INSTALLATION INSTRUCTION
SHUTTER MOTOR

Solar WIBAT LINTEAU by MANTION

SALES DEPARTMENT

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VERSION 1-01 EN

WARRANTY CERTIFICATE – WARNING

Important Safety Instructions. It is important for the safety of individuals to follow these instructions. Keep these instructions.

The WIBAT LINTEAU Solar product is exclusively intended for the opening and closing of hinged shutters. Any other use beyond the scope of this manual shall not be considered as compliant with the intended purpose. The manufacturer or supplier cannot be held responsible for any damage resulting from such use. The user alone is responsible and assumes all risks associated with any incorrect use of the product.

This device may be used by children aged 8 years and above and by persons with reduced physical, sensory or mental capabilities or lacking experience or knowledge, provided they are properly supervised or have been instructed on the safe use of the device and understand the potential hazards involved.

This motorization must be commissioned by individuals informed of the hazards related to electricity, drilling, and possessing the qualifications required to work on domestic installations, in accordance with good practice.

If the power supply cable is damaged, it must be replaced by the manufacturer, its after-sales service, or a similarly qualified person in order to avoid any danger.

Follow all instructions, as incorrect installation may lead to injury.
All assembly steps and operating instructions must be strictly observed, taking into account all safety rules.

Before installing the motorization, ensure that the driven component is in proper mechanical condition, as well as the entire WIBAT LINTEAU Solar product, and that the supporting structure is capable of bearing the WIBAT LINTEAU Solar product as a whole.

The product must be installed by qualified personnel or individuals authorized by MANTION.

Electrical installation must comply with the national regulations in force and with all legal and regulatory obligations applicable.
(Electrical compatibility: voltage and frequency indicated on the product and those of the electrical network used.) Do not connect the device without ensuring that the power supply circuit is switched off.

Frequently inspect the installation to detect any imbalance, wear, or deterioration. Do not use the device if repair or adjustment is needed.
Disconnect the power supply during cleaning, maintenance, or servicing operations.

Do not carry out any modifications or add components that could affect safety without written authorization from MANTION.
Pay particular attention to the risk of finger entrapment during use.
Any failure to comply with these safety rules, and any resulting damage, is entirely the responsibility of the user.

The product must be stored in a closed, dry place, at a temperature between 0°C and +45°C.
During installation, the installer must consider accident-prevention guidelines and standards in force in the country.

Do not immerse or spray the product with water.
Do not throw into fire or expose to flame or sources of heat.
Do not use household or chemical cleaners.
Use only a damp sponge and soap.
Do not dispose of packaging in the environment; treat it according to local regulations.
Keep the product, accessories, and documentation out of reach of children.
Do not allow children to play with fixed control devices. Keep remote controls out of reach of children.
When using a non-latching switch, ensure that other people are kept at a safe distance.

RADIO CONTROL :

Use of the radio remote control is permitted only when interference in the transmitter or receiver does not pose any danger to people or animals, or if such hazards are prevented by additional safety measures.
The user of the radio control does not benefit from protection against interference caused by other telecommunications systems or remote-controlled devices. If significant interference occurs, contact the organization responsible for radio interference measurement.
Do not use the radio transmitter in areas sensitive to radio transmissions (airports, hospitals), unless all necessary precautions have been taken.
Remote operation of the shutters may present risks and must be used in accordance with the following points:

1. Ensure that no person or object is within the moving area of the shutters.
2. Operate the movement only when direct visual control is possible.

The radio control is not a toy; do not allow children to play with it. Keep it out of reach of children and animals.

WARRANTY CONDITIONS

The WIBAT LINTEAU Solar product is covered by a five (5)-year warranty from the date of delivery.
The warranty is limited, at MANTION's discretion, either to the replacement or the repair of products acknowledged by MANTION as defective, provided that :

- After obtaining written authorization from MANTION for the return of the products, the products are returned without delay, with details of the defect and a copy of the installer's/distributor's invoice indicating the installation date.
- The products have been stored, installed, maintained, and used in accordance with MANTION's instructions and specifications.

The warranty is strictly limited to the provisions of this Article, and any other warranty or liability, including loss of profit or damage arising directly or indirectly from the sale or use of the products, is excluded.
MANTION cannot, under any circumstances, be held responsible for the installation conditions of the product.
MANTION's liability shall only apply to the WIBAT LINTEAU Solar product itself. The warranty does not apply in cases of overvoltage or short-circuit related, for example, to wiring errors or climatic conditions such as lightning. The warranty does not cover normal wear.

DEVICE RECYCLING

In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation under national laws, this symbol indicates that the device must not be disposed of with household waste. Hazardous substances it may contain could be harmful to health and the environment. Return the device to your distributor or use the selective collection systems provided by your local authority.

TABLE DES MATIERES

1. TECHNICAL SPECIFICATIONS

The WIBAT LINTEAU Solar product enables the automatic opening and closing of hinged shutters (one or two leaves). It is designed for domestic use.
This product is intended exclusively for under-lintel installation.

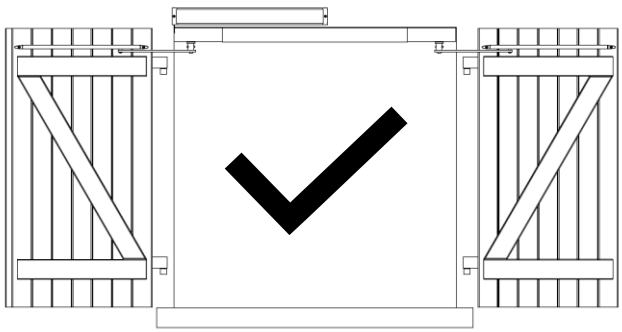
Minimum width per leaf	**0,40 m ***
Maximum width per leaf	**0.8 m ***
Maximum surface area per leaf	**1.6 m² ***
Maximum weight per leaf	**50 Kg**
Maximum power	**30 W**
Power supply	**12V DC**
Motor torque	**55 Nm max**
Protection rating	**IP24 (avec carter monté)**
Limit switch type	**Dynamique (arrêt sur obstacle)**
Opening time **Closing time**	**13 s** **16 s**
Motor speed	**2,9 Tr/mn**
Operating temperature	**-20/+60 C°**
Radio frequency	**433.92 MHz**
Standby power consumption	**<2 W**
Colour option**	**Blanc RAL 9010 ou Brun RAL 8019**

** for all other dimensions, please contact us.*
*** for all other colors, please contact us.*

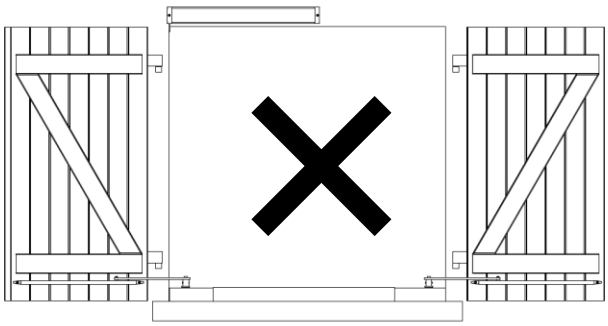
Note : All data in the table are for informational purposes only, depending on specific conditions (wind, hinge condition), and do not constitute a firm commitment on the part of MANTION.

During periods of strong wind, we recommend not operating the WIBAT LINTEAU Solar to avoid damage to the shutters and the device.

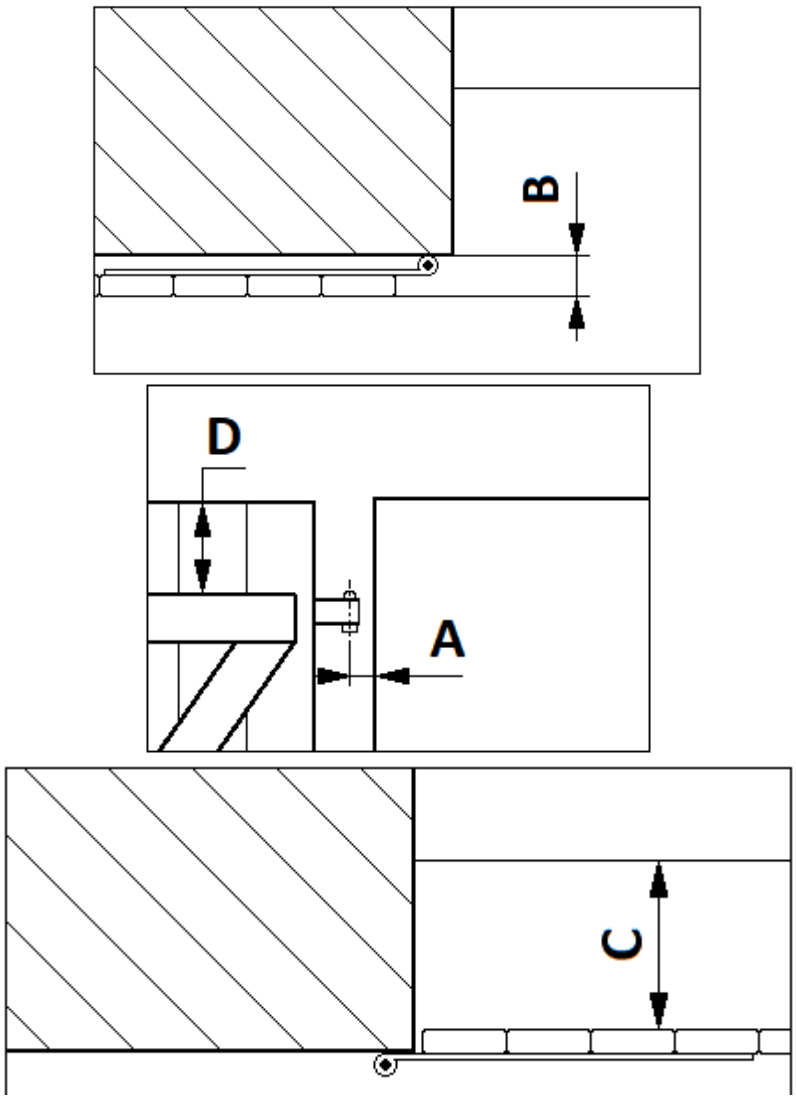
Under-Lintel installation **OK**



Sill installation **NON PRECONISE**



1.1 DIMENSIONS TO CHECK



Dimension A : Distance between the frame and the hinge axis (depending on the type of arm, see chart).

Dimension B : Distance between the wall and the outside of the shutter (depending on the type of arm, see chart).

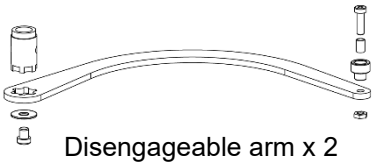
Dimension C : Distance between the window and the closed shutter (depending on the type of arm, see chart).

Dimension D : Minimum clearance at the top of the shutter =
90 mm minimum if a horizontal brace is present
70 mm minimum if there is no horizontal brace

1.2 LIST OF TOOLS REQUIRED FOR INSTALLATION :

A : 1 pencil
B : 1 hammer
C : 1 pozidriv screwdriver N°1
D : 1 drill + 1 Ø 6 mm masonry drill bit
E : 1 spirit level
F : 1 allan key 2.5 mm (supplied)
G : 1Torx key TX30

1.3 CONTENTS OF THE TWO-LEAF KIT



Disengageable arm x 2
(compatible D/G)

Arm screw x4

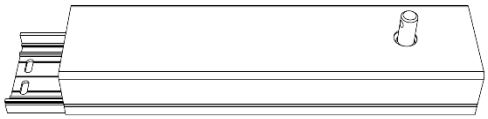
Shaped coupling
sleeve x2

Remote control

Wall plugs x6

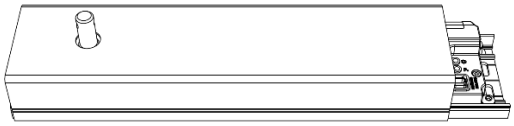
Screws x6

Arm track x2
Track support x4



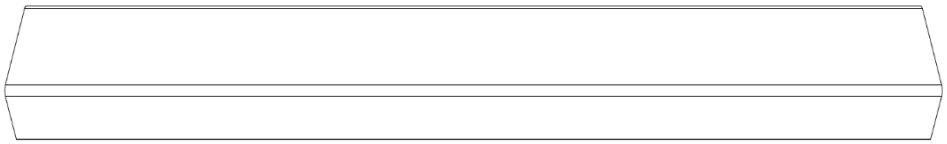
Auxiliary motor

Track support screw x4

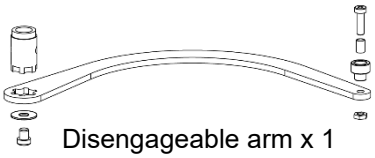


Motor with electronics

Cover



1.4 CONTENTS OF THE ONE-LEAF KIT



Disengageable arm x 1
(compatible D/G)

Arm screw x2

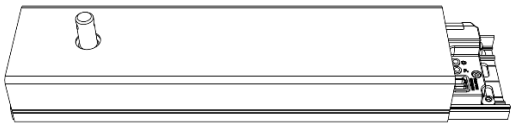
Shaped coupling
sleeve x1

Remote control

Wall plugs x5

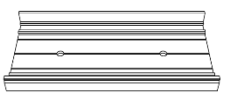
Screws x5

Arm track x1
Track support x2

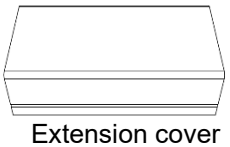


Motor with electronics

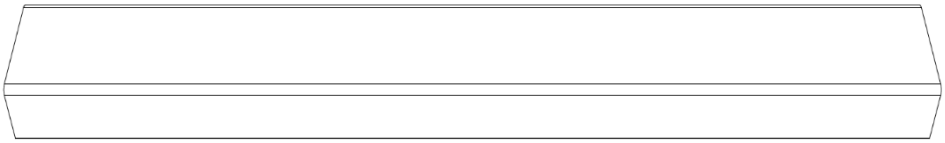
Track support screw x2



Extension



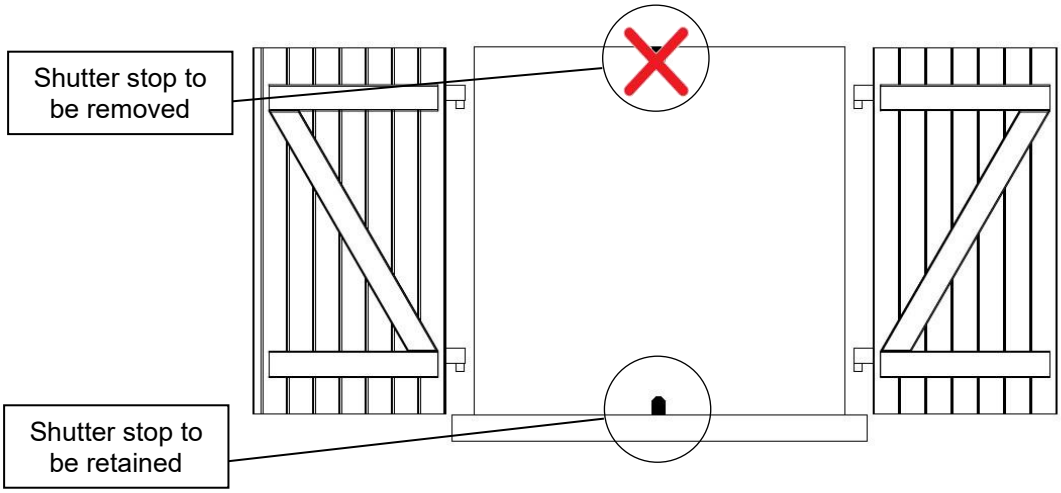
Extension cover



Cover

2. PRE-INSTALLATION PREPARATION

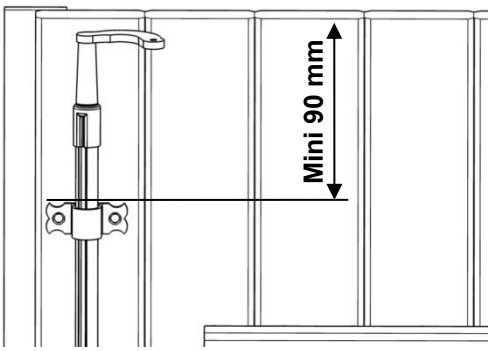
2.1 ADJUSTMENT OF SHUTTER STOPS.



The presence of the lower shutter stop and the wall opening stops is essential for the proper functioning of the product.

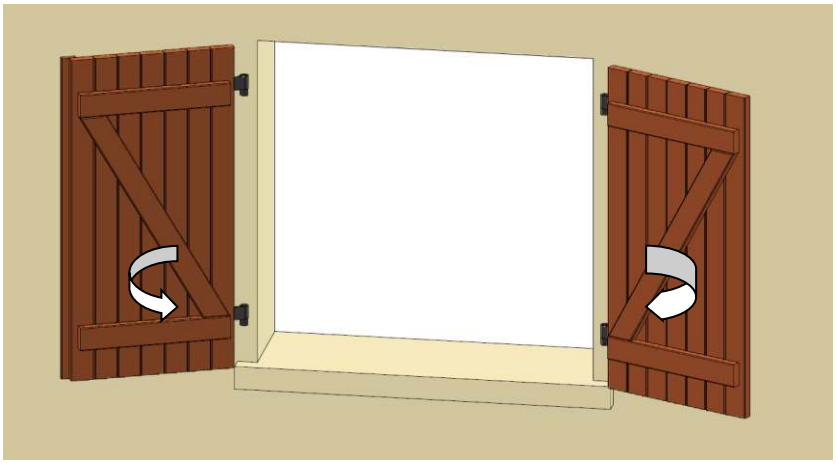
2.2 MODIFICATION OF THE HARDWARE.

If a espagnolette is present, clear the upper part to allow passage for the product.



2.3 ENSURE THE SHUTTERS ROTATE CORRECTLY.

The shutters must operate smoothly and without effort, as any resistance may affect the proper functioning of the WIBAT LINTEAU.

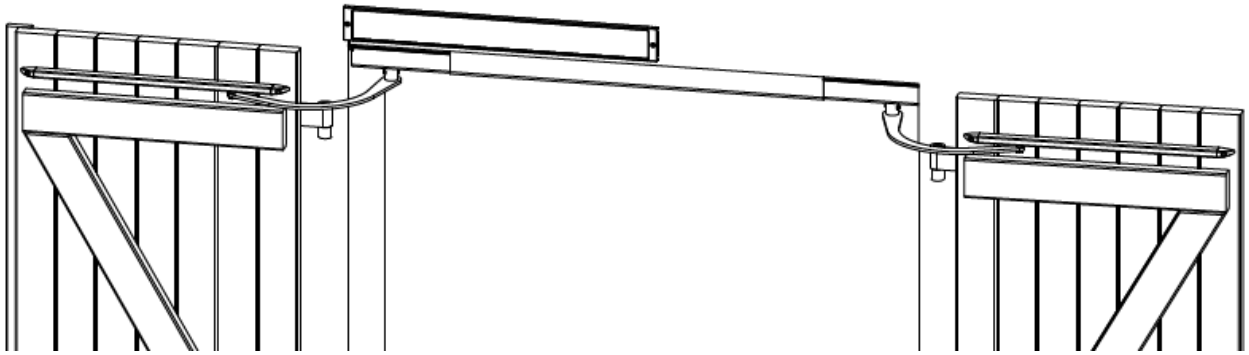


3. INSTALLATION OF THE MOTORSDES MOTORISATIONS

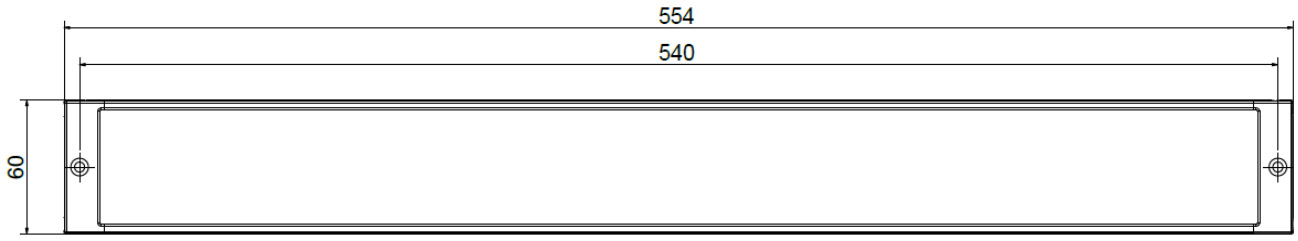
Depending on the configuration, refer to the corresponding installation instructions :

3.1 SOLAR PANEL

The solar panel must be installed flush with the façade, without any obstruction. The solar panel must be exposed as much as possible to direct sunlight.



The solar panel must be installed on a flat surface to avoid any deformation during fastening.



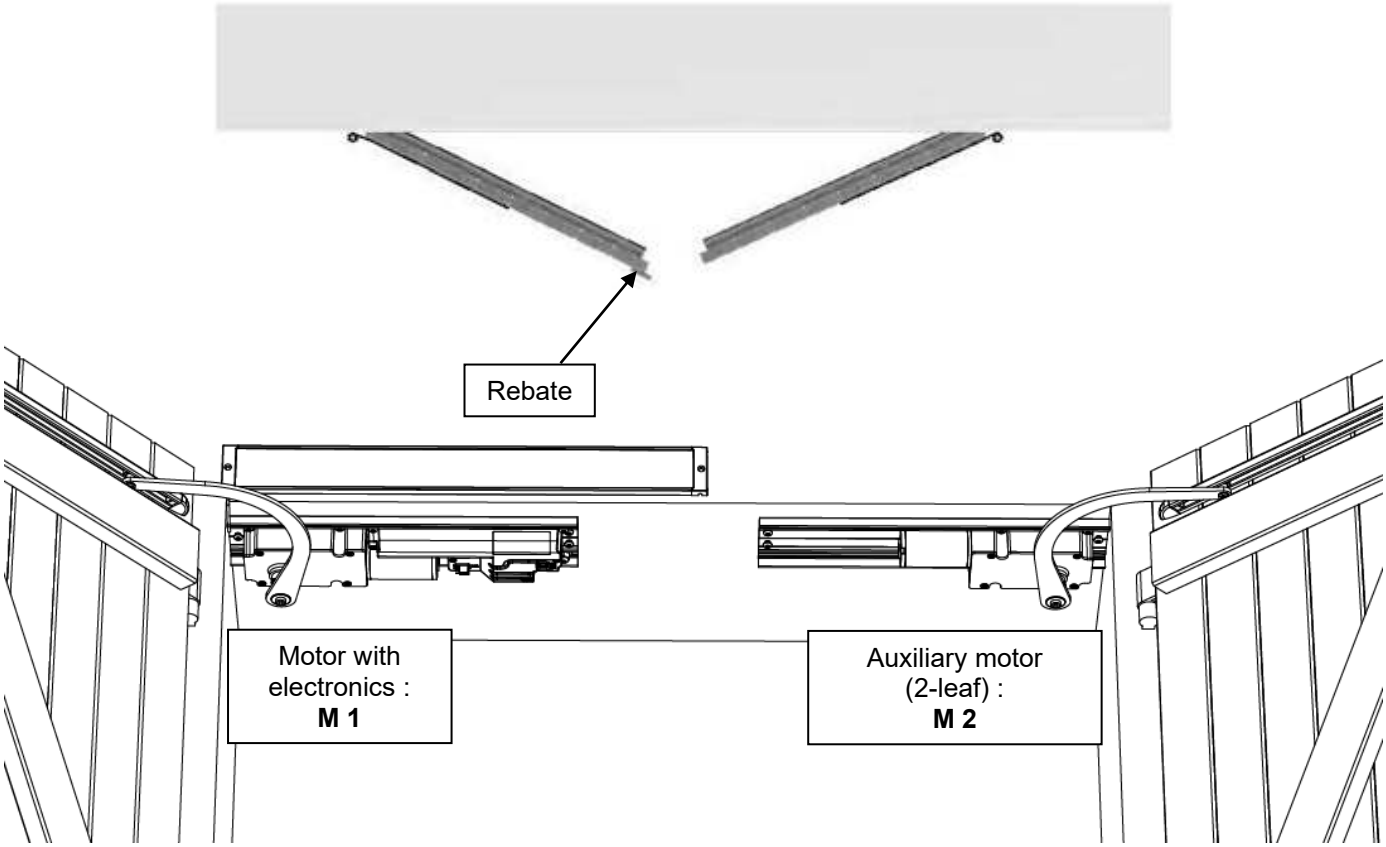
3.2 2-LEAF INSTALLATION

3.2.1 PREPARATION

Motor identification

The leaf with overlap (rebated leaf) is the first to open.

As standard, the WIBAT LINTEAU Solar is configured for shutters with a left-hand rebate (**viewed from the outside**), as shown in the figure below.
The motor with the electronic control unit must be installed on this side, i.e. on the left when viewed from the outside.

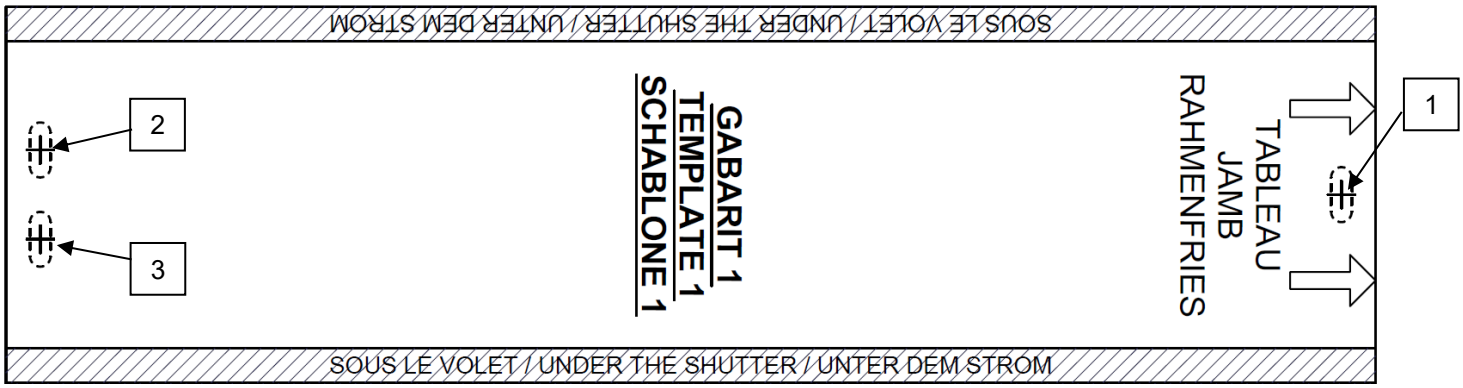


Note: The rotation direction and motor position can be reversed via the remote control.
(Refer to Section 7.2 “Master Mode”)

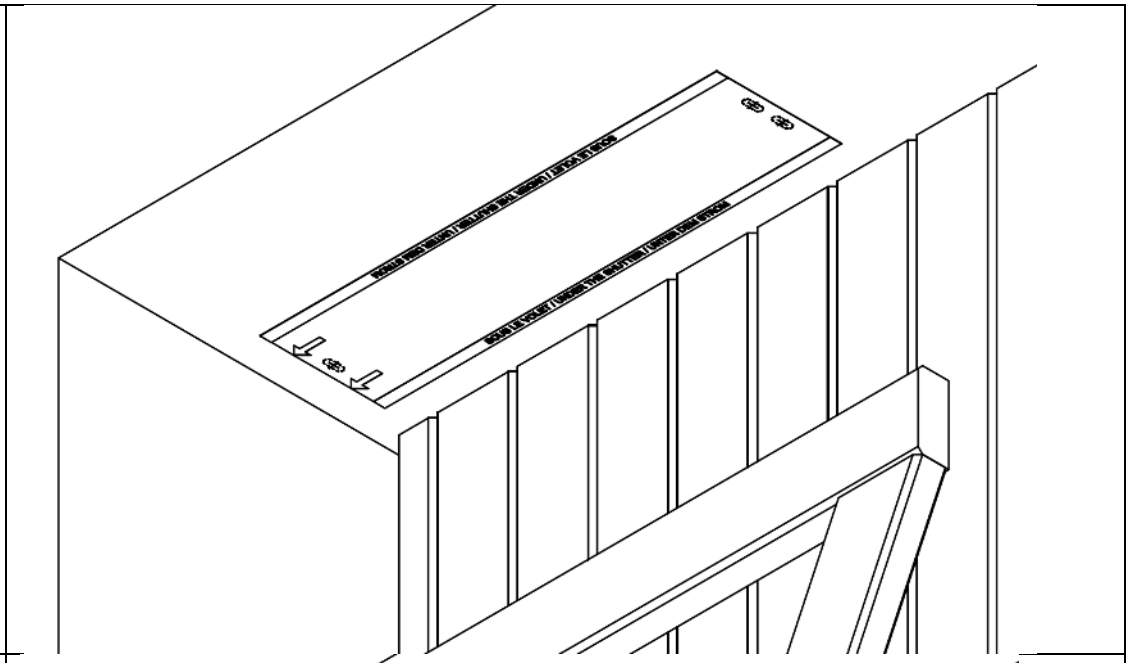
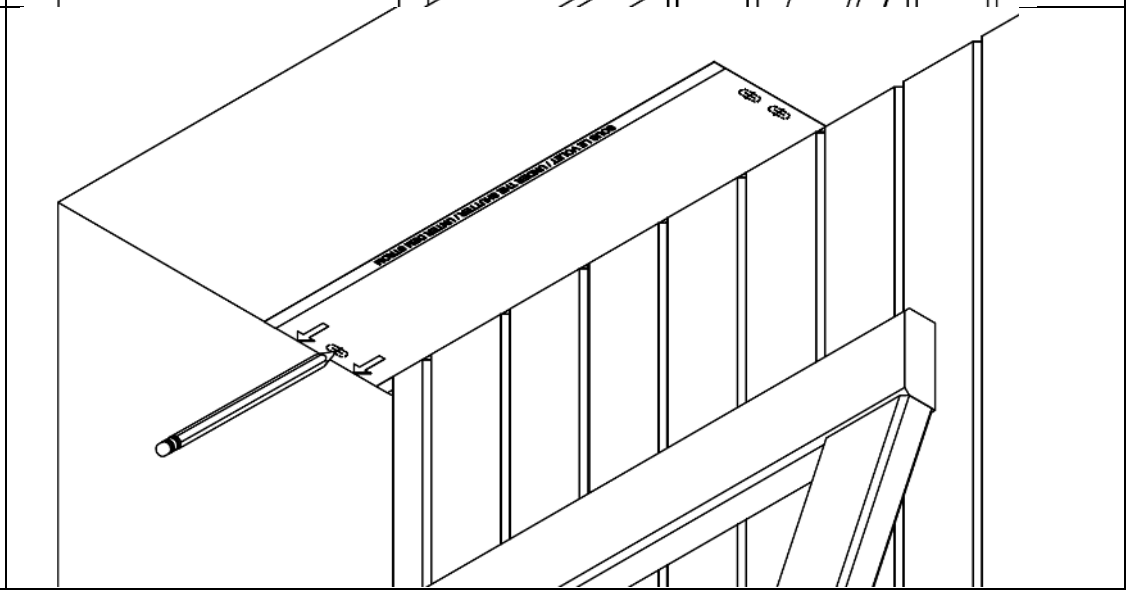
3.2.2 INSTALLATION PROCEDURE

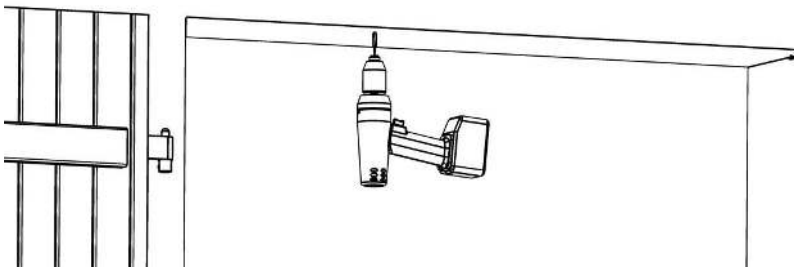
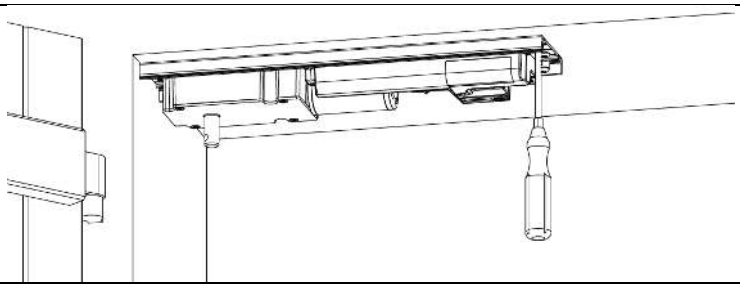
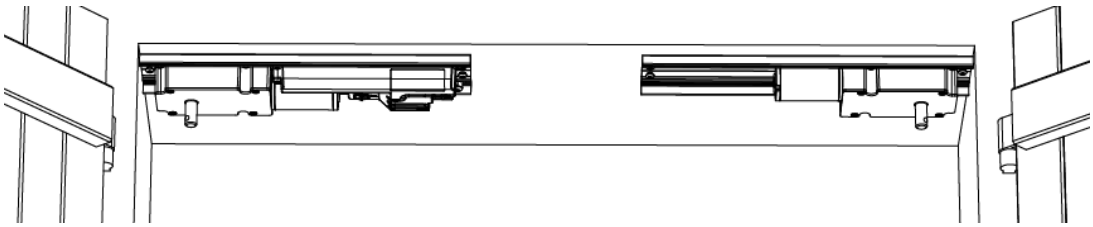
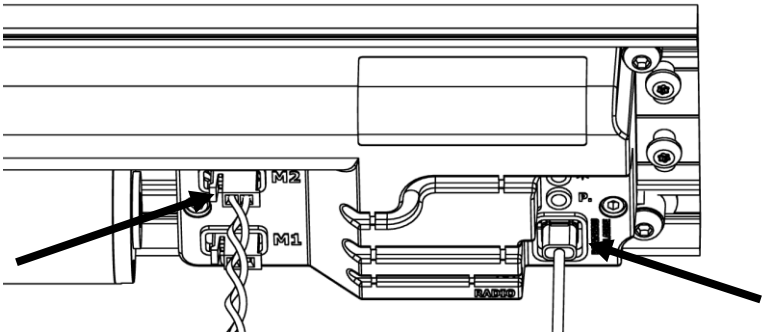
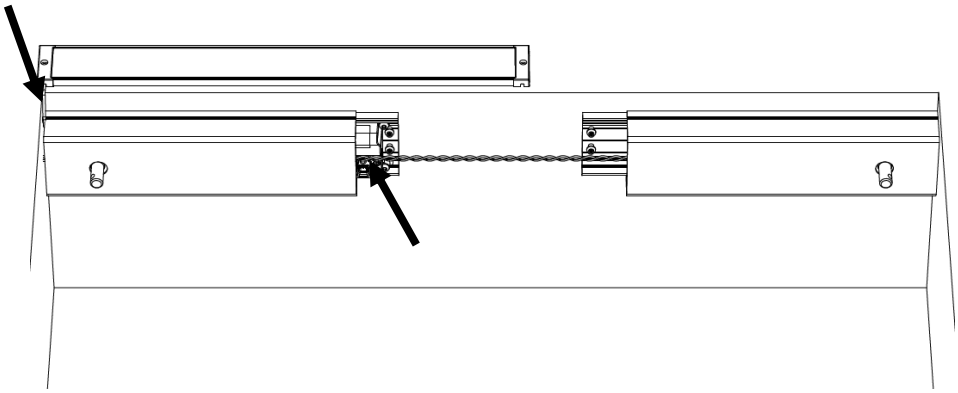
Use of the drilling template

Markings 1, 2 and 3: Drilling of the holes for the motor profiles on the left or right side.



Installation

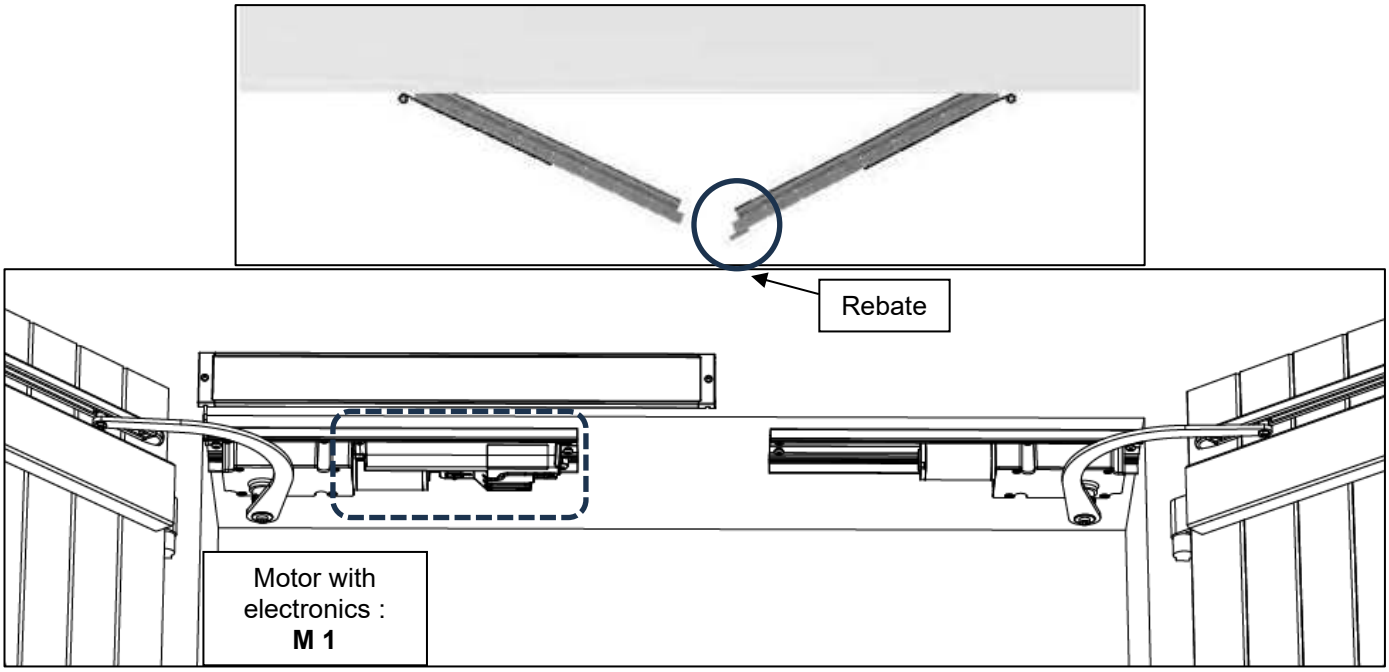
Insert and align the template on the shutter and place it against the wall.	
Once positioned, mark drilling points 1, 2 and 3.	

Repeat the same procedure on the second shutter. Drill Ø 6 mm holes and insert the wall plugs.	
Secure the motor mounting plates without fully tightening the screws.	
Check the alignment of both motor units before fully tightening all screws.	
Connect motor M2 to the electronic control unit using the extension cable provided, and connect the solar panel.	
Secure the motor covers. **Caution:** When installing the covers, ensure that the motor extension cables and the solar panel cable are not pinched.	

Motor adjustments for special cases :

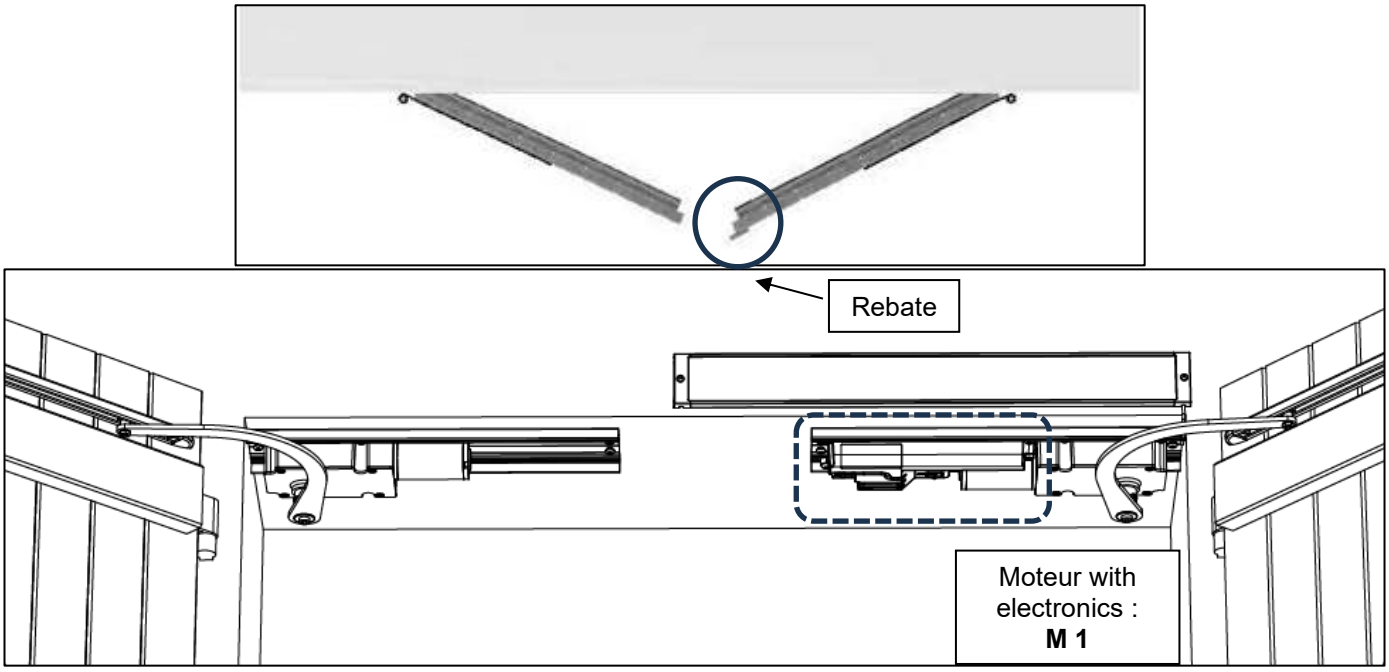
Reminder: The leaf with overlap (rebated leaf) is the first to open. As standard, the WIBAT LINTEAU Solar is configured for shutters with a left-hand rebate (viewed from the outside), with the motor and electronic control unit installed on the left (viewed from the outside).

- ***Right-hand rebate with M1 installed on the left*** *:*



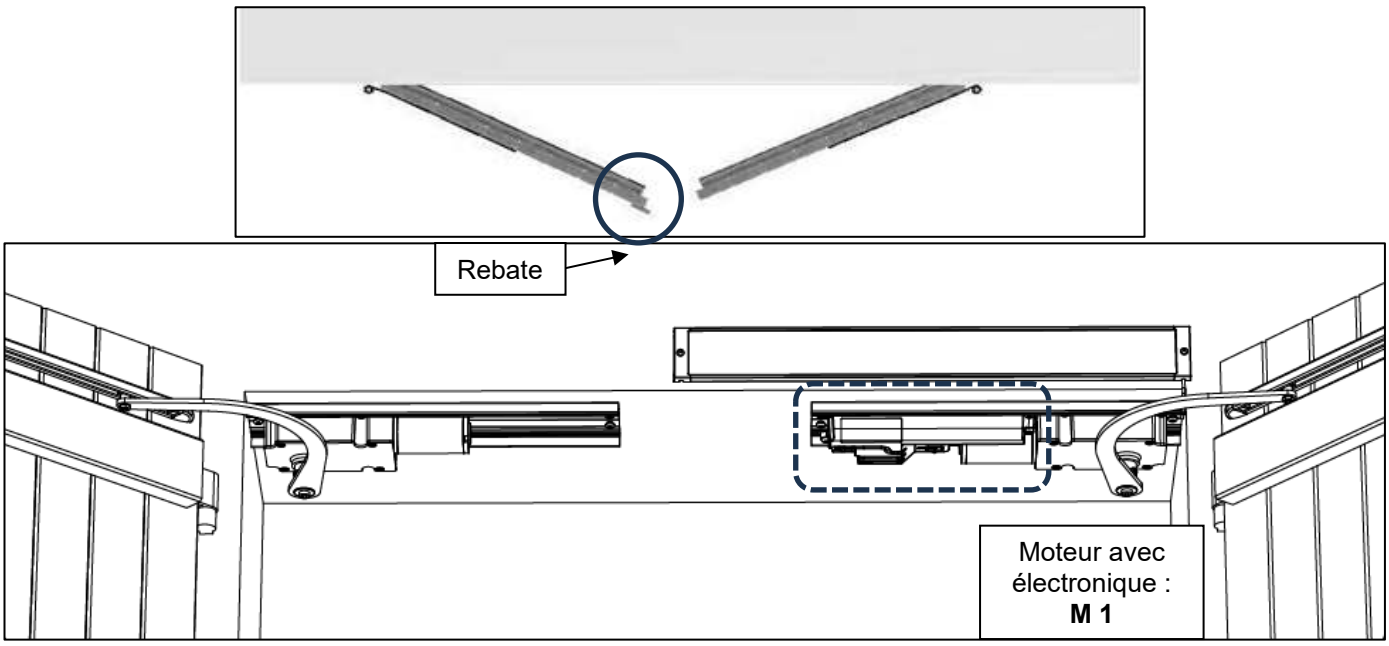
Using the remote control and the Master Mode (see Section 7.2 “Master Mode”), reverse **M1 and M2.**

- ***Right-hand rebate with M1 installed on the right*** *:*



Using the remote control and Master Mode (see Section 7.2 “Master Mode”), **reverse the rotation direction of the motors.**

- ***Left-hand rebate with M1 installed on the right*** *:*



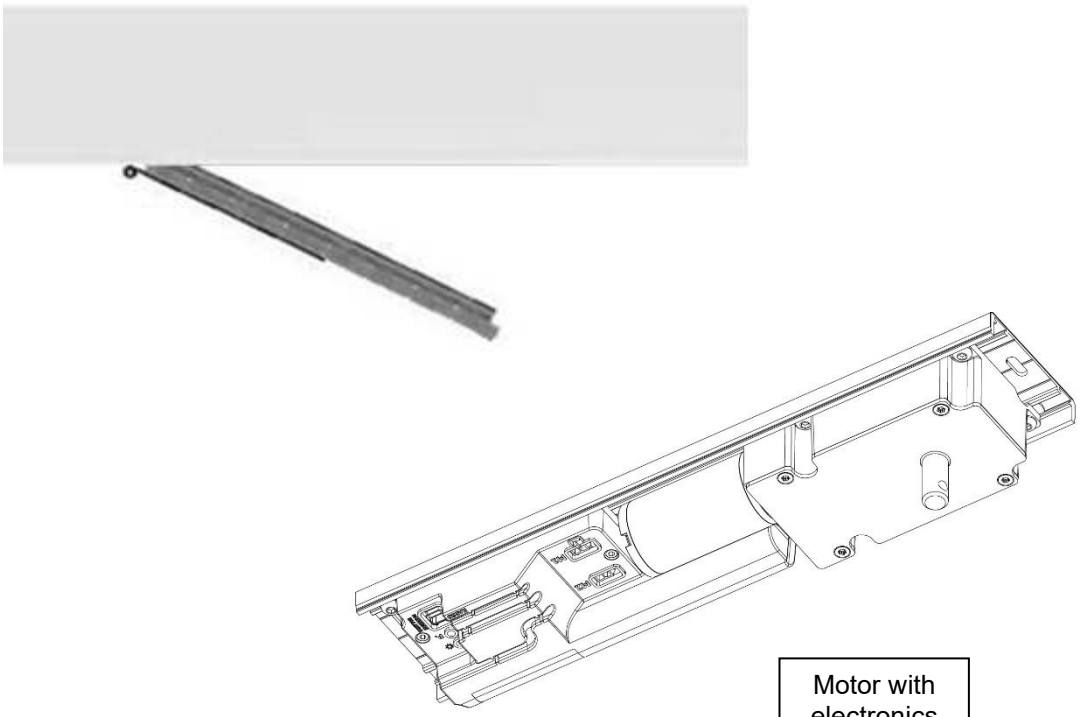
Using the remote control and Master Mode (see Section 7.2 “Master Mode”), reverse the rotation direction of the motors **and swap motors M1 and M2**.

3.3 INSTALLATION OF SINGLE-LEAF MOTOR

3.3.1 PREPARATION

Motor identification

As standard, the WIBAT LINTEAU Solar is configured for shutters with a hinge on the left (viewed from the outside), as shown in the figure below.
The motor with electronic control unit must be installed on this side, i.e., on the left when viewed from the outside.



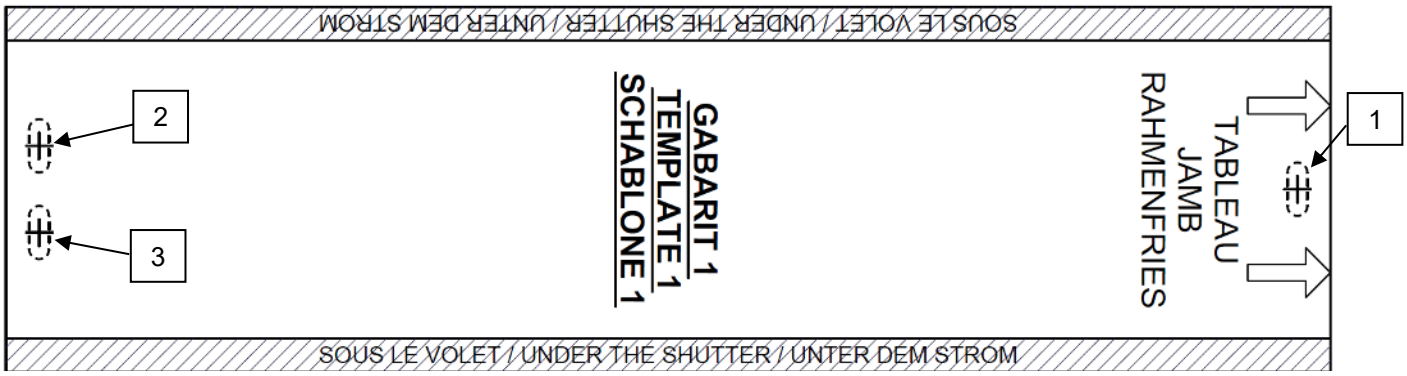
Motor with electronics

Note: If the shutter hinge is on the right (viewed from the outside), the motor's operating direction must be reversed.
Using the remote control and Master Mode (see Section 7.2 "Master Mode"), reverse the rotation direction of the motor.

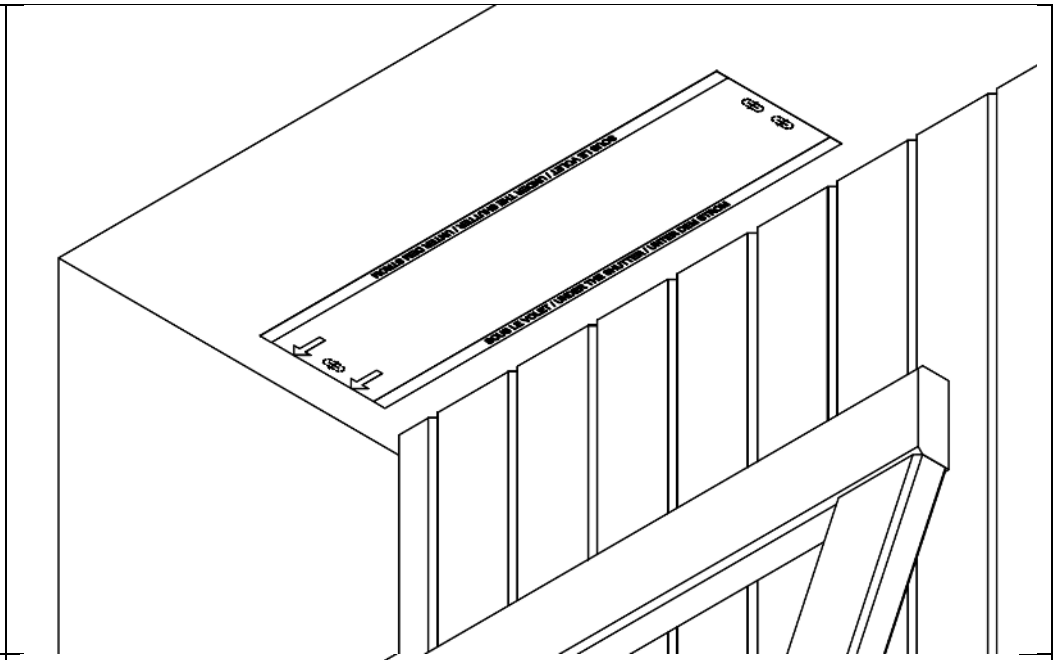
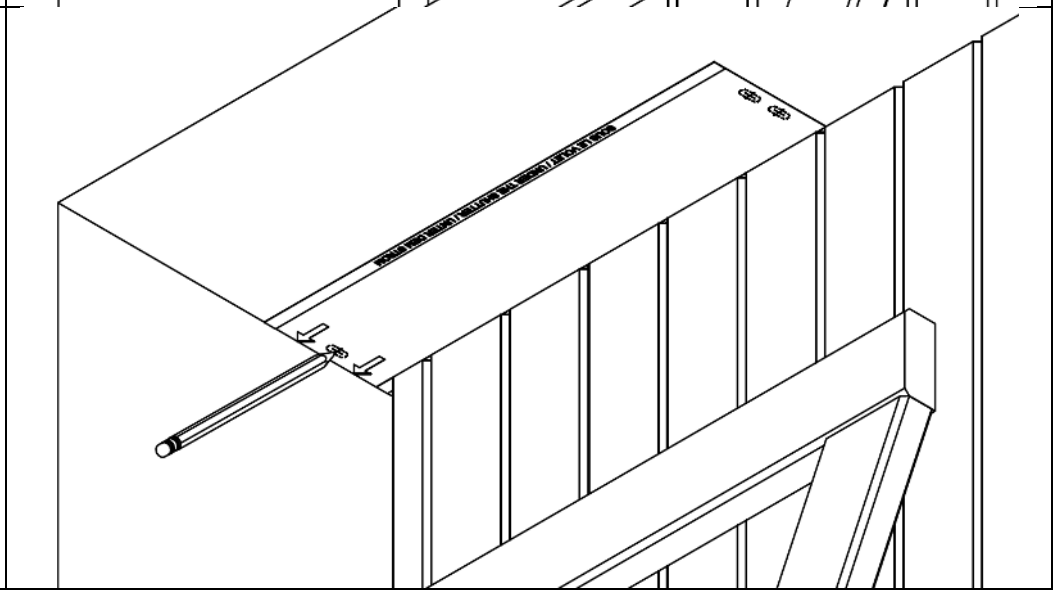
3.3.2 INSTALLATION OF 1-LEAF MOTOR, LOWER BAY AT 580 MM

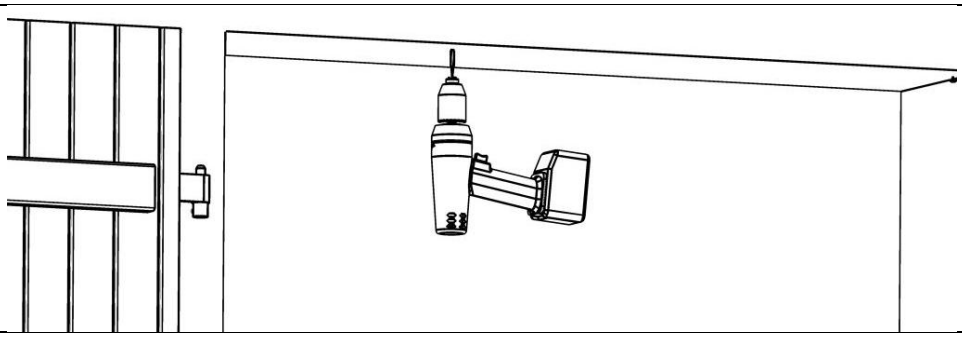
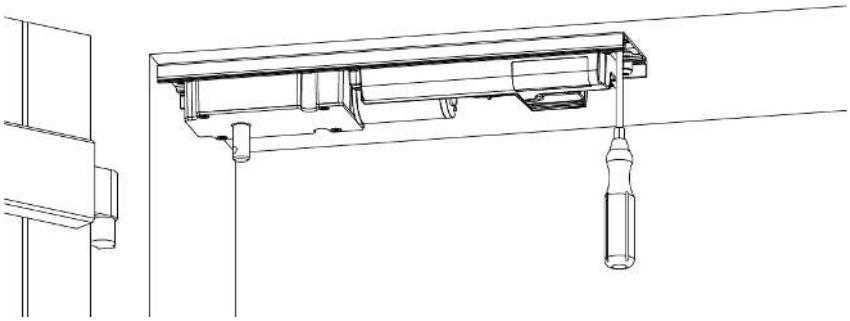
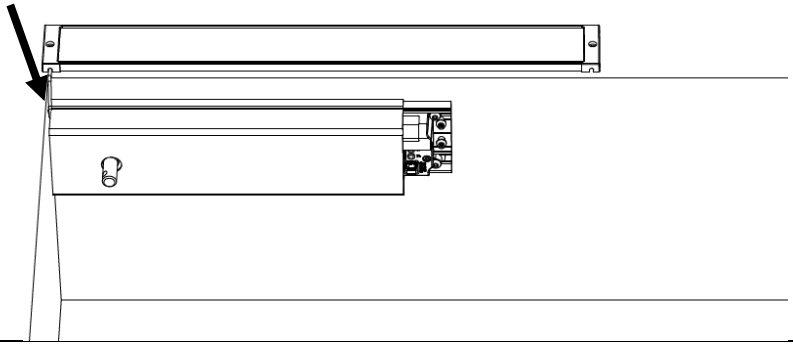
Use of the drilling template

Markings 1, 2, and 3: Drill holes for the motor profiles on the left or right side.



Installation

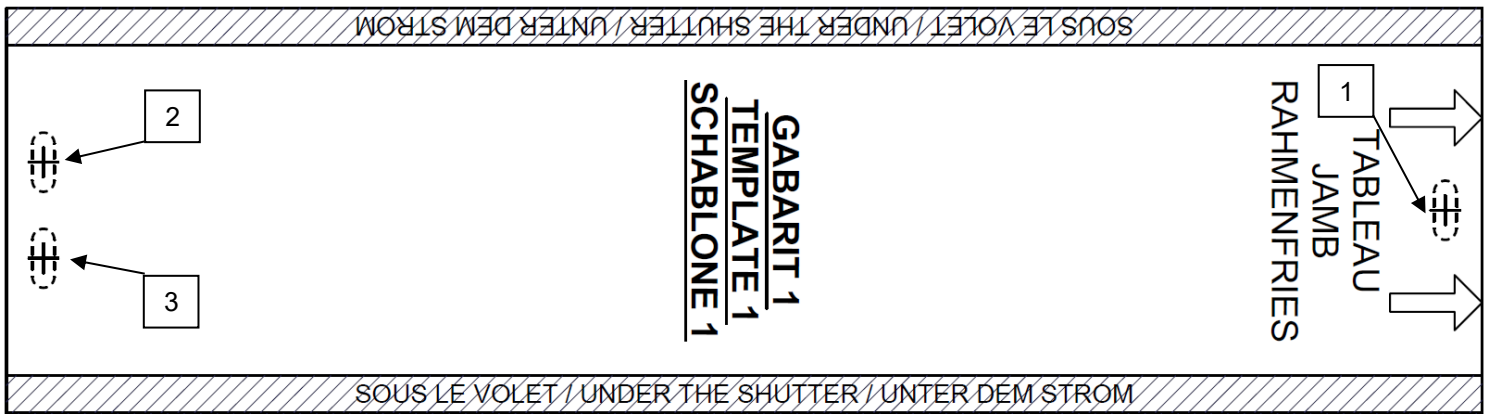
Insert and align the template on the shutter and place it against the wall.	
Once positioned, mark drilling points 1, 2 and 3.	

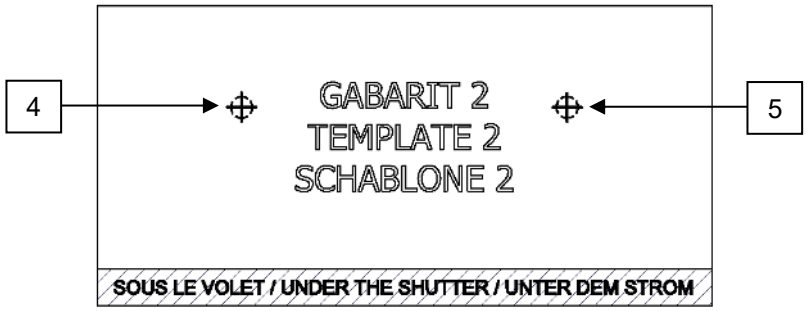
Drill Ø 6 mm holes and insert the wall plugs.	
Secure the motor mounting plates without fully tightening the screws.	
Secure the motor cover. **Caution:** When installing the cover, make sure not to pinch the solar panel cable.	

3.3.3 INSTALLATION OF 1-LEAF MOTOR, UPPER BAY AT 580 MM

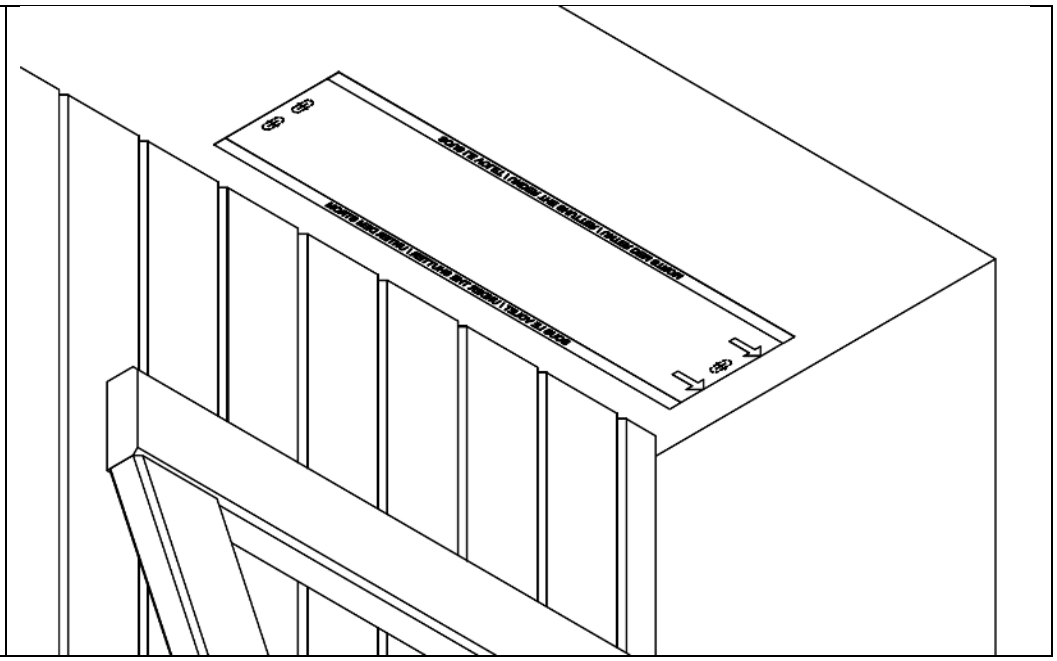
Use of the drilling template

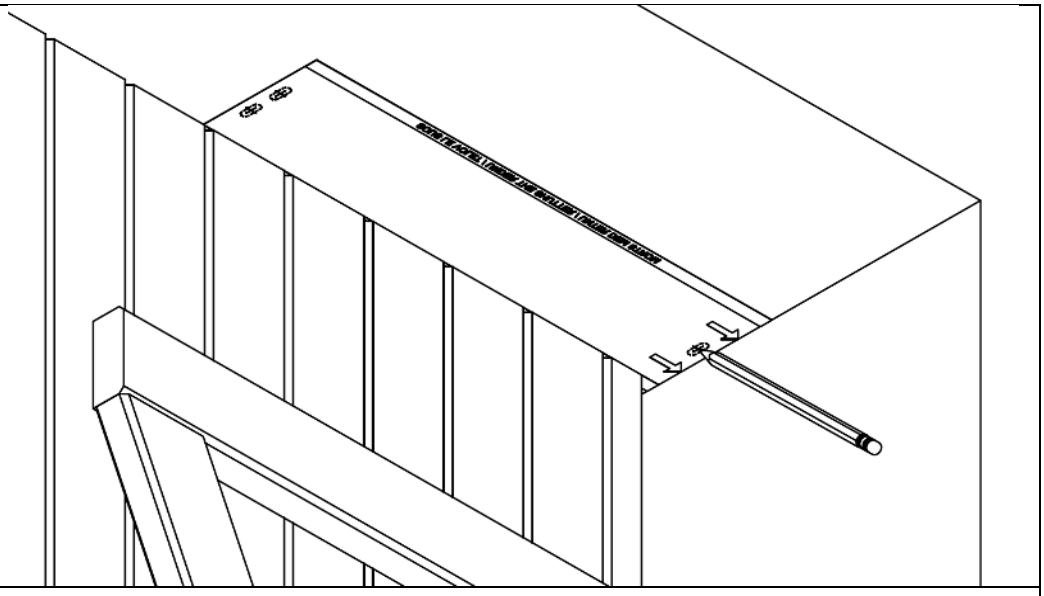
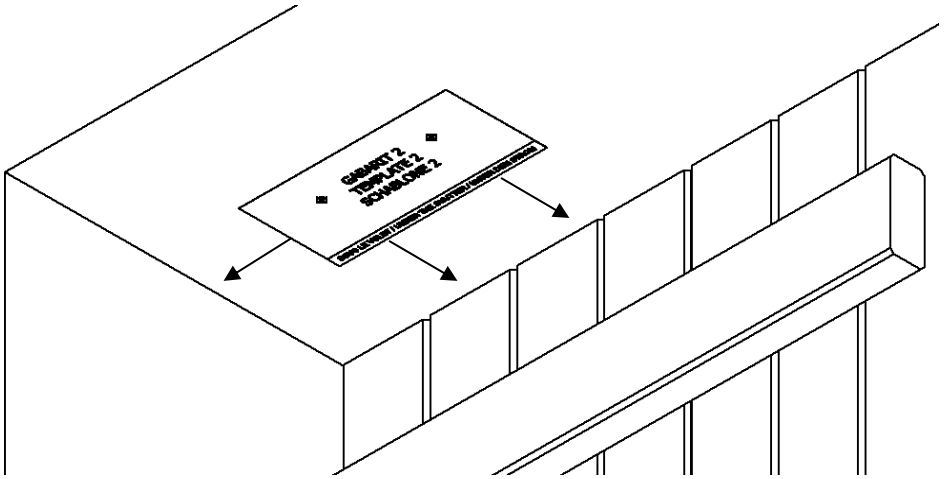
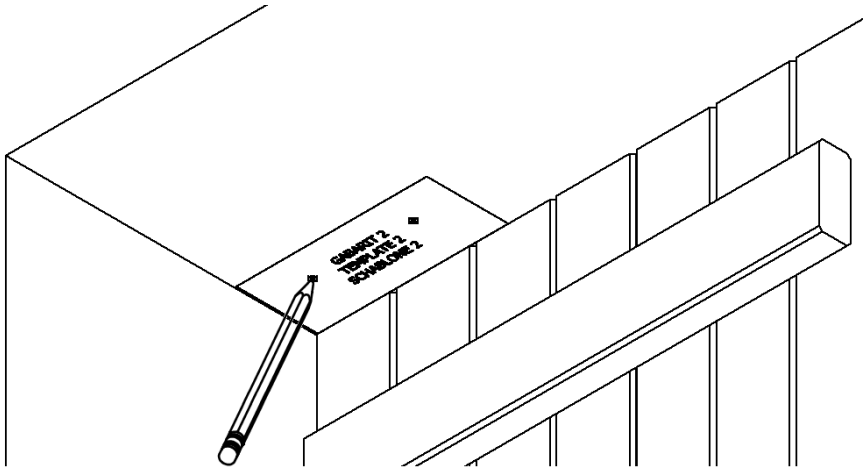
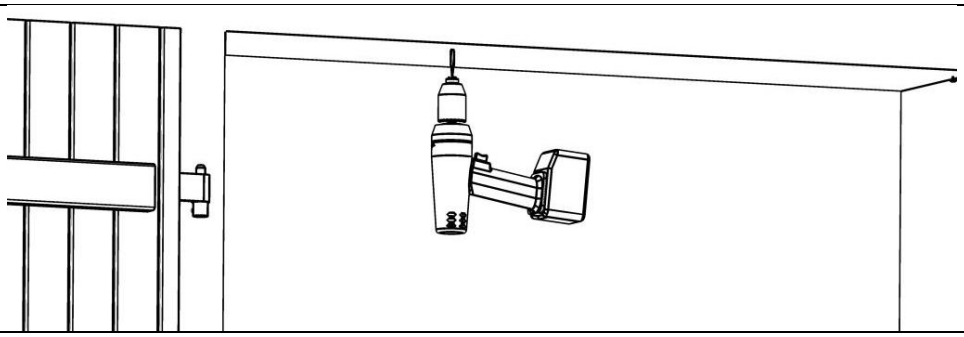
Markings 1, 2, and 3: Drill holes for the motor profiles on the left or right side.
Extension on the left or right, markings 4 and 5: Drill holes for the extension.

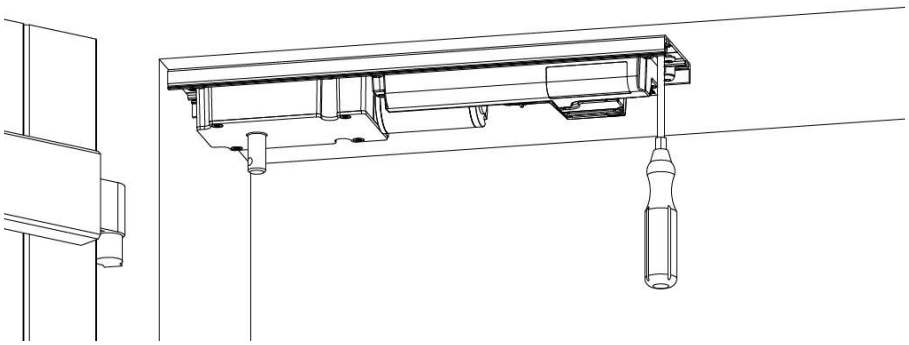
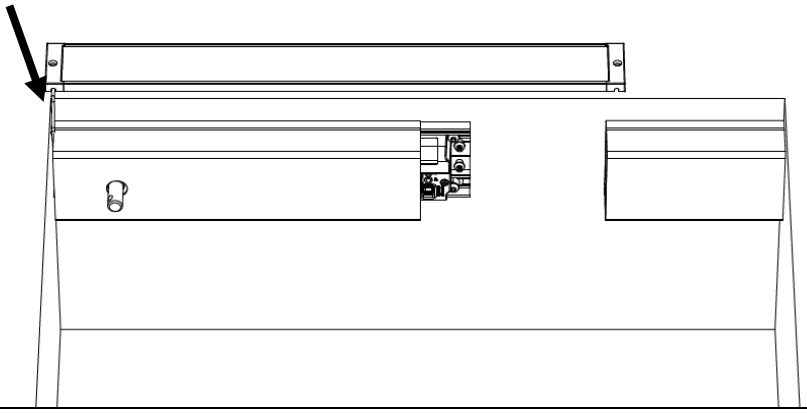




Installation

Insert and align the template on the shutter and place it against the wall.	

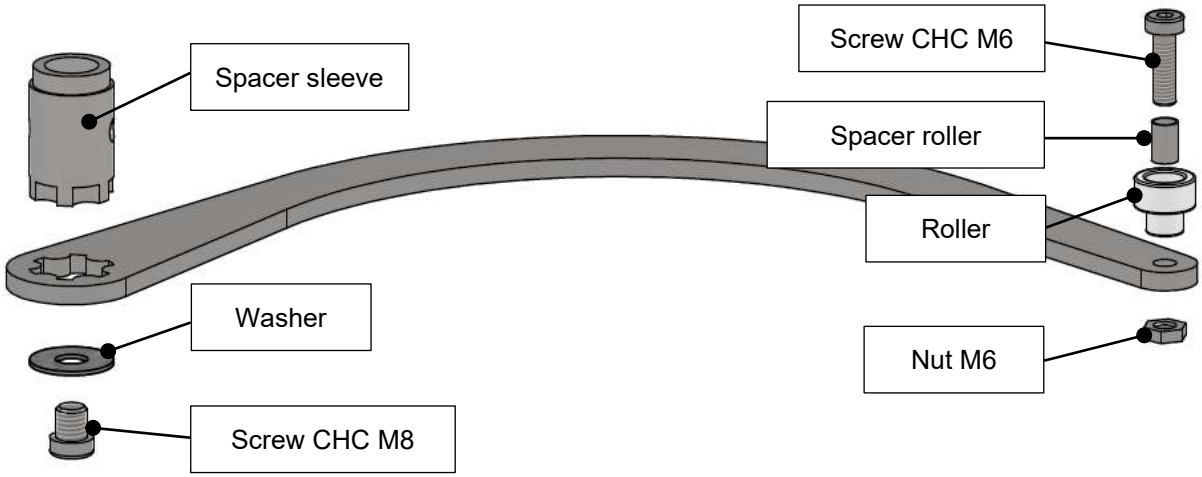
Once positioned, mark drilling points 1, 2 and 3.	
Insert and align template 2 on the shutter and place it against the wall.	
Mark the extension holes according to the position you have defined. Extension on the left or right: Markings 4 and 5: Drill holes for the extension.	
Repeat the same procedure on the second shutter. Drill Ø 6 mm holes and insert the wall plugs.	

Secure the mounting plate with the motor without fully tightening the screws. Then secure the second mounting plate alone. Check the alignment with M1 before fully tightening all screws.	
Secure the motor cover. Caution: When installing the covers, ensure that the solar panel cable is not pinched. Clip the small base cover into place.	

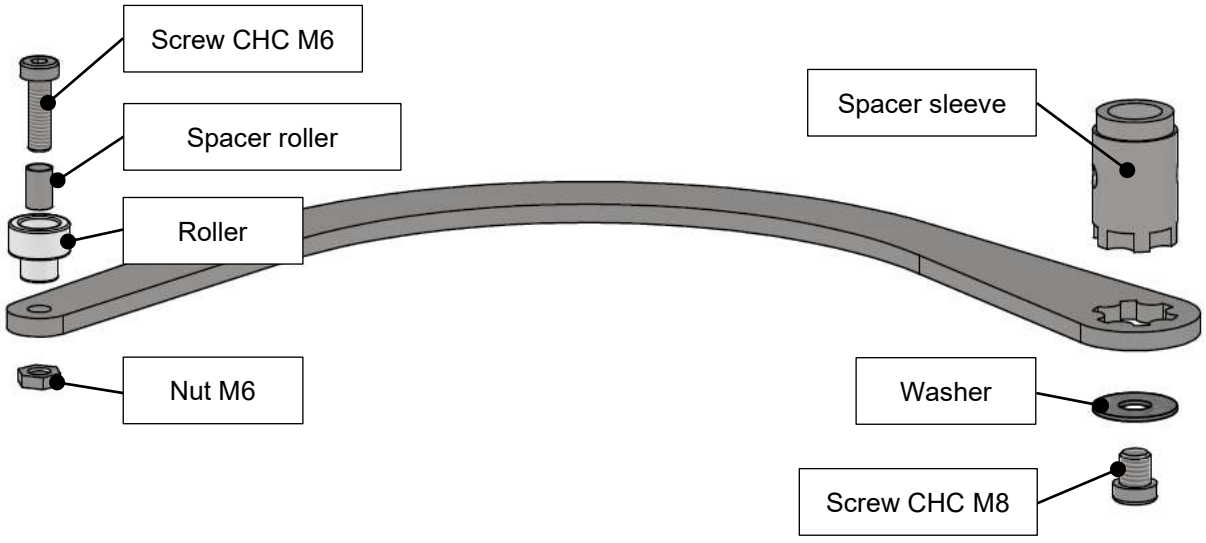
3.4 ASSEMBLY AND USE OF DISENGAGEABLE ARMS

Note: The arms supplied with the product are disengageable and therefore interchangeable. The same arm can be used on either the right or left side; simply reverse the flat side of the arm.

- **Arm installation for a LEFT-HAND SHUTTER (viewed from the outside) :**



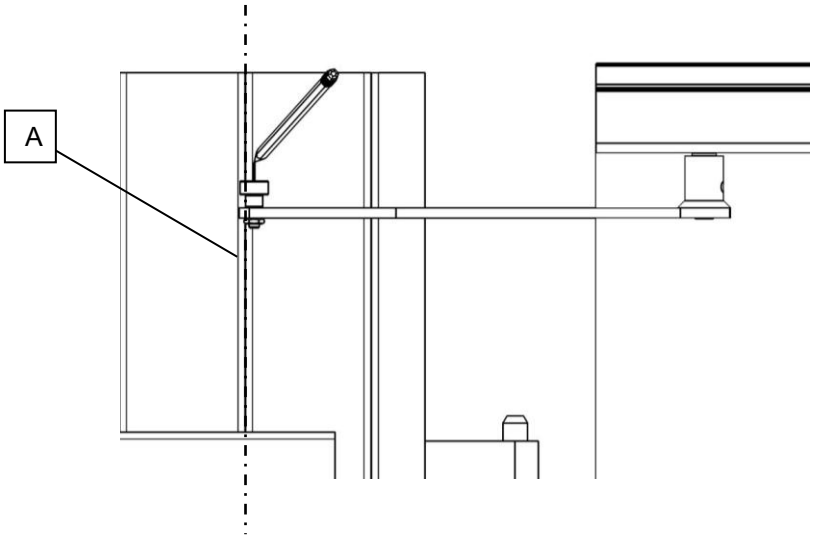
- **Arm installation for a RIGHT-HAND SHUTTER (viewed from the outside) :**



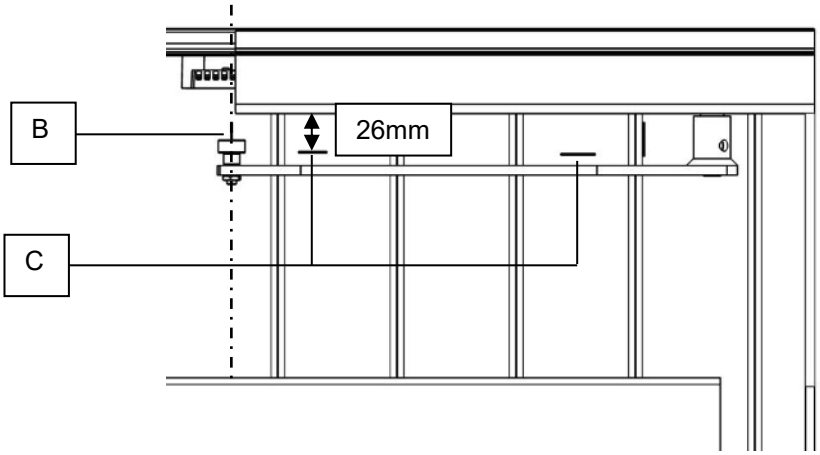
3.5 FITTING THE TRACKS

NB : for shutters less than 480mm, cut the rail to length.

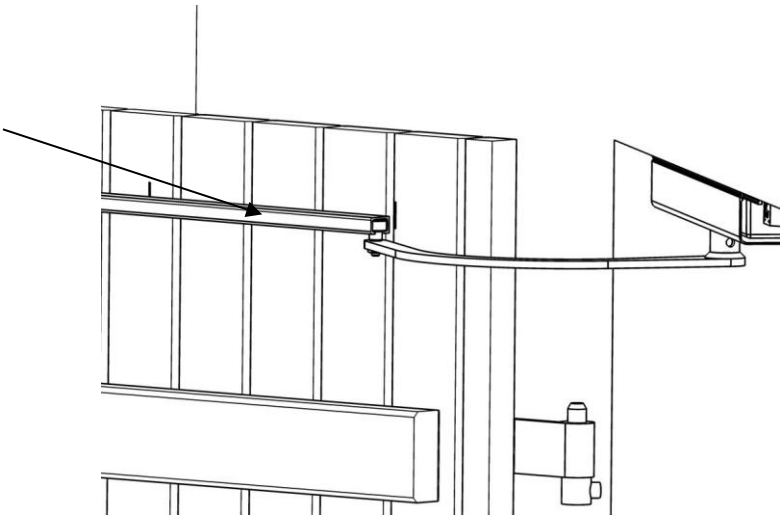
Mark the A position of the roller center with the **shutter open**.



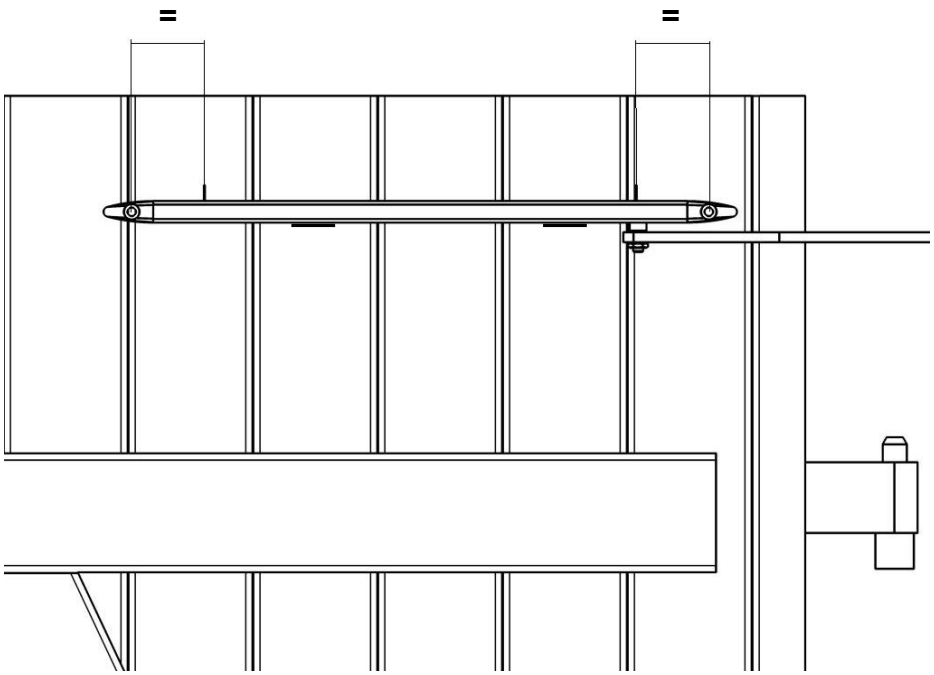
Mark the B position of the roller center with the **shutter close.**
Put 2 marks, name C, at 26mm under the cover to help you to align the track.



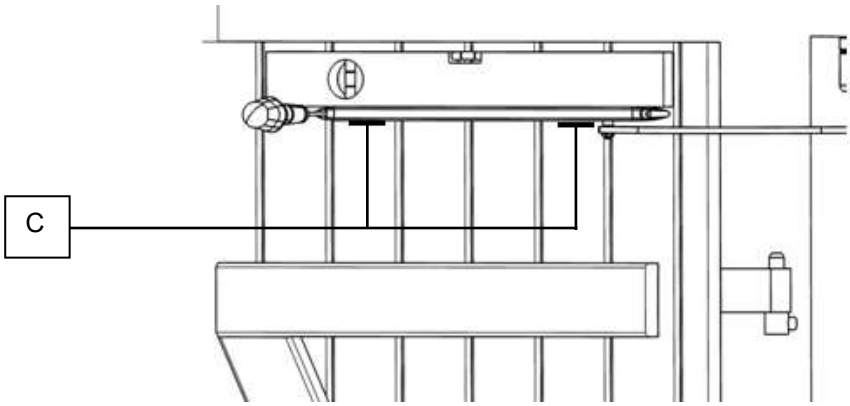
Slide the roller in the track.



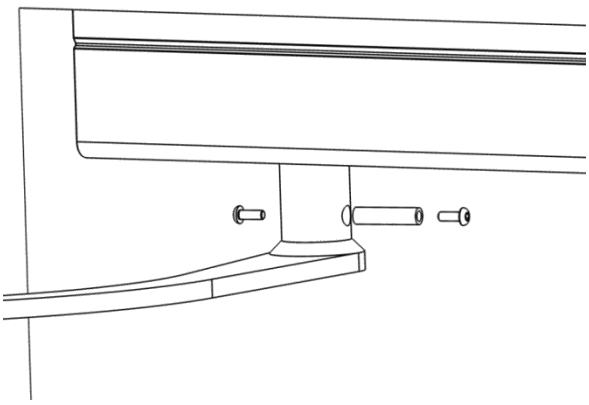
Mount the 2 end pieces and bring the shutter close to the track.
Position the track in such a way that the distance between the marks and the screw holes is the same on either side.



Align the bottom of the rail with the two C marks located 26 mm from the cover, level it, then tighten the screws.



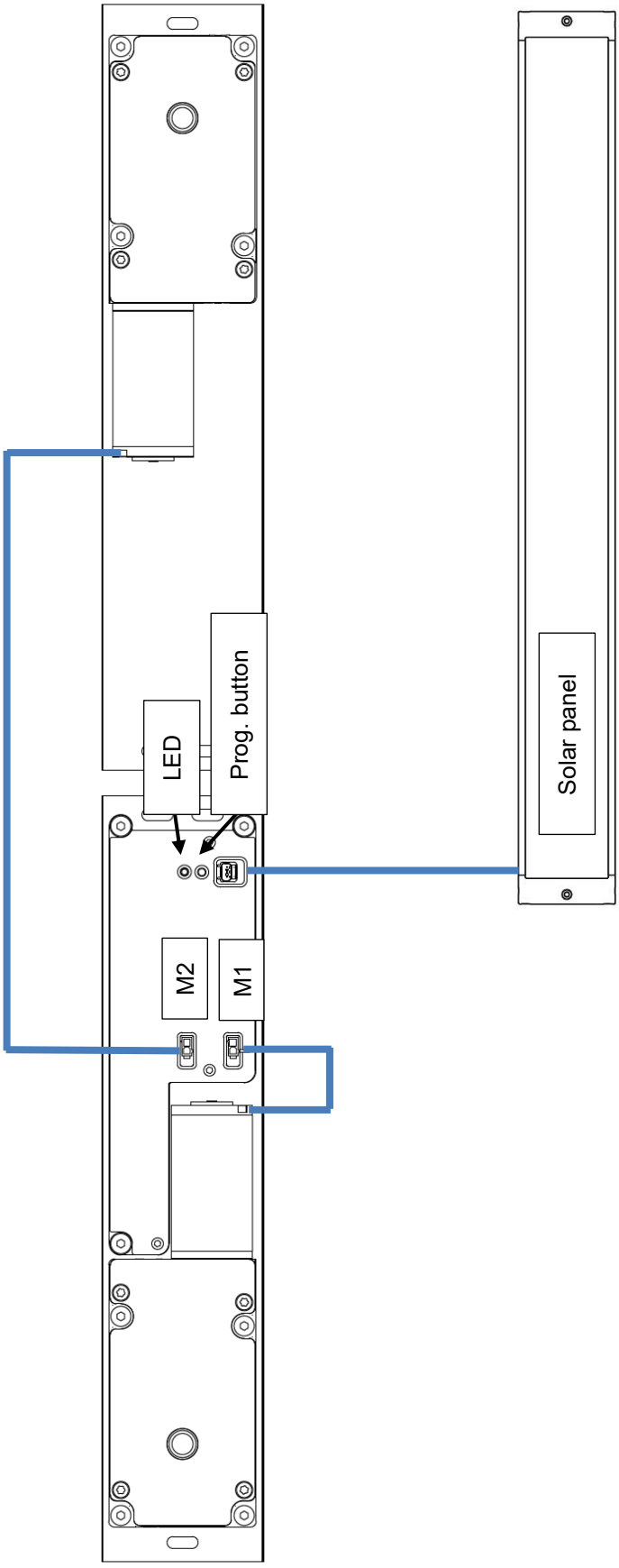
Check that the shutter rotates smoothly.
Pivot the shutter to align the hole in the arm with the hinge hole.
Secure the sleeve to the arm.



Note: The sleeve is a safety component. In the event of excessive force applied to the shutter, it is designed to break in order to prevent damage to the motorization system.

Repeat these steps for the second shutter (for double-leaf installation).

4. ELECTRICAL CONNECTION DIAGRAM



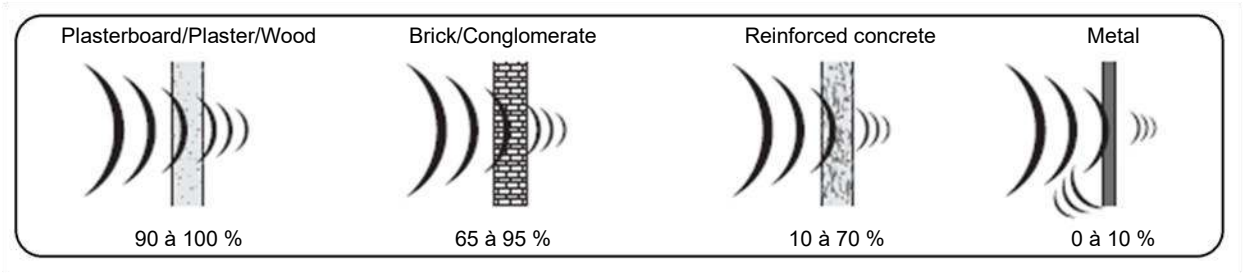
Note: It is possible to connect motor M2 and the solar panel using extension cables.
A maximum of 2 extensions can be used for the motor and 3 extensions for the solar panel.

5. RADIO PAIRING PROCEDURE

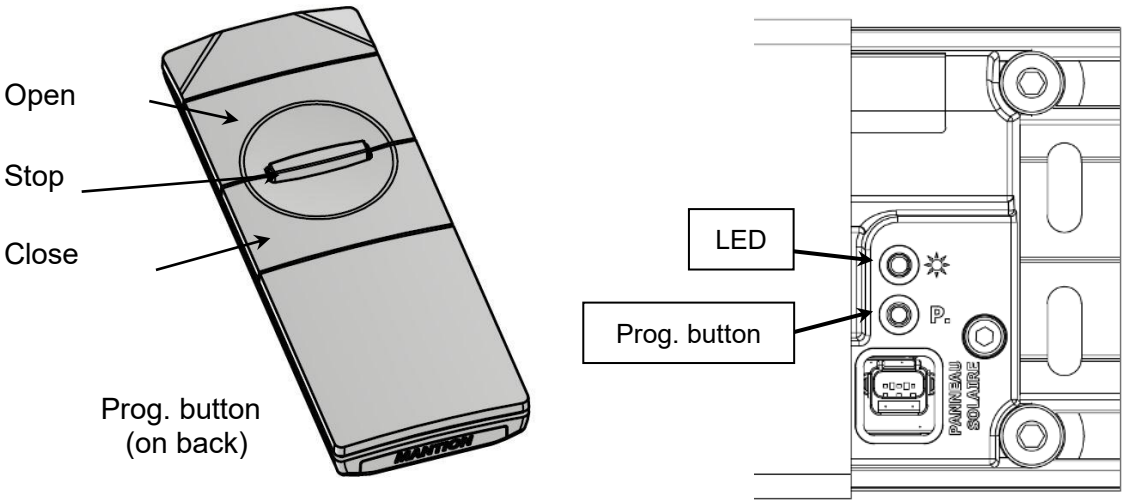
5.1 RADIO SPECIFICATION

Frequency: 433.92 MHz
Transmitters range: approx: 70 metres line-of-sight *

* Propagation of radio waves varies according to the medium they traverse. The range of the radio waves will vary according to the type of construction:



5.2 SETUP



5.3 PAIRING A REMOTE CONTROL

1. Press and hold the programming button on the WIBAT Linteau Solar for about 5 seconds.
   The LED lights up steadily (the control board is in “radio pairing mode”).
   The unit beeps once.
2. When the LED is steady, press the programming button on the back of the remote control.
   The LED flashes rapidly, then turns off.
   The unit beeps once: the remote control is paired.

Note: It is possible to pair several WIBAT LINTEAU Solar units with the same transmitter, as well as several transmitters with a single WIBAT LINTEAU Solar. To do this, simply repeat the steps above. A maximum of 12 remote controls can be paired with one WIBAT Linteau Solar.

5.4 DELETING A REMOTE CONTROL

1. Press and hold the programming button on the WIBAT Linteau Solar for about 5 seconds.
   The LED lights up steadily (control board in “radio pairing mode”).
   The unit beeps once.
2. Press the programming button on the WIBAT Linteau Solar briefly.
   The LED starts flashing.
   The unit beeps regularly every second.
3. Press the programming button on the back of the remote control briefly.
   The LED flashes twice.
   The unit beeps once.

5.5 FACTORY RESET

1. Press and hold the programming button on the WIBAT Linteau Solar for about 5 seconds.
   The LED lights up steadily (control board in “radio pairing mode”).
   The unit beeps once.
2. Press and hold the programming button on the WIBAT Linteau Solar again for about 5 seconds.
   The LED flashes 5 times.
   The unit beeps once.

The unit is reset to factory settings.
All remote controls associated with the product are deleted, and the end-stop learnings are erased.
It is necessary to perform the end-stop learning procedure again after a factory reset.

Additional Information

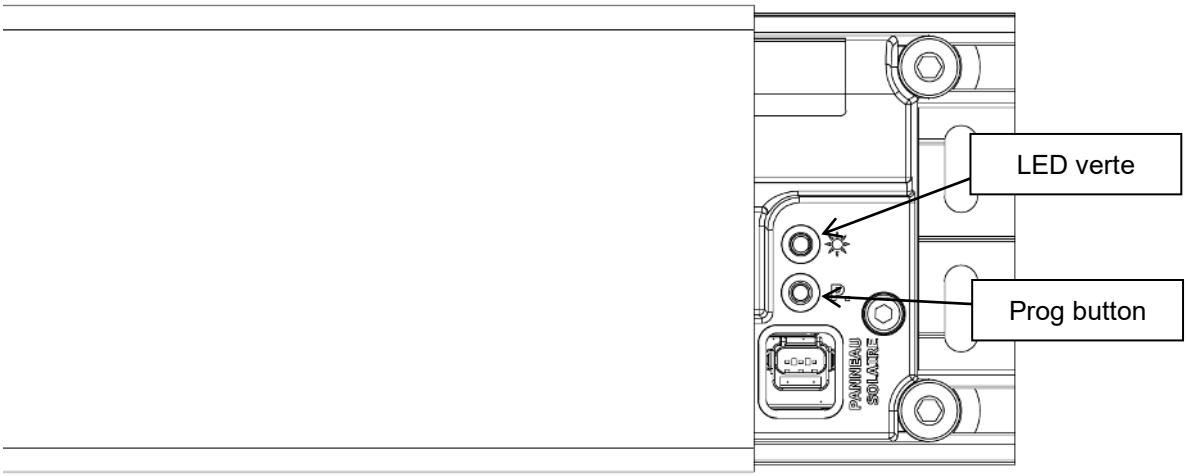
When the product is waiting for a radio identification code (steady light – pairing – or slow flashing – deletion), any inactivity for about 20 seconds will turn off the LED. The product then returns to normal operation, and the procedure must be restarted from the beginning.
When the product is in “radio deletion mode,” a brief press on the programming button will turn off the LED, returning the WIBAT Linteau Solar to normal operating mode.

6. COMMISSIONING

End-Stop Learning

The motors operate at low speed until the learning procedure is completed.
Two audible beeps indicate operation without learning.
The learning cycle is mandatory for the standard and proper functioning of the product.

Starting the learning cycle :



To start the learning cycle, briefly press the programming button using a small screwdriver.
The shutters will open fully and then close.
During closing, the second leaf starts with a 6-second delay compared to the first leaf.
When the shutters are closed, the system is operational.
One audible beep confirms successful end-stop learning.

Reversing Motor Direction or Position :
If, after completing the learning procedure, the shutters are in the open position or did not open in the correct order, it is possible to reverse the motor direction or swap the motor positions using the “Master Mode” of the radio remote paired with the product. (See Ch. 8.2 Master Mode)

Shutter operation

Opening the shutter	Press the **OPEN** button on the remote control
Closing the shutter	Press the **CLOSE** button on the remote control
Stopping the shutters in an intermediate position.	Press the **STOP** button on the remote control

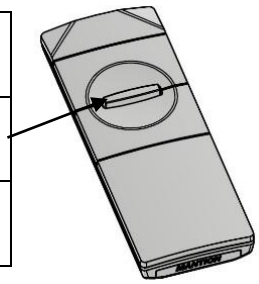
The WIBAT LINTEAU Solar product is equipped with an overload protection system using current measurement. In the event of an obstacle during opening or closing, the shutter reverses its direction and returns to its initial position.

7. USING THE RADIO REMOTE CONTROL

7.1 STANDARD OPERATION OF THE REMOTE CONTROL

The remote control is equipped with 3 buttons dedicated to operating the motorization.

Opening the shutters	Press the **OPEN** button on the remote control
Stopping the shutters in an intermediate position	Press the **STOP** button on the remote control
Closing the shutters	Press the **CLOSE** button on the remote control



7.2 MASTER MODE

The remote control is equipped with a “Master” mode, allowing certain adjustments to be made directly from the remote without needing to access the motor’s programming button.*

7.2.1 – LEVEL 1 : PAIRING A NEW RADIO REMOTE AND ENDS-STOP LEARNING

Briefly press the programming button on the remote control.
The motor LED flashes (control board in “MASTER LEVEL 1” mode).
The unit beeps continuously.

Adding a new radio remote control :
Pressing the **OPEN** button on the remote control puts the unit into radio pairing mode.
The LED lights steadily until a new remote is added (time limit: 20 seconds).
Press the programming button on the new remote to be paired.
The LED flashes twice rapidly, then turns off.
The unit beeps once: the new remote is paired.

End-stop learning :
Pressing the **CLOSE** button on the remote control starts the end-stop learning cycle.
The shutters open fully and then close, with the LED flashing throughout the cycle.
During closing, the second leaf starts with a 6-second delay compared to the first leaf.
When the shutters are closed (and the LED stops flashing), the system is operational again.

7.2.2 – LEVEL 2 : MOTOR CYCLE ADJUSTMENT

Briefly press the programming button on the remote control.
The motor LED flashes (control board in “MASTER LEVEL 1” mode).
The unit beeps continuously.
Briefly press the STOP button on the remote control.
The motor LED flashes in double rapid blinks (control board in “MASTER LEVEL 2” mode).
The unit emits continuous double beeps.

Reverse rotation direction :
Pressing the **OPEN** button on the remote control changes the rotation direction of the motors.
The motor LED turns off.
The unit beeps once.
The motors’ opening and closing directions are reversed.

* *All remote controls already paired with the product can be used in Master Mode*

Swapping Motor M1 and Motor M2 :

Pressing the **CLOSE** button on the remote control swaps the product's motors.

The motor LED turns off.

The unit beeps once.

Motors M1 and M2 are swapped.

It is necessary to restart the end-stop learning cycle to recalibrate the product.

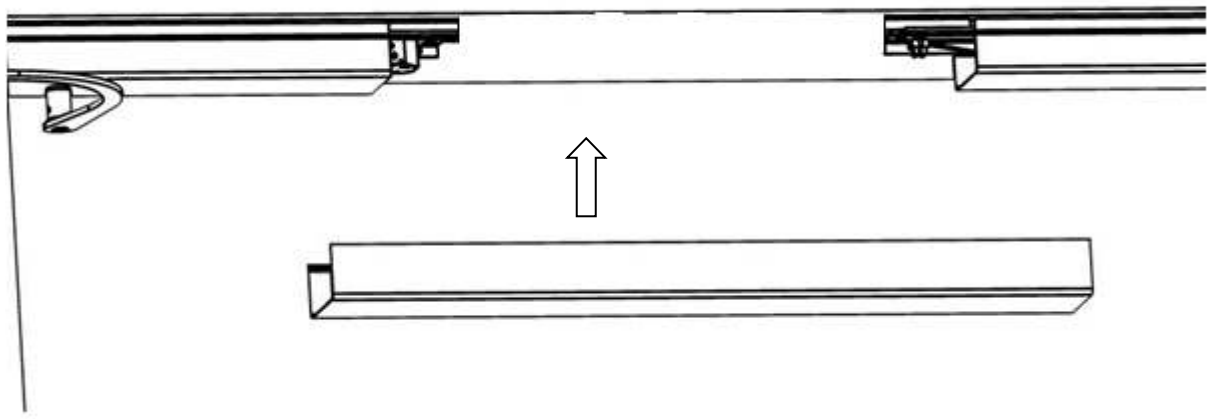
Note

When the product is waiting for a command in "Master" mode, any inactivity of about 20 seconds will exit this mode: the product then returns to normal operation.

8. FINAL ASSEMBLY

After verifying the proper operation of the product, install the finishing cover.

The cover must be centered between the two motors.



9. DIAGNOSTIQUE SONORE

Number of beeps	Behavior / Cause
1 short beep : Confirmation	Powering on the product Pressing the motor programming button (long or short) End-stop learning confirmed Remote control correctly (un)paired Motor direction reversal confirmed Motor position reversal confirmed Factory reset
2 short beeps : Problem	Command executed before learning is completed Command when battery is low Error during remote pairing (already paired or maximum number of remotes reached).
3 short beeps	Command while battery is very low (operation impossible)
1 long beeps	Obstacle on the shutter travel.
2 long beep	Motor 1 not detected.
1 continuous beep	Waiting for remote deletion; Master Mode Level 1
2 continuous beeps	Master Mode Level 2.

10. LEVEL 1 DIAGNOSTICS

Symptoms	Probable causes	Solutions
he motors do not operate	The product is not powered	Check the battery connection and power.
The motors operate at low speed	Incorrect learning	Repeat the learning procedure (see radio pairing procedure).
The motors do not slow down at the end of travel	Incorrect learning	Repeat the learning procedure (see radio pairing procedure).
The shutters do not move during learning	Learning started while shutters are open	Close the shutters and repeat the learning procedure (see manual)
The leaf with overlap closes first	Motor 1 and Motor 2 positions are swapped	Swap Motor 1 and Motor 2 using the remote's Master Mode.
The shutter starts moving but returns to its original position	Presence of an obstacle	Remove the obstacle.
The shutter goes too far when closing	Missing stops	Check for the presence of upper and lower shutter stops.
The motor runs but the shutter does not open (or close)	Coupling sleeve is broken or missing	Reinstall a coupling sleeve..
Motors do not run when opening or closing is commanded	The remote control is faulty	Check that the batteries are not defective (the LED should light up when pressed).
The shutter does not fully open or close	The rail is incorrectly installed	Check the rail installation (see manual).