PORTUGAL

EN

BRISA SOLAR

USER'S AND INSTALLER'S MANUAL

Motorline® PROFESSIONAL

v2.2
REV. 09/2022

00. CONTENT

INDEX

01. SAFETY INSTRUCTIONS

ATTENTION:

CE	This product is certified in accordance with European Community (EC) safety standards.
RoHS	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
 	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

01. SAFETY INSTRUCTIONS

GENERAL WARNINGS

- This manual contains very important safety and usage information. very important. Read all instructions carefully before beginning the installation/ usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.
- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.

WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The control board must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on the power supply cable. Please note that all the cables must enter the control board from the bottom.
- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16 September 2009.

01. SAFETY INSTRUCTIONS

- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage satefy with control board (only at 24V motors)

WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety conditions have been met.
- In the event of tripping of circuits breakers of fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

RESPONSABILITY

- Supplier disclaims any liability if:
  - Product failure or deformation result from improper installation use or maintenance!
  - Safety norms are not followed in the installation, use and maintenance of the product.
  - Instructions in this manual are not followed.
  - Damaged is caused by unauthorized modifications
  - In these cases, the warranty is voided.

MOTORLINE ELECTROCELOS SA.
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Barcelos, Portugal

SYMBOLS LEGEND:


- Important safety notices


- Potentiometer information


- Useful information

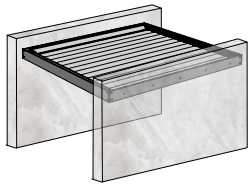

- Connectors information


- Programming information


- Buttons information

BRISA SOLAR

The **BRISA SOLAR** awning is constructed entirely of aluminum, which makes it ideal for covering exterior spaces. Solutions for esplanades, terraces or winter gardens. The electrically controlled blades allow light through them, air renewal from the surrounding space or the full water inlet seal.

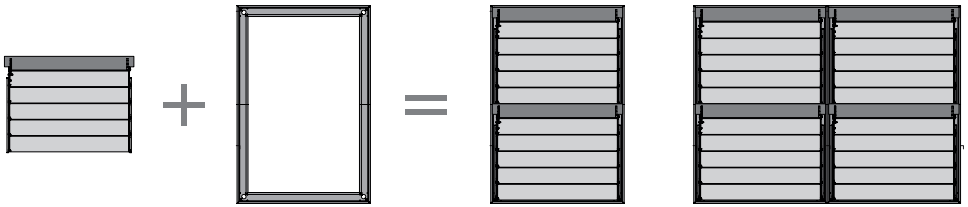


WALL VERSION

2P VERSION

4P VERSION

The **BRISA SOLAR** awning is composed of the following parts:



Module
(Motor + blades)

Frames

BRISA SOLAR awning
(x Modules + Frames)

Several BRISA SOLAR awnings
(2 or more)

TECHNICAL CHARACTERISTICS

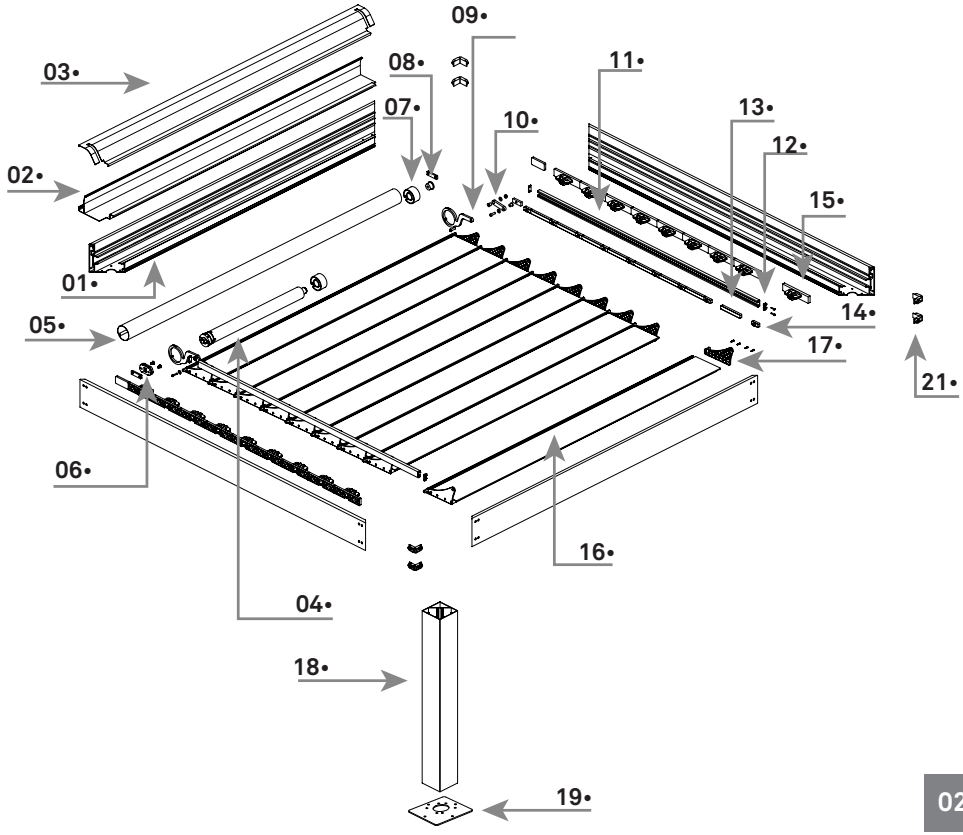
The technical characteristics of the **BRISA SOLAR** are as follows:

	TUB200R2 Motor
• Power supply	AC 230V 50Hz
• Power	350W
• Speed	2RPM
• Force	140Nm
• Lift up	<200Kgs
• Noise	<50dB
• Working Time	4min
• Diameter	ø59mm

TECHNICAL CHARACTERISTICS

On the awning you will find the following components:

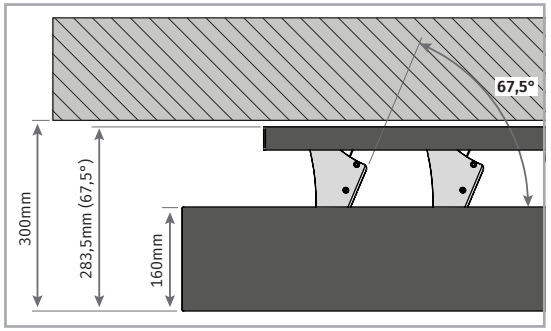
01• Profiles Frame
02• Motor Base
03• Motor Cover
04• TUB200R2 Motor
05• Tube Ø78mm
06• Motor support
07• Tube Adapter Ø78mm
08• Tube Support Ø78mm
09• Motor Arm
10• Union joint
11• Side Guide
12• Side Guide Top
13• Spacer
14• Upper Rotation Axis
15• Blade Holder (Left/Right)
16• Blade
17• Blade Top (Left/Right)
18• Vertical Profile
19• Floor fixing plate
20• LED Lighting
21• Union Profiles
22• MC65 control board
23• FALK remote controls



DIMENSIONS

The BRISA SOLAR is an awning for protection of exterior areas with integral aluminum construction. Its rotating and waterproof blade system allows you to manage the amount of light on an esplanade as well as totally protect it from rain.

- Before installing your Brisa Solar, pay attention to the following dimensions: when opening the blades, its highest point is 283.5mm, but at 90° it will be only 271mm.



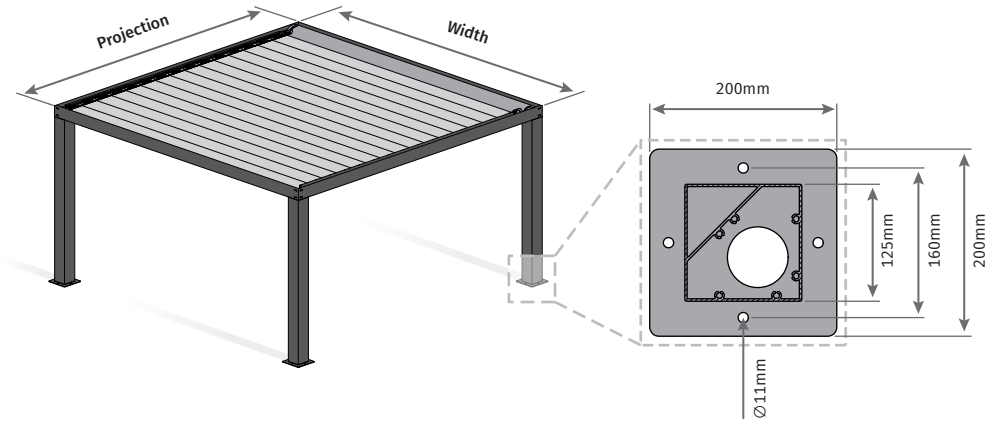
If the awning is applied under some cover, there must be 300mm free for the blades to open without causing damage to the product.

Other dimensions also important:

Width • Dimension parallel to the blades (width of the blades)
> Maximum width: 4m

Projection • Dimension perpendicular to the blades (number of blades)
> Maximum Projection: 5m

NOTE: Width and Projection are measured by the exterior of the frame.



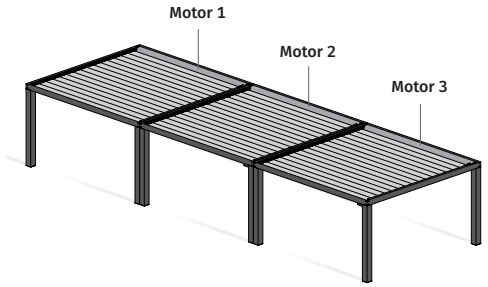
The maximum area for each awning is 16m2, and includes 1 motor and 1 control board for each.

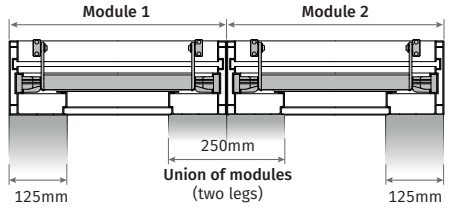
ORIENTATION AND CONSTRUCTION

When the width, projection or area are greater than the maximums defined, you can group several modules in both width and projection to form a larger awning.

2 OR MORE MODULES IN WIDTH:

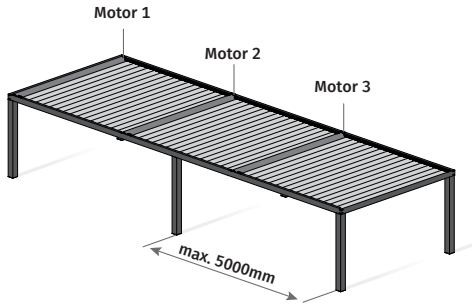
In this type of construction, the various modules are located and fixed to one another through the side profiles of the frame.

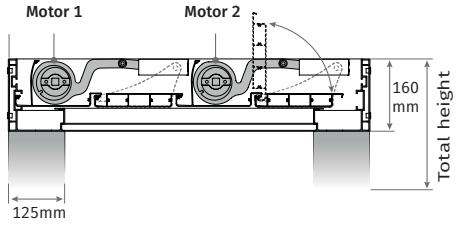




2 OR MORE MODULES IN PROJECTION:

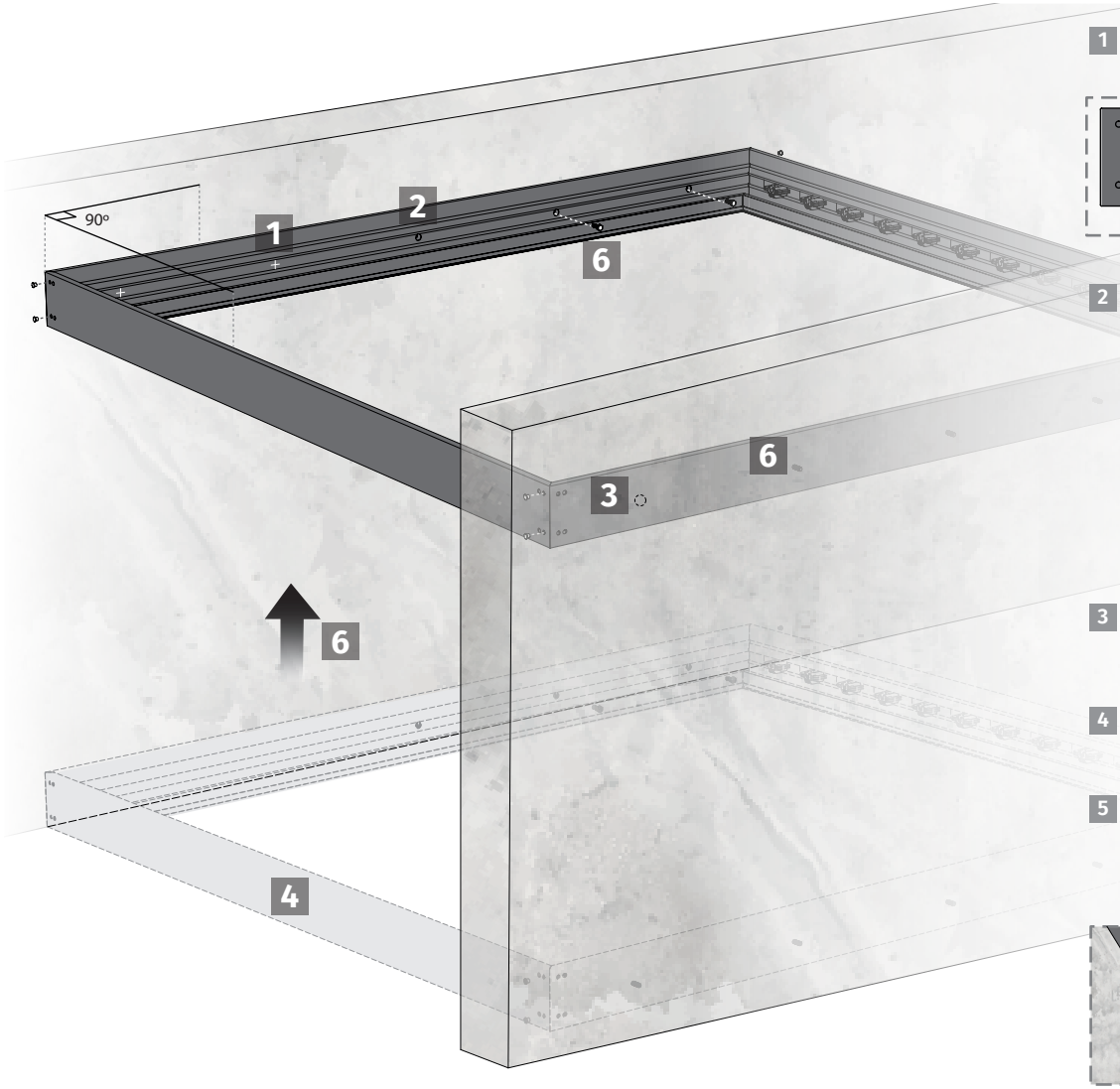
In this type of construction, a single frame is created with the total measurements, but 1 motor and 1 control board are added for each module.
When closed, the union joint between modules is not visible from the inside, since the base of the motor is identical to the blades, giving the idea of a single awning.



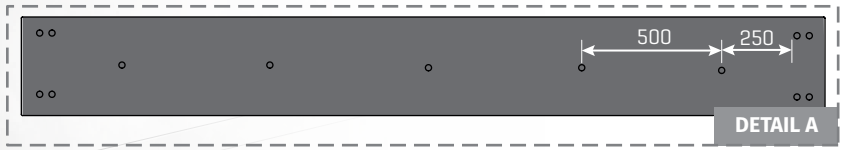


03. INSTALLATION

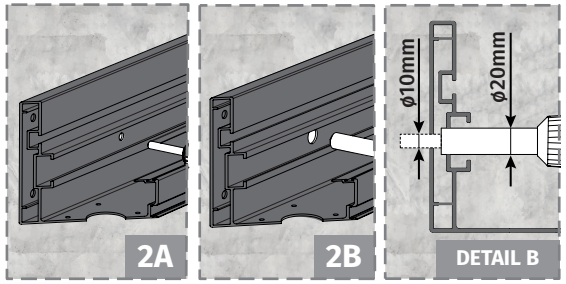
FIXING BETWEEN WALLS - DIRECT FIXATION



1 MARKINGS ON APPLICATION PROFILES ON THE WALL
Mark the holes in the profiles that will be installed on the wall **(see detail A).**



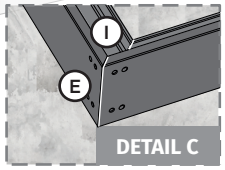
2 HOLES IN THE APPLICATION PROFILES ON THE WALL
Drill the markings along the profiles with **Ø10mm** (2A). Then widen the hole in the inner wall to **Ø20mm** (2B), so that the screw head can move inwards.



3 HOLES ON THE WALLS
Raise the profile to the fixing wall, mark and make the holes with **ø10mm**. Insert the anchor bolt. Proceed again on the opposite side.

4 ASSEMBLY OF THE FRAME
Place all profiles of the frame on the floor, aligned in the correct position for assembly.

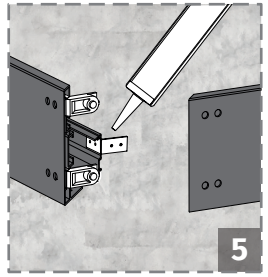
5 PROFILE FITTING
Apply sealing silicone to the diagonal faces of the various profiles. The side profiles are fitted through the union joints. Clean the silicone **(see detail C)**.



CLEAN EXCESS SILICONE:

(I) Inside, leave a visible silicone line for total isolation of the union joint between profiles.

(E) Outside, completely wipe off excess silicone so it will not be visible.

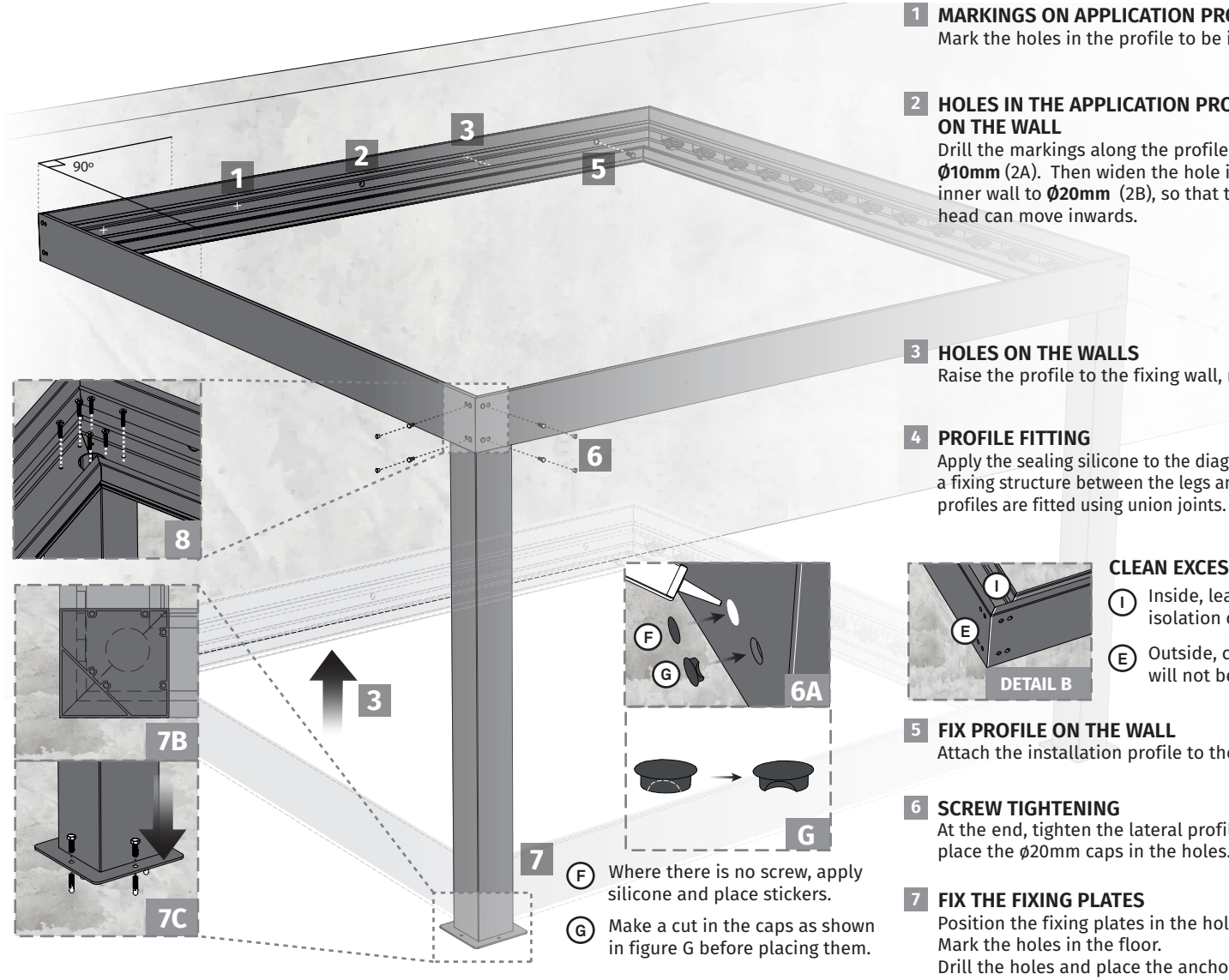


6 FIXING TO THE WALL
Raise the frame to the fixing wall, tighten the bolts and place the Ø20mm caps in the holes.
NOTE: This step must be performed by at least 3 people

Measure the diagonals to ensure approximately **90°** angle (difference of **2mm** at the maximum).

03. INSTALLATION

FIXING TO THE WALL AND WITH LEGS



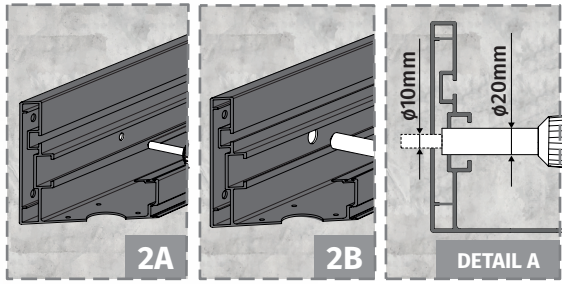
F Where there is no screw, apply silicone and place stickers.

G Make a cut in the caps as shown in figure G before placing them.

Measure the diagonals to ensure approximately **90°** angle (difference of **2mm** at the maximum).

1 MARKINGS ON APPLICATION PROFILES ON THE WALL
Mark the holes in the profile to be installed on the wall **(see detail A on page 6A)**.

2 HOLES IN THE APPLICATION PROFILES ON THE WALL
Drill the markings along the profiles with **Ø10mm** (2A). Then widen the hole in the inner wall to **Ø20mm** (2B), so that the screw head can move inwards.



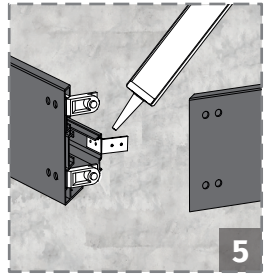
3 HOLES ON THE WALLS
Raise the profile to the fixing wall, mark and make the holes with **ø10mm**. Insert the anchor bolt.

4 PROFILE FITTING
Apply the sealing silicone to the diagonal faces of the various profiles. Mount a fixing structure between the legs and the front profile, and then the side profiles are fitted using union joints. Clean the silicone**(see detail B)**.

CLEAN EXCESS SILICONE:

I Inside, leave a visible silicone line for total isolation of the union joint between profiles.

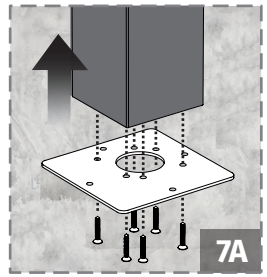
E Outside, completely wipe off excess silicone so it will not be visible.



5 FIX PROFILE ON THE WALL
Attach the installation profile to the wall.

6 SCREW TIGHTENING
At the end, tighten the lateral profiles to the legs. Tighten the screws and place the ø20mm caps in the holes.

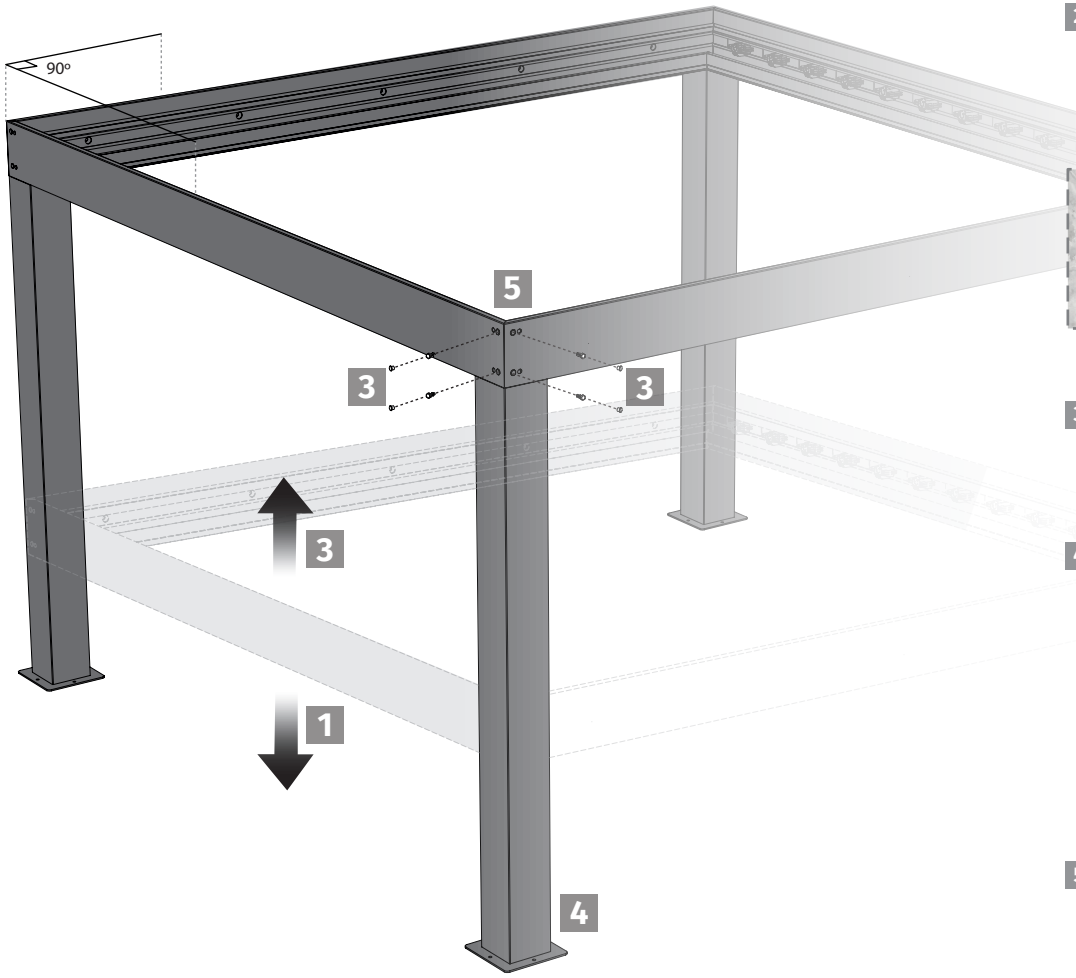
7 FIX THE FIXING PLATES
Position the fixing plates in the holes.
Mark the holes in the floor.
Drill the holes and place the anchor bolt suitable for the hole created.
Make sure the legs are installed according to figure **7B**.



8 FIX THE LEGS TO THE FRAME
Tighten the legs of the awning to the frame. Apply the screws.

03. INSTALLATION

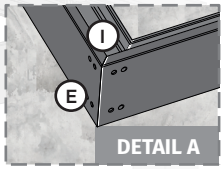
FIXING WITH LEGS



Measure the diagonals to ensure approximately **90°** angle (difference of **2mm** at the maximum).

1 ASSEMBLY OF THE FRAME
Place all profiles of the frame on the floor, aligned in the correct position for assembly.

2 PROFILE FITTING
Apply the sealing silicone to the diagonal faces of the various profiles.
The two fixing structure are mounted between the legs and the rear and front profiles, and then the side profiles are fitted through the union joints.
Clean the silicone **(see detail A).**



CLEAN EXCESS SILICONE:

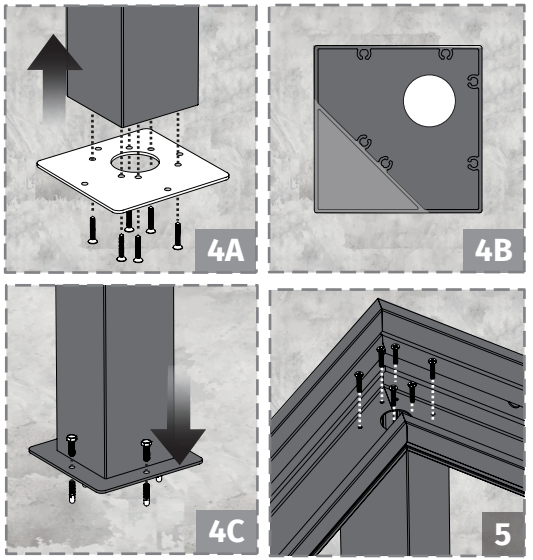
(I) Inside, leave a visible silicone line for total isolation of the union joint between profiles.

(E) Outside, completely wipe off excess silicone so it will not be visible.

3 SCREW TIGHTENING
At the end, tighten the lateral profiles to the legs. Tighten the screws and place the ø20mm caps in the holes.

4 FIX THE FIXING PLATES
Position the fixing plates in the holes.
Mark the holes in the floor.
Drill the holes and place the anchor bolts suitable for the drilled hole.

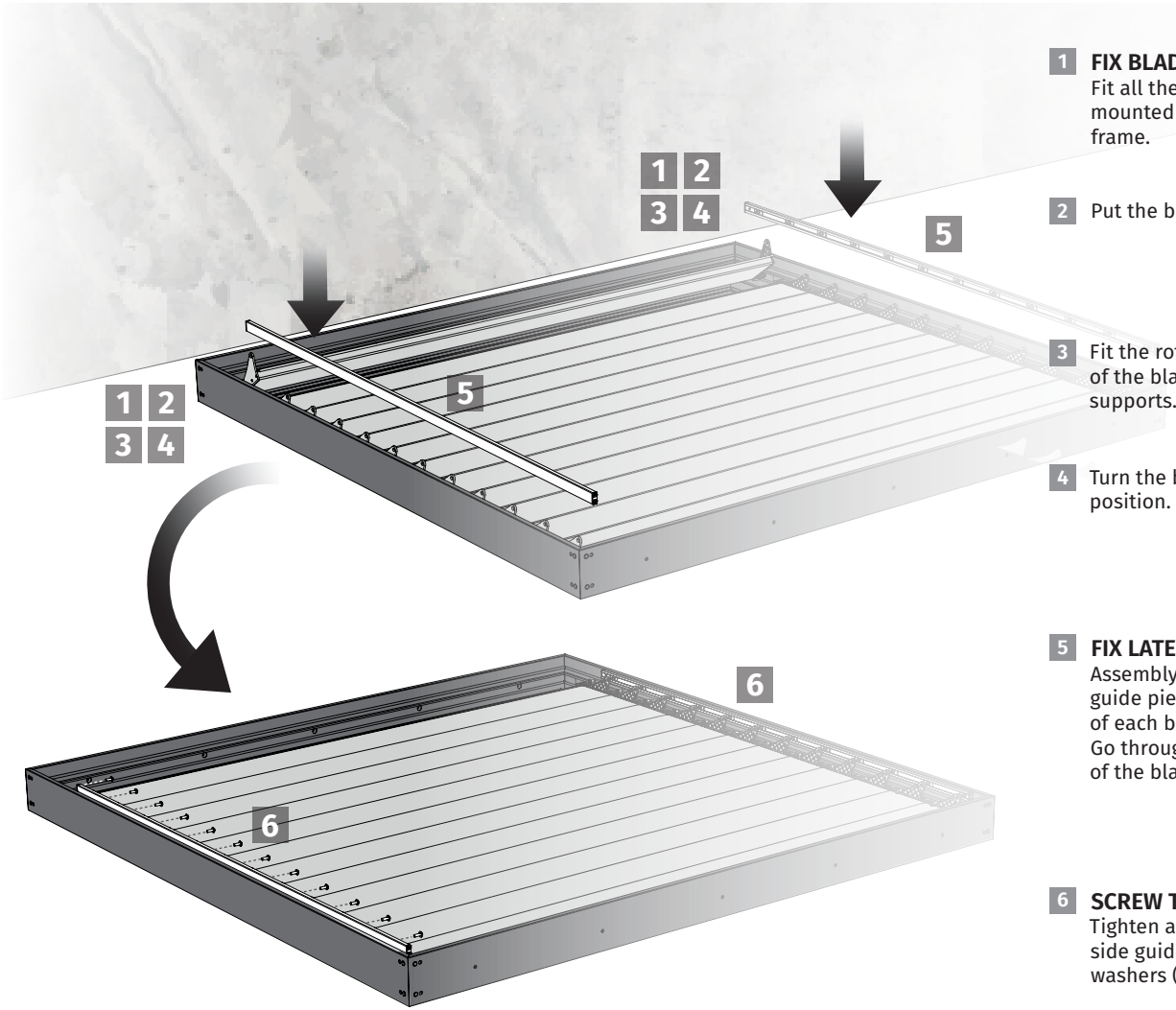
Make sure that it is as indicated in image **4B**, with the crossbar of the legs outside and the hole towards the inside, and finally the fitting in figure **4C**.



5 FIX THE LEGS TO THE FRAME
Tighten the legs of the awning to the frame.
Apply the screws.

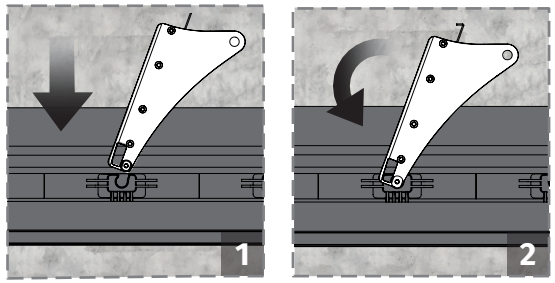
03. INSTALLATION

BLADES ASSEMBLY



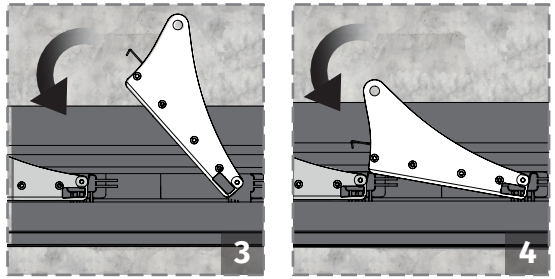
1 FIX BLADES
Fit all the blades into the supports mounted on the side profiles of the frame.

2 Put the blade vertically.

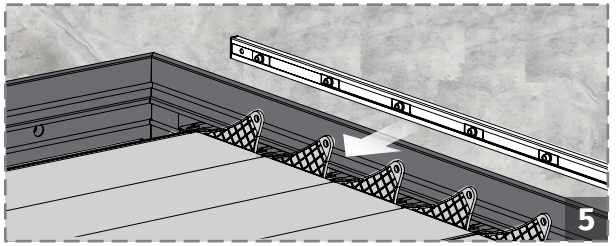


3 Fit the rotating axes of the plastic tops of the blades into the existing frame supports.

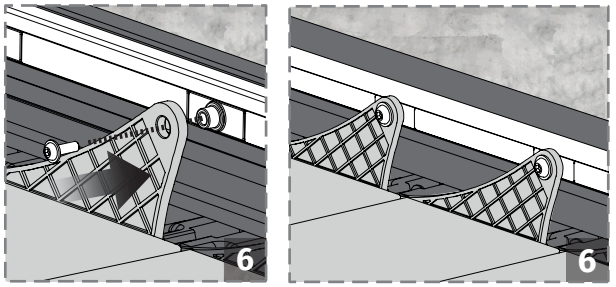
4 Turn the blade to the horizontal position.



5 FIX LATERAL GUIDES
Assembly the axes of the side guide pieces on the plastic tops of each blade.
Go through the holes of the tops of the blades.



6 SCREW TIGHTENING
Tighten all blade tops on each side guide with **M6x25** bolts and washers (two for each screw).



On one side of the side guides there is a metal plate with threaded hole for fixing the motor arm. As such, these plates should be facing the motor side **(see figure 5)**.

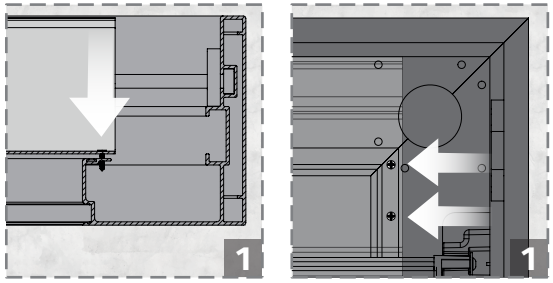
03. INSTALLATION

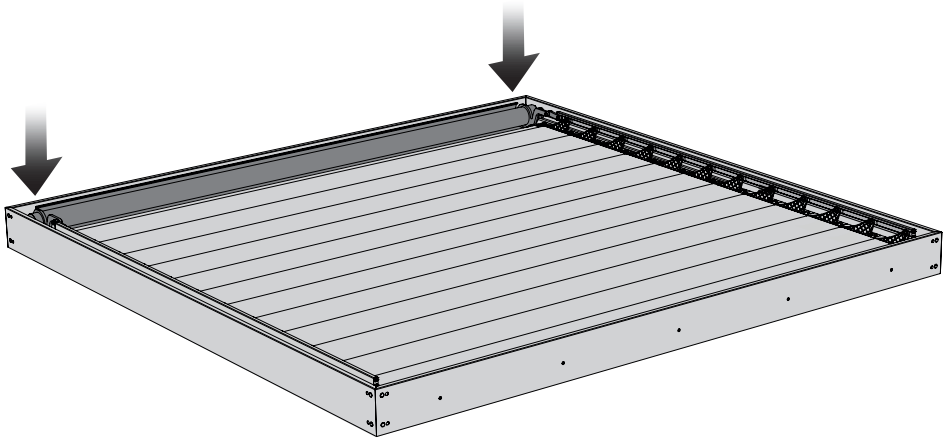
MOTOR ASSEMBLY

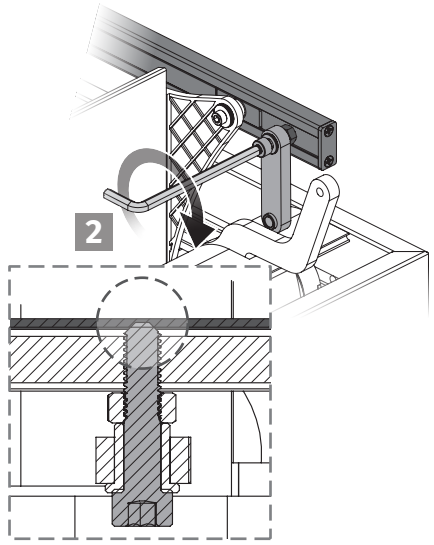
The following steps are only carried out on the application side of the motor.

1 FIX MOTOR PROFILE
Attach the motor base profile to the side profiles of the frame with self-tapping screws.

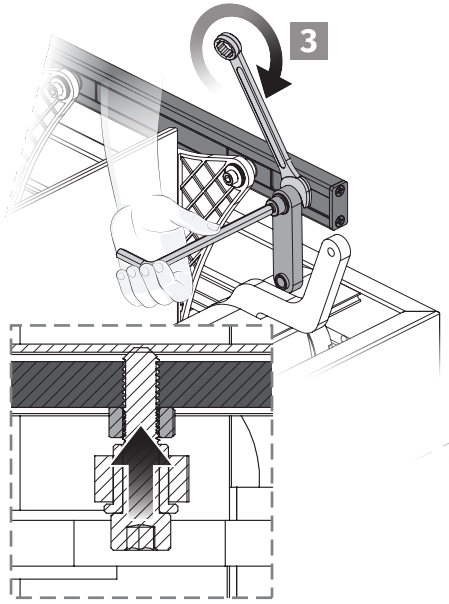
Do not tighten the screws as far as possible to avoid crushing the rubber.



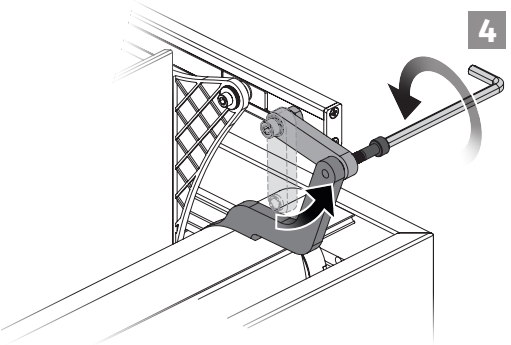




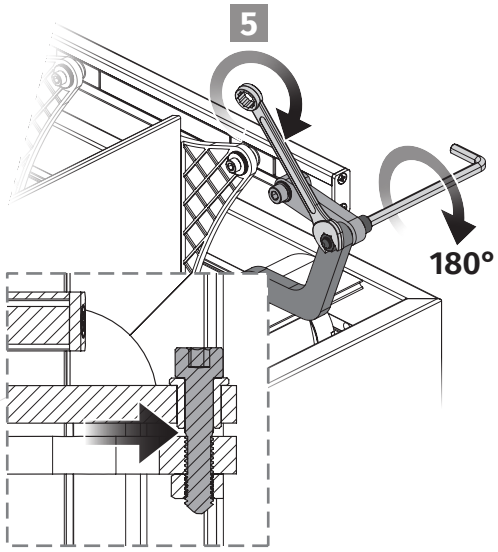
2 FIT CONNECTION PLATE
Mount the Connection Plate on the Profile Plate, tightening the screw until it pricks the aluminum profile.



3 Holding the screw, tighten the nut to the Profile Plate to lock the screw.



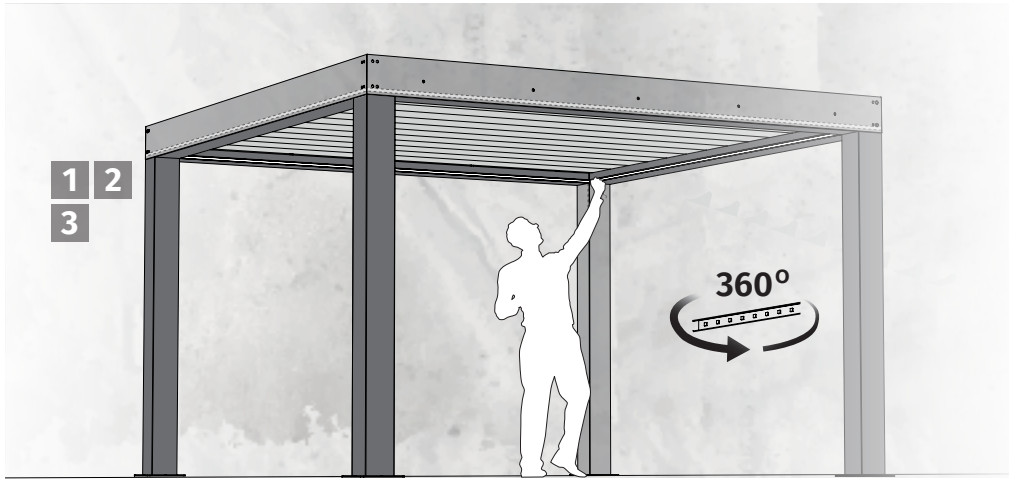
4 TIGHTEN MOTOR ARM
Mount the Connection Plate on the Motor Arm, tightening the screw until the components touch.



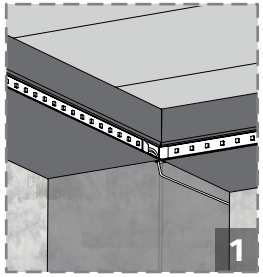
5 Loosen the screw half a turn (so that the bushing is loose), and tighten the nut to lock screw in position.

03. INSTALLATION

LED LIGHTING KIT ASSEMBLY

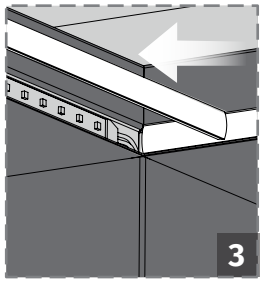


1 FIX THE LED LIGHTING TAPE
Unwind the LED lighting strip and install it on the framing frieze all around the awning!
The LED strip tips should be in the corner of the motor head so that the LED and motor wires stick together.



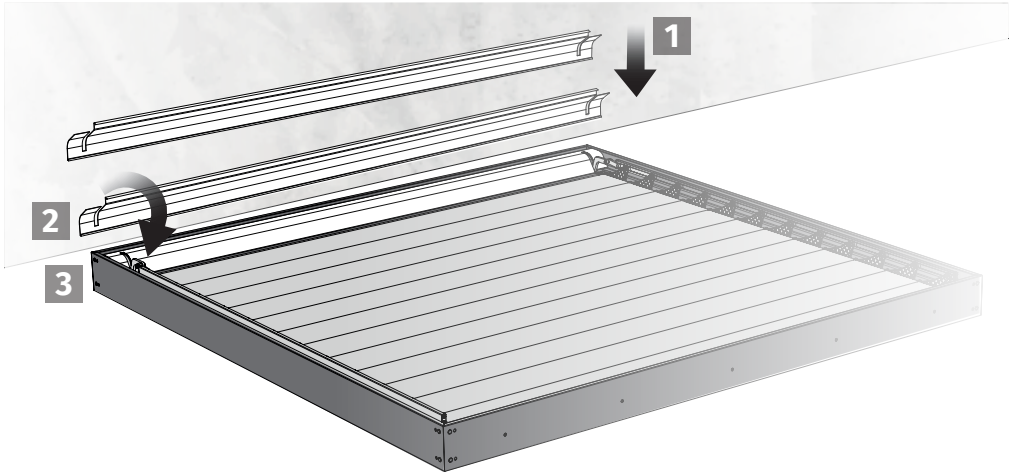
2 CONNECTION TO CONTROL BOARD
Pass the LED wire through the most convenient place to get it to the control board

3 FIT TRANSLUCENT PROFILE
Cover the frieze with the translucent profile provided, to hide the LED lighting strip.



03. INSTALLATION

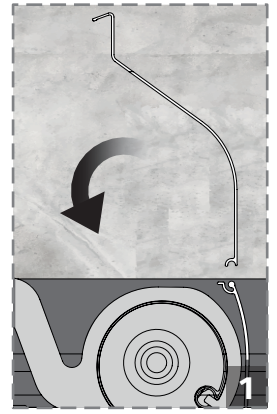
MOTOR COVER ASSEMBLY



1 ATTACH PROFILE
Fit the motor cover profile into the rotational zone of the motor base section.

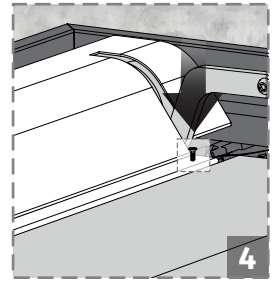
2 PROFILE CLIPPING
Clip the motor cover profile to the motor profile.

3 FIX THE PROFILE
Turn the motor cover profile to the horizontal position.



Please note that when rotating the motor cover, the slots on the cover must correspond to the position of the motor arm so that there are no collisions.

4 MOTOR COVER FIXING
Tighten the motor cover to the motor base with two self-tapping screws on the ends of the motor.



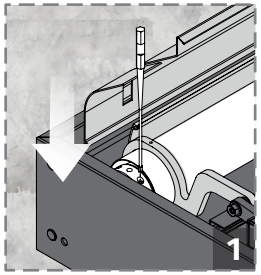
04. REGULATION

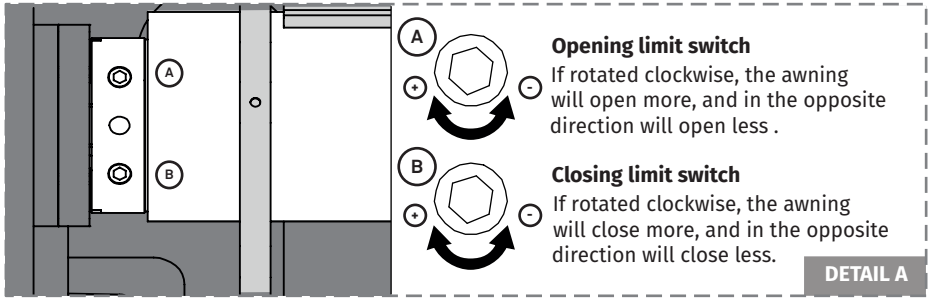
LIMIT SWITCHES

1 Turn the desired tuner by only half a turn (180°) in the direction corresponding to the desired setting (see detail A).

2 Test the motor behavior.

3 Adjust and test this way until you reach the desired opening and closing points.





Opening limit switch
If rotated clockwise, the awning will open more, and in the opposite direction will open less .

Closing limit switch
If rotated clockwise, the awning will close more, and in the opposite direction will close less.

DETAIL A

The motor limit switches are preset at the factory.

It is important that you turn the tuners only half a turn at a time, since the tuning is very sensitive. Due to the force of the motor, be careful during the tuning process to ensure that the mechanical parts do not undergo excessive stress, in order to ensure the longevity of the product.
The limit switches must be adjusted so that the motor stops as soon as the blades are in a vertical and horizontal position, without stressing them against the frame.

05. MAINTENANCE

INSTRUCTIONS FOR WATER DRAINAGE

It is important create drainage points in the **BRISA SOLAR** to avoid accumulation of water inside the frame. Follow the instructions and recommendations below.

1 **DRILLING**

Mark the site where you want to place the drainage hole **(Ø50mm)**, taking into account the dimensions indicated for the option you want:

- **OPTION A:** Flow within the BRISA SOLAR standard leg
- **OPTION B:** Flow through another method designed by the customer

NOTE: For installations on awning with legs, it is recommended to drain through the inside of the leg. This method avoids the use of tubes and other accessories.

2 Drill **(Ø50mm)** the drain hole.

4 **LEG / TUBE FIXING**

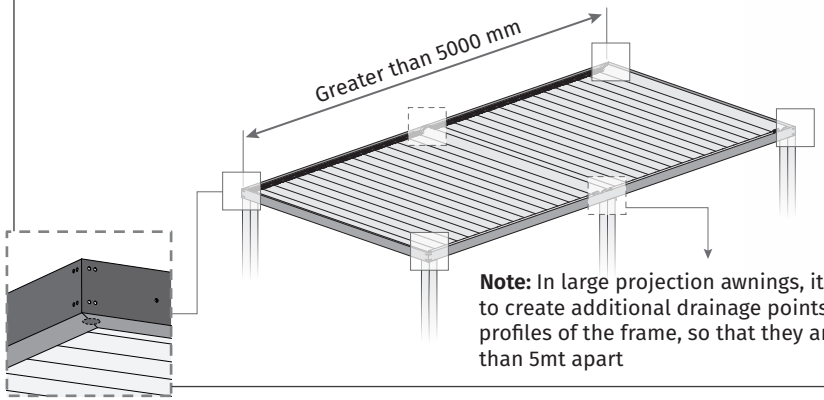
OPTION A: Fix the leg to the profile using the screws for this purpose, making sure that the water to be channeled to the ground.

OPTION B: Apply the method you designed to make the water flow from the hole to the ground (eg: drainpipe).

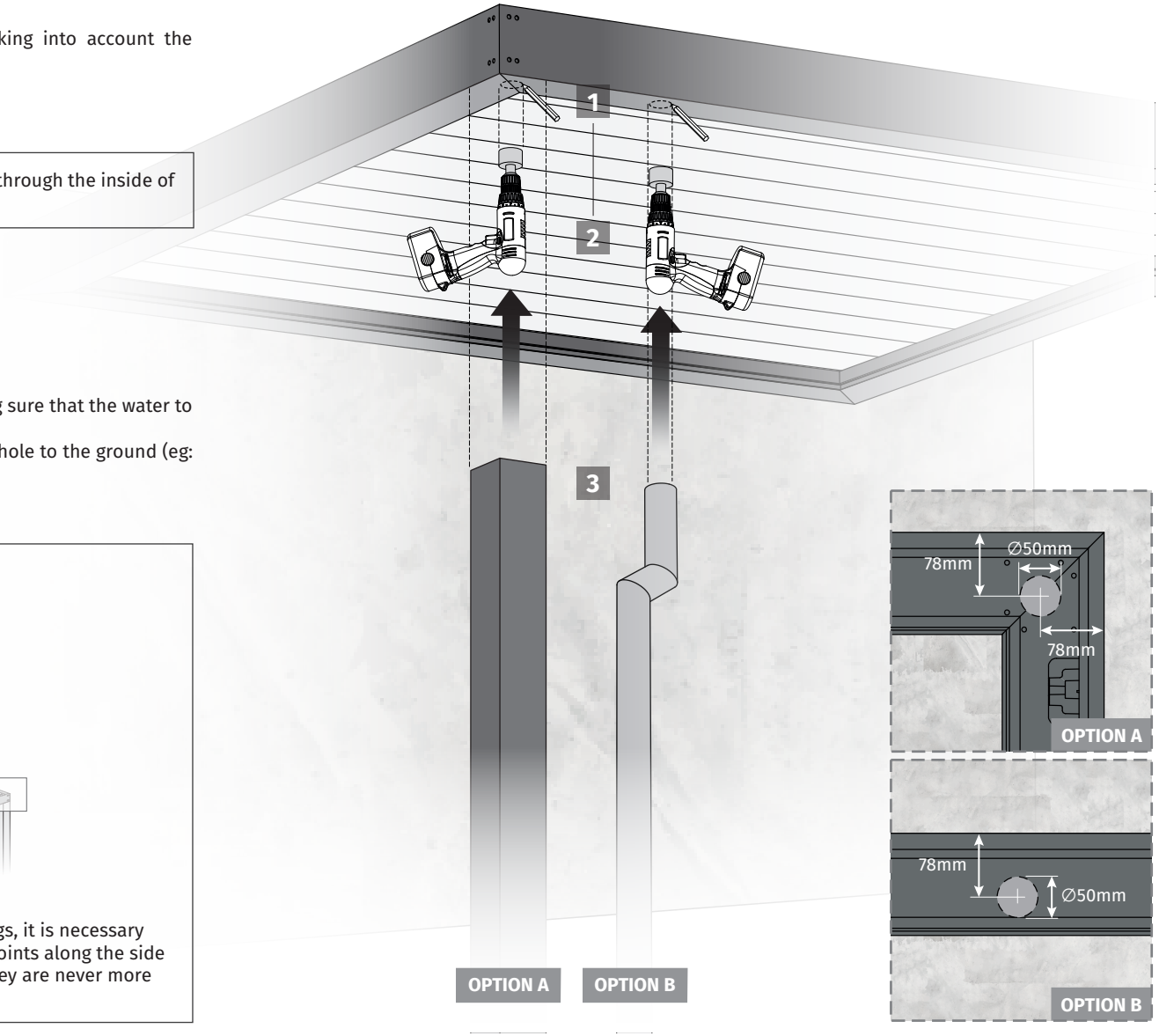
DRAINAGE ZONES

The drainage zones are made per awning (see page 4A):

- On the **4 corners of each awning**;
- In projection, every **5 meters away**.

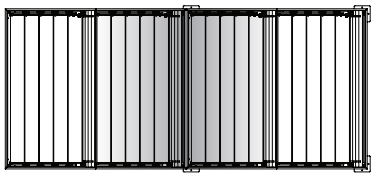


Note: In large projection awnings, it is necessary to create additional drainage points along the side profiles of the frame, so that they are never more than 5mt apart

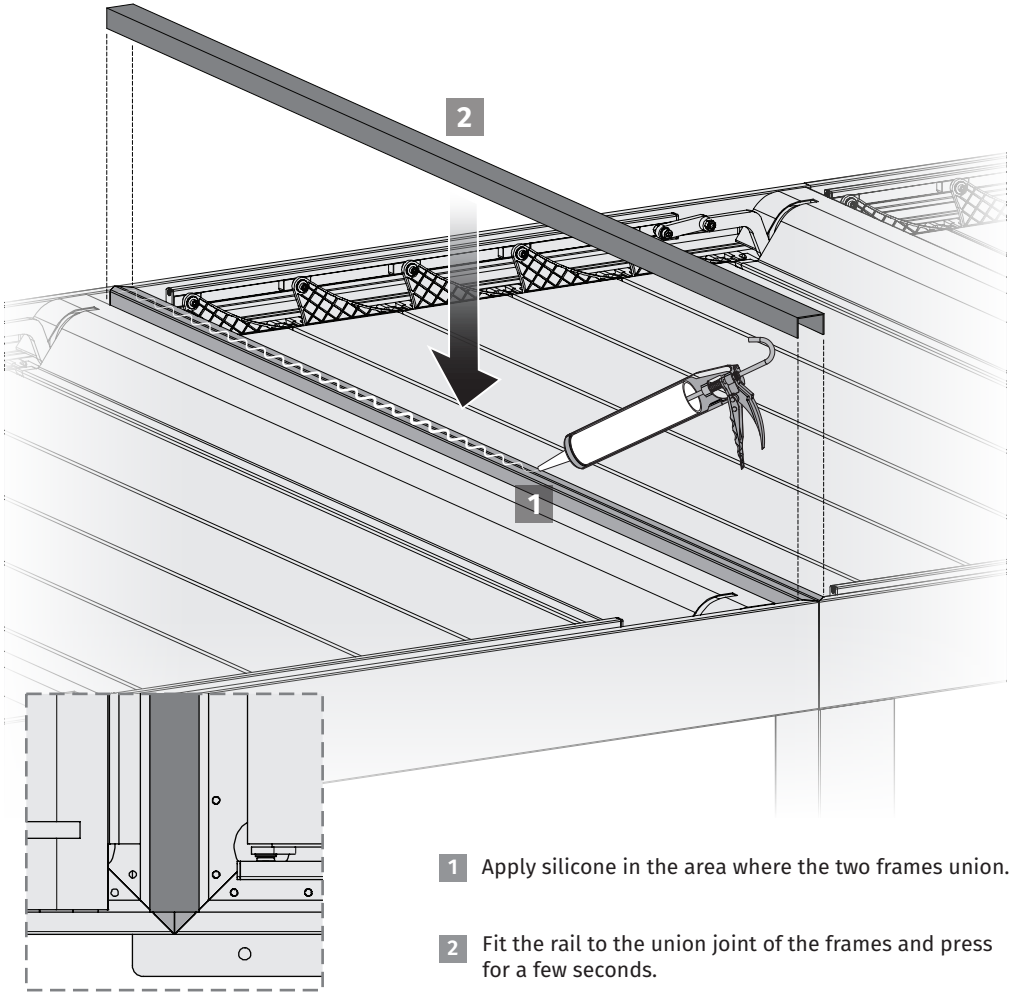


05. MAINTENANCE

WATER SEALING BETWEEN FRAMES



This method is only applied when there are two or more awnings leaning against each other, in order to prevent the passage of water between the frames of each awning.
Isolation rail is applied to the union joint.



1 Apply silicone in the area where the two frames union.

2 Fit the rail to the union joint of the frames and press for a few seconds.

06. TROUBLESHOOTING

FINAL CONSUMERS AND SPECIALIZED TECHNICIANS INSTRUCTIONS

Problems	Behavior	Procedure
The awning is not secure properly on the wall.	• The screws are not suitable for the wall structure.	• Check the installation measures. • Check that the number of screws is sufficient and that they are indicated in this manual.
The awning does not remain level after opening.	• Changes to the awning after several maneuvers.	• Check the level of the wall brackets. • Check the level of the square tube.
The top does not close in full.	• Detuning the top or limit switch.	• Tune the motor limit switches.
The awning does not work and the motor makes no noise.	• The motor goes into thermal protection after 2 openings and 1 closing.	• Wait 20 minutes.
The awning does not work and the motor makes no noise.	• Protection problem.	• Check the motor connection. • Check closing operation by connecting directly to the power supply.