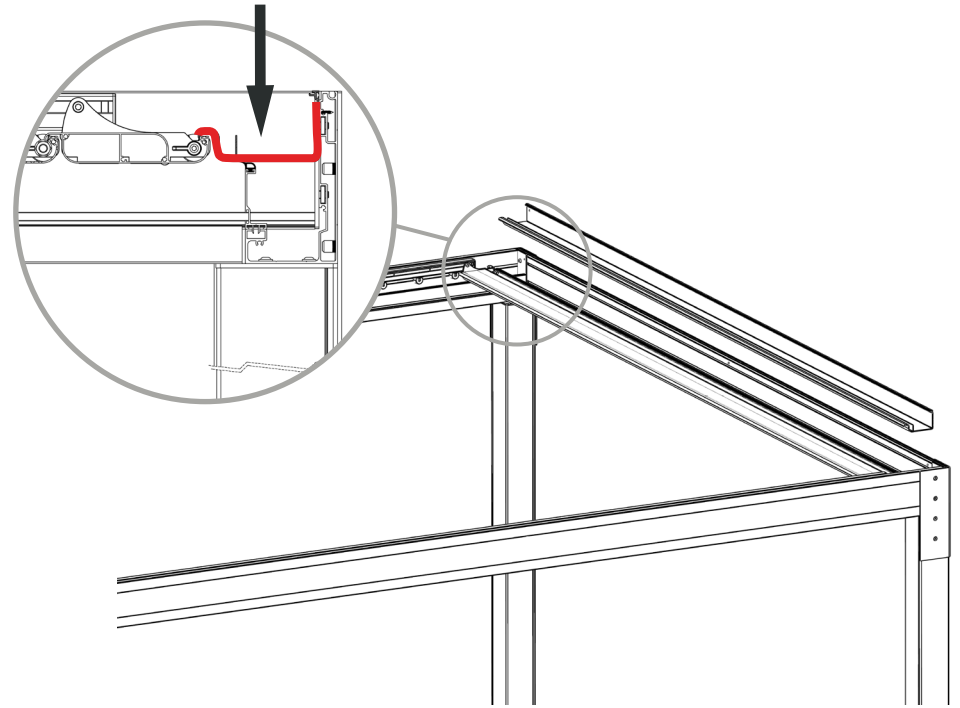
# 8

## INSTALLATION OF THE TRAY AND COVER PROFILE

### A

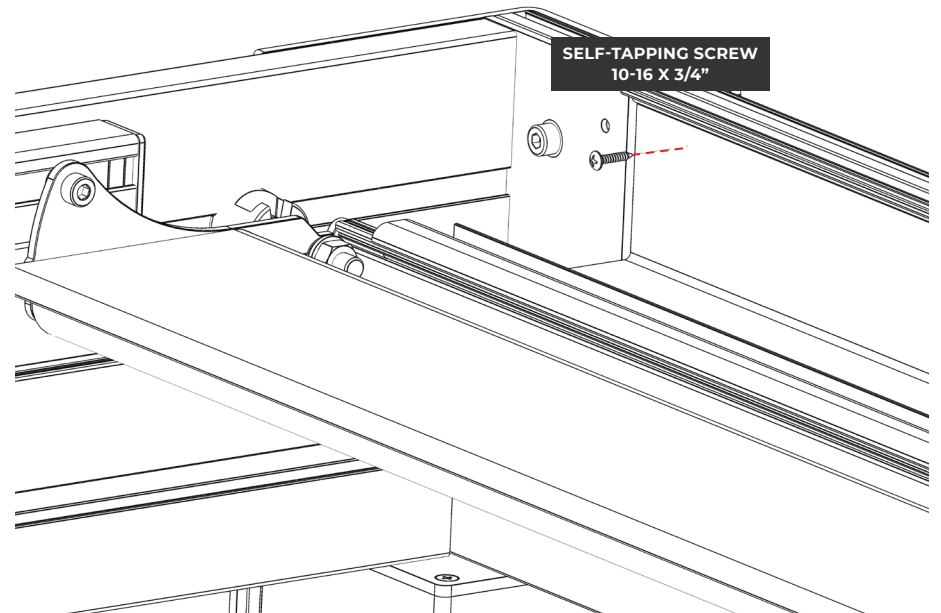
Remove the two screws on the back gutter and save for step 8B.

Position the cover profile. When it is in the right position, it covers the last blade, and the blade can open and close without obstruction.



### B

After positioning the tray profile, secure with the screws at both ends.



# 9

## INSTALLATION OF THE INTERMEDIATE BLADE

**A**

Remove the hardware on the intermediate blade.

**B**

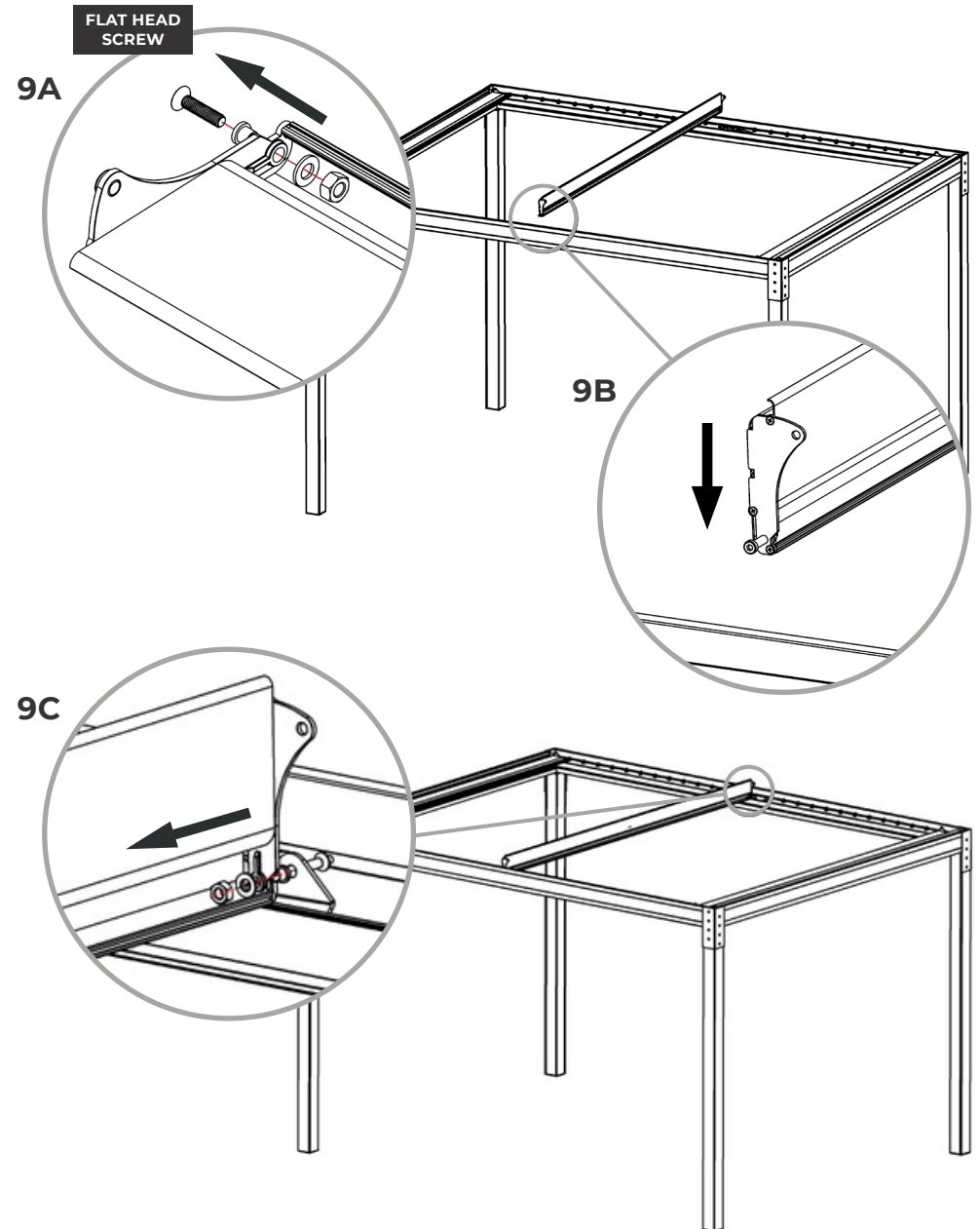
Click the intermediate blade at the point indicated by the coloured dot on the side opposite of the piston.

**C**

Attach the other end to the blade holder at the location indicated by the coloured dot with the hardware removed beforehand.

**D**

Return the blade to the closed position.



# 10

## INSTALLATION OF THE PISTON BLADE

**A**

Remove the nut and bolt on the piston blade, keep the parts for attachment in step 10C.

**B**

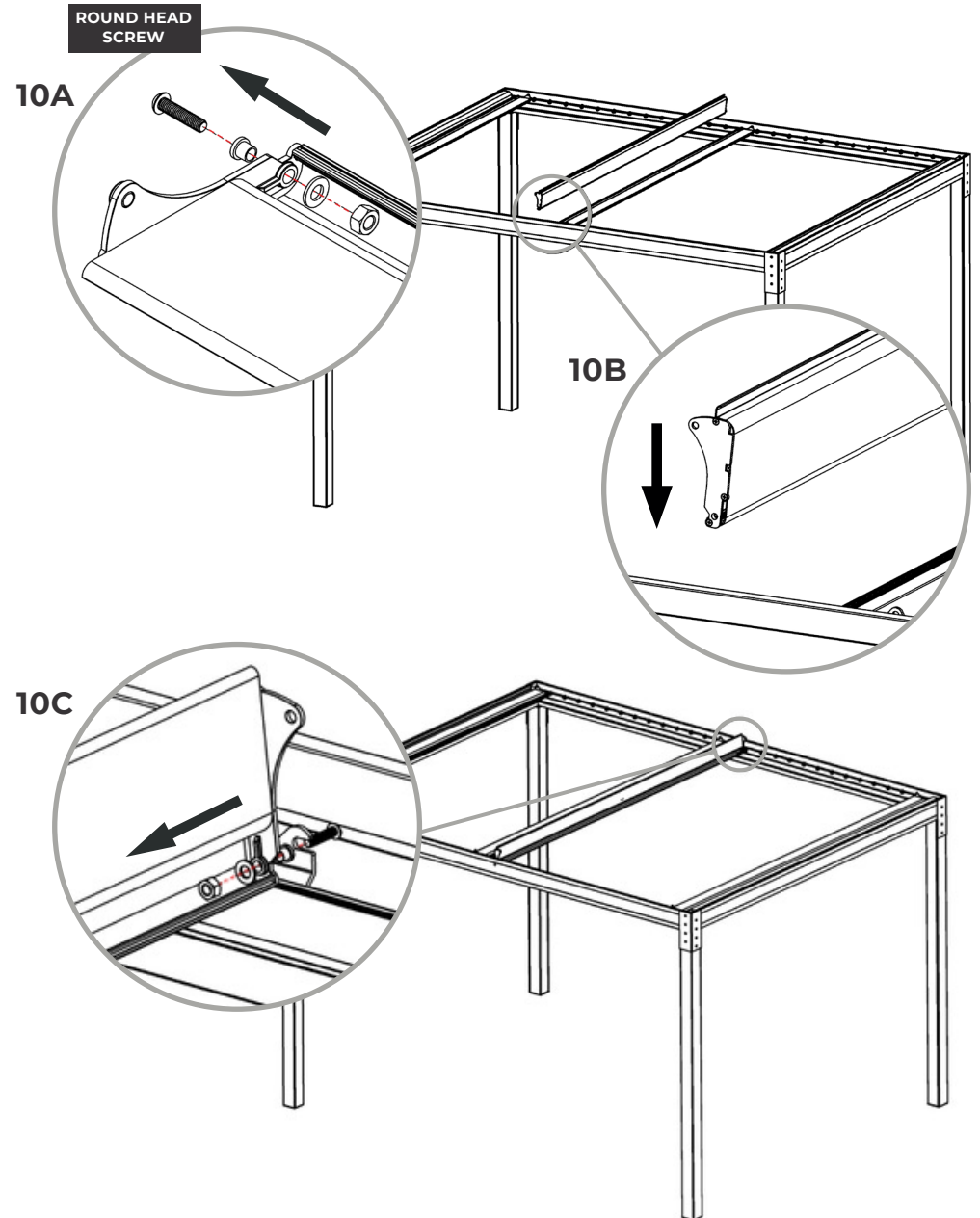
Click the blade on the opposite side of the piston.

**C**

Using the hardware from step A, attach the blade to the blade holder on the piston side.

**D**

Return the blade to the closed position.

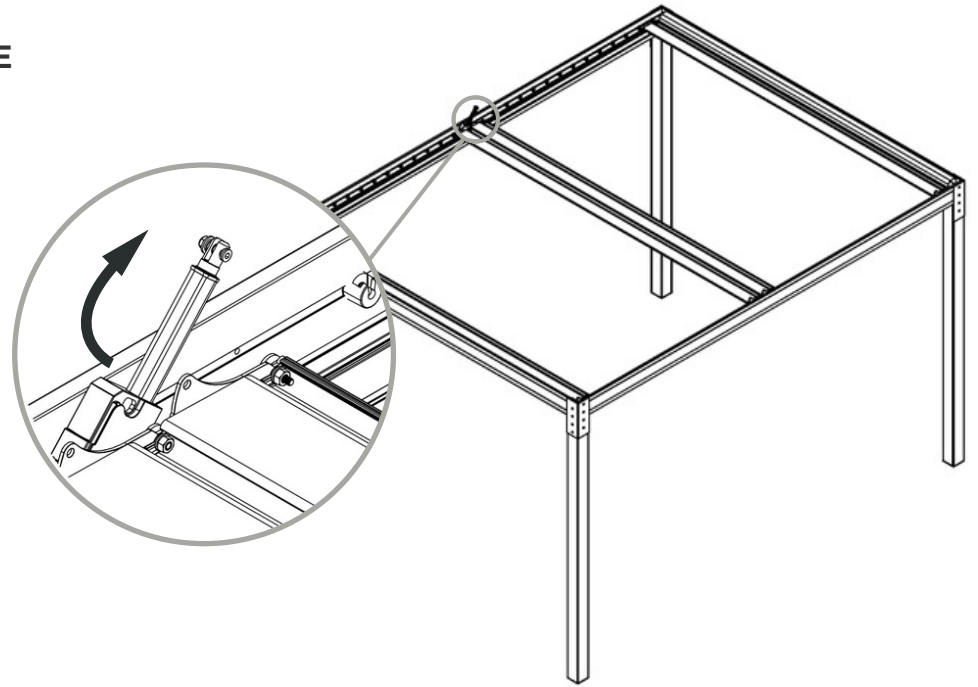


# 11

## INSTALLATION OF THE MANEUVERING PROFILE ON THE PISTON SIDE

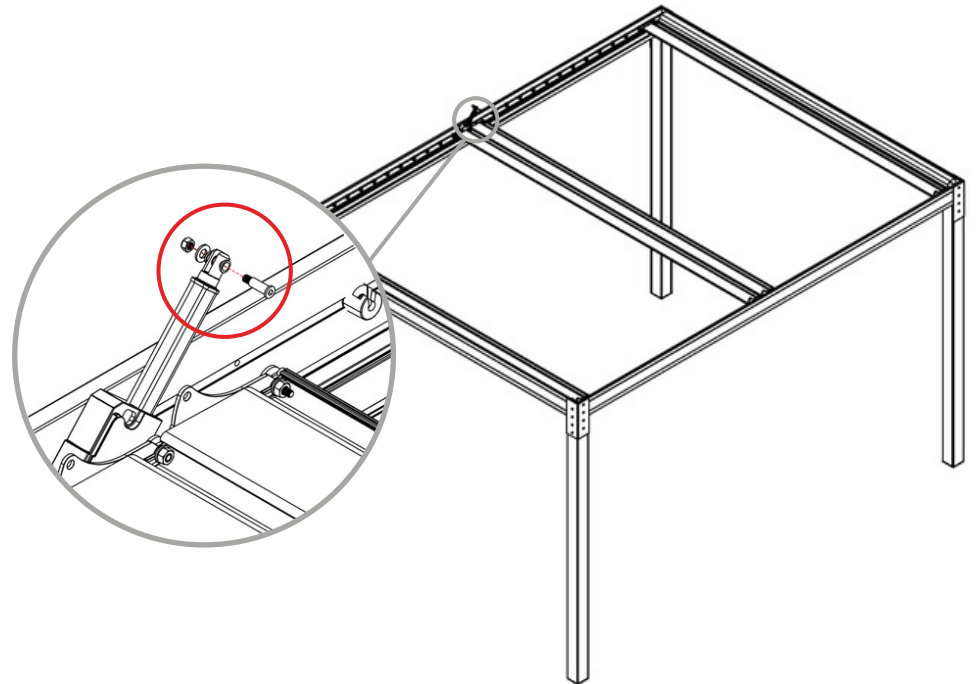
### A

Manually lift the piston to provide clearance for access to the hardware.



### B

Prepare the piston by removing the nut and bolt on the piston end.

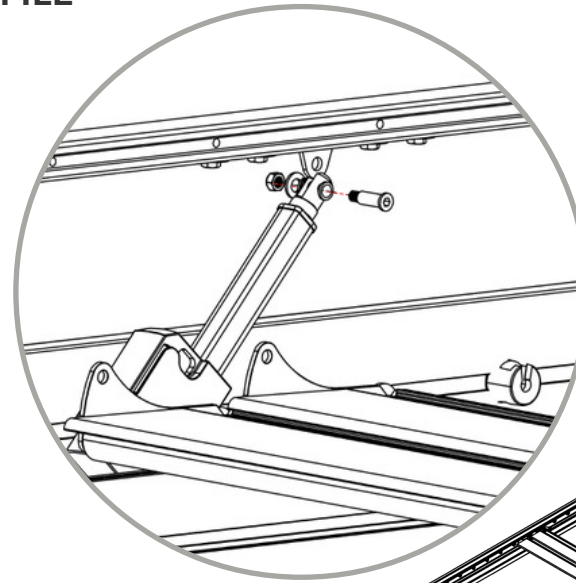


# 11

## INSTALLATION OF THE MANEUVERING PROFILE ON THE PISTON SIDE ... CONTINUED

**C**

Attach the maneuvering profile to the piston with the hardware removed in step 11B on the maneuvering profile hook. Make sure that the holes in the maneuvering profile are towards the blades and that the front and rear identification on the maneuvering profile matches the rear and front of the pergola.



**D**

Manually bring the piston and the maneuvering profile down to the initial position of the piston, the blades will be in the closed position.

**E**

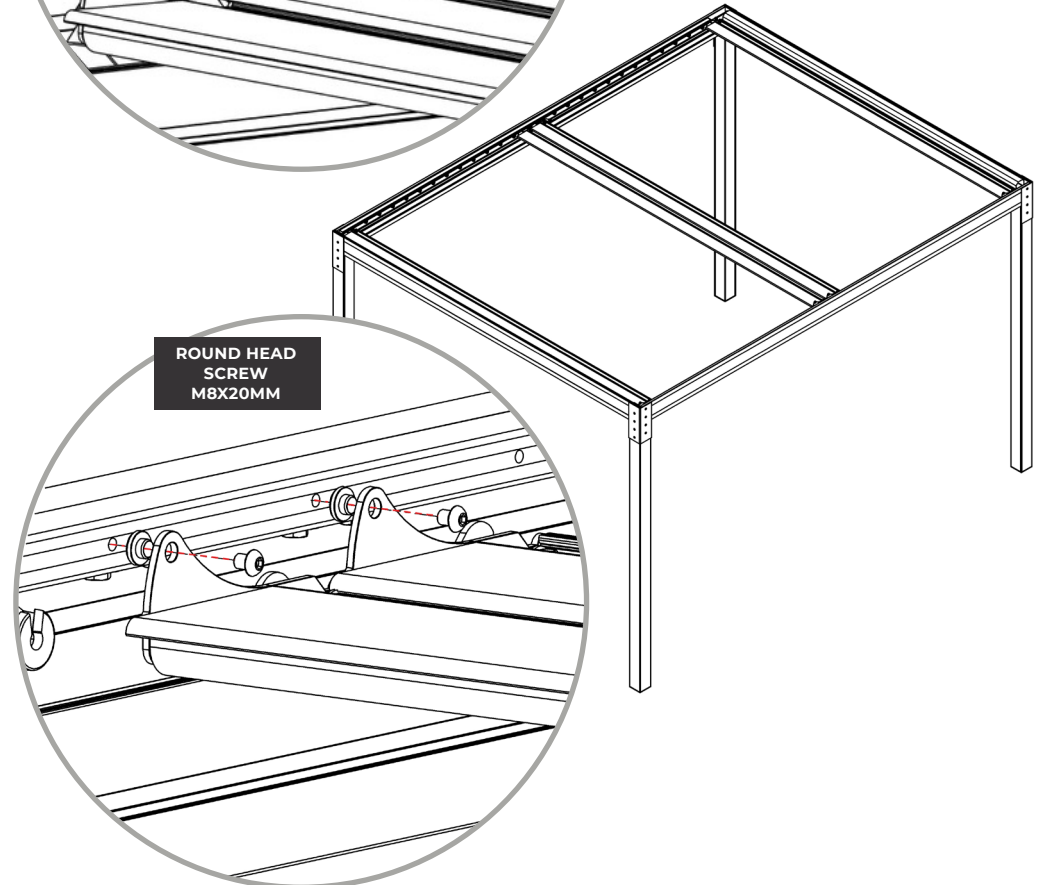
Fix the four blades to the maneuvering profile with the M8X20MM screws (round head).



Do not overtighten screws.

**F**

Supply power to the control unit in order to operate the piston. Bring the pergola to the open position, i.e. the blades at 90 degrees from the closed position.

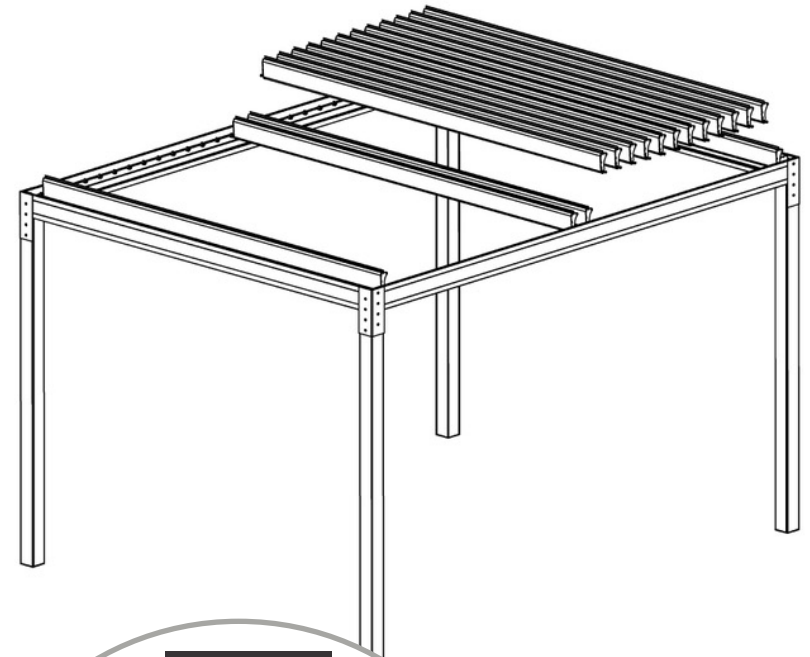


# 12

## INSTALLATION OF ALL OTHER BLADES

### A

Install all remaining blades in a vertical position. Insert the pivots on each end into the plastic clips on the blade support rafters. Press hard until it clicks into place.



### B

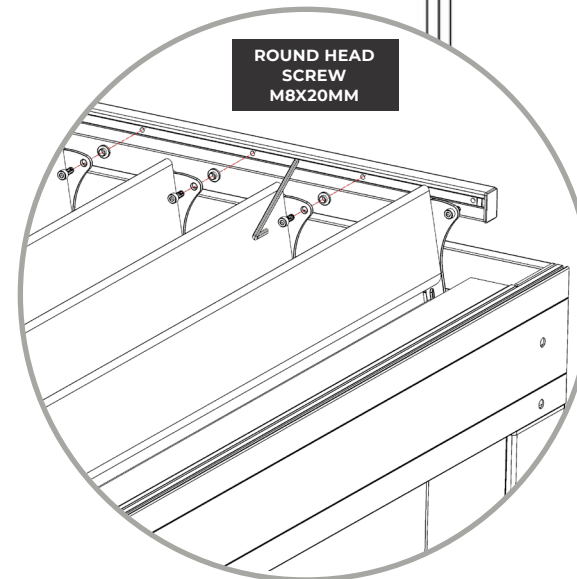
Fix the blades to the maneuvering profile with the M8X20MM screws (round head) and the plastic washers.



Do not overtighten screws and do not use impact tools.

### C

Repeat the step 12B with the second maneuvering profile on the other side.

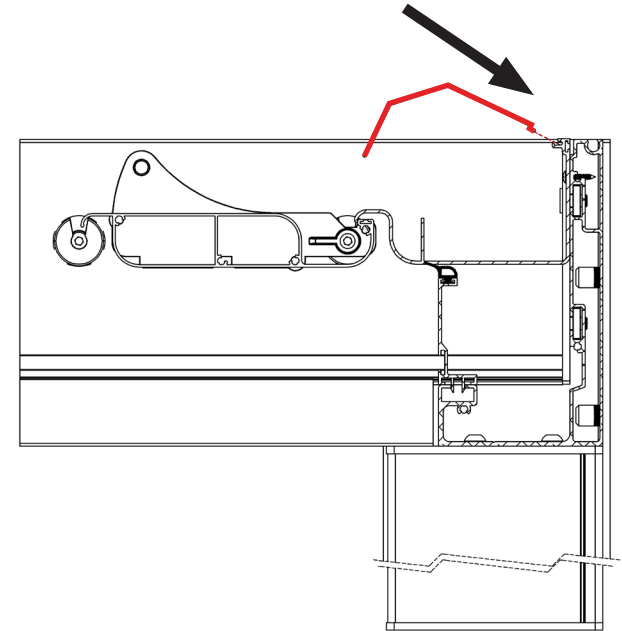


# 13

## INSTALLATION OF THE TRAY COVER

### A

Insert the cover in the groove of the tray profile.

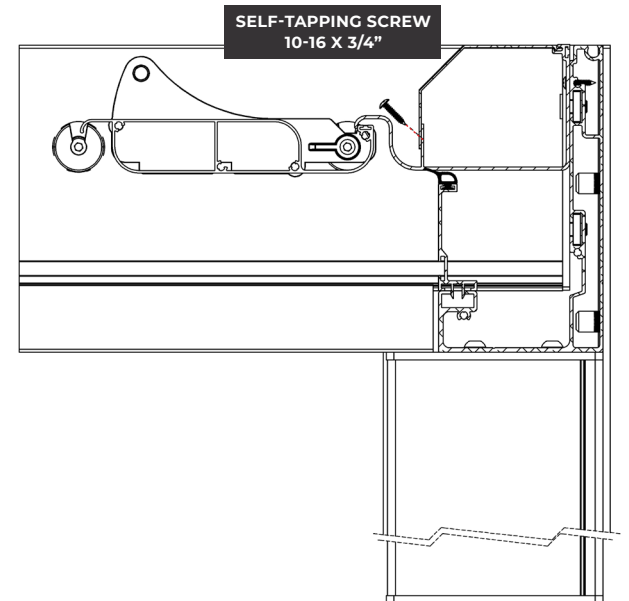


### B

Secure the cover and the tray profile together with two 10-16 X 3/4" self-tapping screws at each end.



Check and tighten all fasteners, and do this periodically.



## ELECTRICAL REQUIREMENTS

The wire lengths are suggested, taking into account that the feed is made from the bottom of a post.

- Pergola motor 2.3 amps / unit = 1 wire 14/2 NMWU - 15 amps. No wire supplied; we suggest 20' long.
- LED light 1.7 amps per unit = 1 wire 14/2 NMWU - 15 amps. No wire supplied; we suggest 20' long.
- The pergola circuit and the LEDs can be grouped on the same circuit.
- The circuit must be powered without a switch on the circuit.

**NOTE:** The electrician will determine how many systems will be connected to the same circuit.

The wire lengths listed are from the bottom post of the pergola. The customer must make sure to have an adequate length to allow the connection to an electrical source (electrical panel / junction box).

The electrician is responsible for making the final connections following your installation including waterproof boxes and fittings.

TERRA SUMMER does not supply wires or junction boxes and is not responsible for the cost of electrical connections or the sealing of the electrical system. All connections must be made by a licensed electrician.



## FAQS

- 1 - Poor water drainage. Water stagnating in the blades support rafters:
  - Check that the structure is not leveled. Remove all the blades from the structure and level the structure.
- 2 - Water running down the posts:
  - Poor waterproofing at the level of the finishing caps of the front gutters.  
Check or make a seal between the finishing caps of the front gutters.
- 3 - Water leakage at the level of the blades:
  - Bad closing of the blades. Redo the preparation of the piston and the configuration of the working time.  
Closed blades, loosen the maneuvering profile hook, put the piston in position zero (closed), tighten the BS04204 and redo the configuration of the working time.
- 4 - The blades do not open:
  - Make sure the piston are powered up.
  - Check the electrical connections. Be careful to turn off the power in case of handling.
  - Redo the programming of the working time.
  - Check the squareness of the structure.
  - Check the assembly of the maneuvering profiles.
- 5 - The piston screw is blocked by the frame:
  - Check the assembly of the maneuvering profiles.
- 6 - During the assembly of the frame, the arches are not leveled:
  - Perpendicularity problem. Shim or cut posts to be leveled.
- 7 - A gap appears between the tray profile and the first blade:
  - This is a normal phenomenon due to the bending of the first blade. This phenomenon does not cause any leakage.
- 8 - Condensation under the blades:
  - Phenomenon due to a significant change in outside temperature. This natural phenomenon does not affect the quality of the bioclimatic pergola.

## MAINTENANCE TIPS FOR THE LOUVERED PERGOLA

A louvered pergola is subject to many constraints: humidity, salt air, weight constraints, wind, etc.

We therefore recommend:

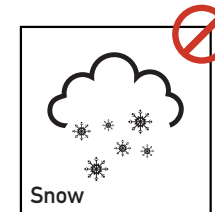
- Check the tightness of the screws after installation, then regularly: at the beginning and end of the season.
- Clean the frame at the beginning and end of the season. Be careful not to use any detergent.
- Do not hang anything on the product's frame. It could fall and cause property damage and/or personal injury.
- Make sure that the blades are clean before opening and closing them.
- Make sure that no foreign object can damage the structure when opening or closing the blades.
- Never put your hands or any part of your body between the blades, or between the blades and the frame of the product, when operating the blades.
- Do not install a barbecue under the product and do not light a fire near it.

DO NOT OPEN YOUR  
PERGOLA IN CASE OF:

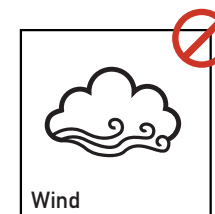


Waterproof product  
in case of rain.

OPEN YOUR PERGOLA  
IN CASE OF:



If it snows while you are away,  
remove as much snow as possible  
before opening the blades.



Open the blades of the pergola  
when it is windy.

# TERRA SUMMER

1-800-515-6652

[info@terrasummer.com](mailto:info@terrasummer.com)

[terrasummer.com](http://terrasummer.com)