

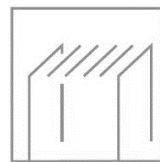
# User manual / Assembly instructions Deponti Louvered Pergola

## Type Pinela

Version: EN –October 2024



[www.deponti.com](http://www.deponti.com)

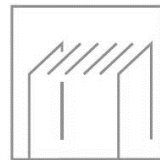


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## KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE USE!

For the duration and the terms and conditions of the warranty we recommend that you contact your supplier. We also refer you to our General Terms and Conditions of Sale and Delivery which are available on request. Depon<sup>4</sup> B.V. accepts no liability for any damage or injury resulting from a failure to carefully follow the instructions in this manual or exercise due caution during transport, assembly, use and maintenance of the pergola. As a result of our policy of continuous product improvement, certain product details may differ from what is described in this manual. For this reason the instructions provided only serve as a guideline for installation of the product this manual describes. This manual has been compiled with the utmost care, but Deponti B.V. cannot be held responsible for any errors in this manual or the consequences thereof. Furthermore, all rights are reserved and no part of this manual may be reproduced in any way whatsoever.



# 1. Introduction

## **Congratulations on the purchase of your Deponti pergola!**

Before you can start enjoying your pergola it must be assembled properly. This manual provides clear instructions for all the steps you must complete for correct assembly of your Deponti pergola. We recommend that you take the time to read the entire manual before you begin the assembly.

Check whether you have received all the necessary parts before you begin assembly. For your safety, follow all the applicable instructions. This also guarantees the safety of the installed roof. If you should have any questions, please feel free to contact your Deponti partner.



This manual should be kept in a safe, dry and shady place. In the event of damage or loss, the user must request a new copy of the manual from the dealer.

# 2. Safety precautions and warnings

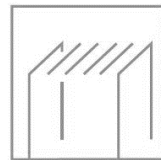


## **Important:**

Please read the safety precautions and warnings before assembling the pergola.

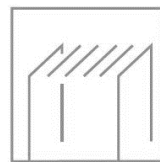
- During assembly, carefully follow the instructions and guidelines as described in this manual. Never change the order of the steps to be performed. If any aspect of the assembly procedure is unclear, please contact your Deponti partner. We reserve the right to make technical changes without written notice.
- We normally recommend that the pergola must be assembled by at least two people (qualified technicians/authorized installers) working together.
- Check the delivery immediately upon receipt. In the event of damage or an incomplete delivery please contact your partner immediately.
- The materials must be stored in a dry, ventilated area, not exposed to direct sunlight.
- Open the packaging carefully. Make sure that you do not damage the product.
- To prevent damage to your pergola, place the parts on a smooth, clean surface. Place the profiles on a flat surface, protected from sun and rain.





## 2. Safety precautions and warnings (continued)

- Adding or removing parts, the use or installation of materials. other than described in this manual, may adversely affect the safety of the pergola and is therefore strongly discouraged!
- Pay attention and be aware of moving parts. Make sure that all power supply is cut off during the assembly.
- Cordon off the assembly location so that others are kept at a distance.
- Always wear the correct protective clothing (work gloves, dust mask, safety glasses, shoes with non-slip soles, etc.) during installation or servicing.
- Mount the system against a firm, flat wall and on a flat and stable foundation. Ensure that the wall and the ground are clean and dry.
- **Never** step or walk on the panel system.
- You must maintain and clean your pergola at least once a year. During this yearly maintenance make sure all fasteners are properly tightened.
- Dispose the product in accordance with local laws and regulations.
- It is forbidden to tamper with the bioclimatic pergola system.
- When safety regulations and instructions are not followed correctly, Deponti B.V. will not accept responsibility for damage(s) and injuries.



### 3. Product description

The Pinela roof is a bioclimatic pergola system which is a rotatable panel system. The Pinela panels can rotate 120° degree. Also it protects from sun, rain and limited snow loads. The panels are connected to a linear actuator and are operated with the remote control by the motor.

The Pinela is available in the following dimensions;

- Width (mm): 3000 / 3500
- Projection (mm): 3011 / 3539\* / 4067 / 4947 \* only by 3500 mm width!

NOTE: All pillars have a length/height of 350cm and don't have a foot/base plate.

When assembled as a freestanding pergola with additional mounting bracket, the maximum gutter height is 250cm. The extra length of the pillar is to prevent collapsing.

#### Optional additions:

- Perimeter lighting system
- Mounting bracket for pillars

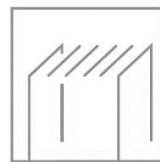
#### Wind resistance:

No of Panel	Projection (cm)	Projection (cm)	Width (cm)	
	<i>(Freestanding)</i>	<i>(Wall installation)</i>	300	350
16	301.1	303.9	7	7
19	353.9	356.7	7	7
22	406.7	409.5	7	7
27	494.7	497.5	7	7

- The values given are according to the Beaufort scale ( 7 Beaufort = 13.9 – 17.1 m/s ≤ 0.18 kN/m<sup>2</sup>).
- Calculated for the Pinela with a front height of 250 cm according to Eurocode EN 1991-1-4 Terrain Category 4.

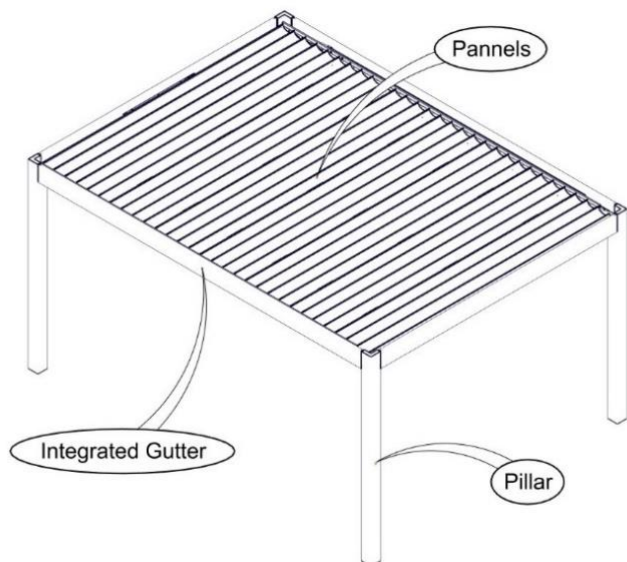
#### Snow load (kg/m<sup>2</sup>):

No of Panel	Projection (cm)	Projection (cm)	Width (cm)	
	<i>(Freestanding)</i>	<i>(Wall installation)</i>	300	350
16	301.1	303.9	125.3	119.0
19	353.9	356.7	103.3	98.0
22	406.7	409.5	81.4	77.0
27	494.7	497.5	44.8	42.0



## 4. Parts Overview

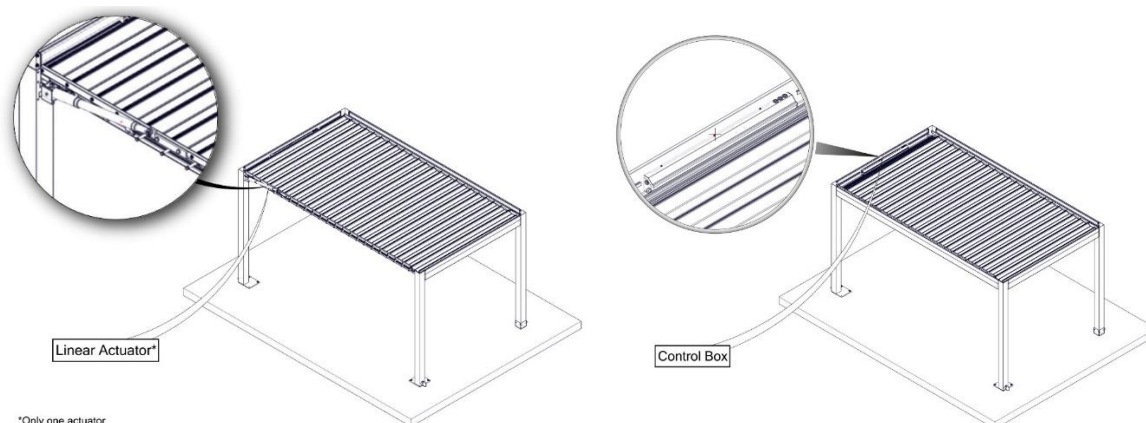
### 4.1 Terminology



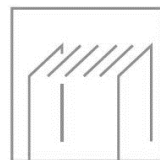
#### Linear Actuator

Linear Actuator provides the movement of the bioclimatic pergola pannels. The linear actuator is located on the lateral Integrated gutter. The linear actuator has to be adjust to exact movement. This must be done during to installation.

The linear actuators works with 24V power. The control box provides power for the linear actuator. The control box works with 230V. The control box is located on rear Integrated gutter. (see below)



\*Only one actuator

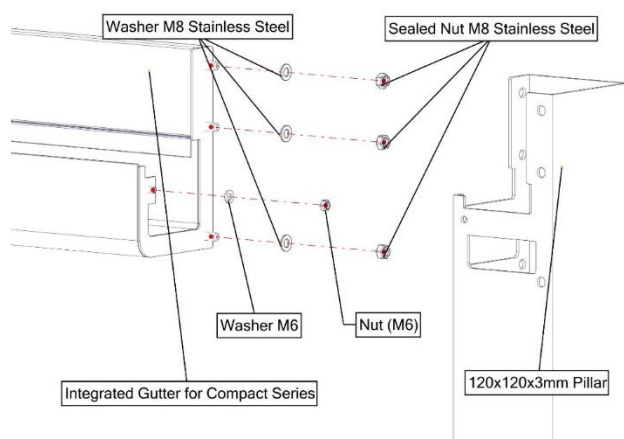


## 4.2 Hardware details

Freestanding model:

Integrated gutter – Pillar connection:

- a. M8 nut stainless steel
- b. Washer for M8x60
- c. M6 nut stainless steel
- d. Washer for M6x45

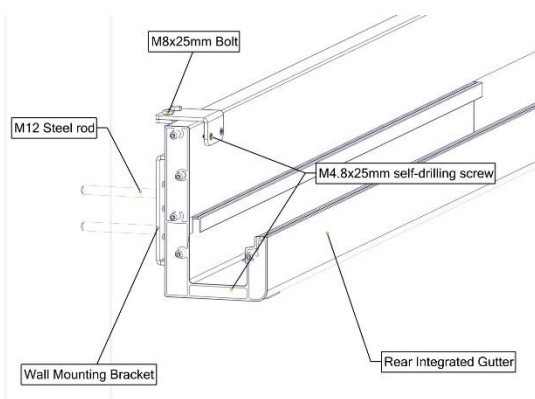
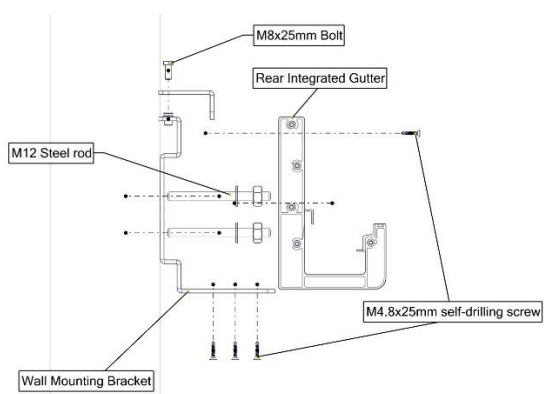


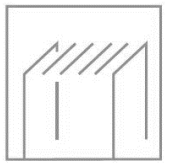
Wall installation

Wall bracket – Integrated Gutter connection:

**NOTE:** Wall mounting hardware not included. Choose the correct hardware for your installation situation

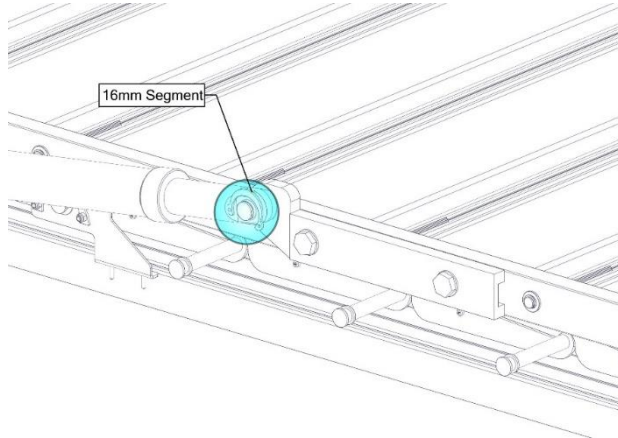
- a. M8x25mm bolt
- b. M4.8x25mm self-drilling screw





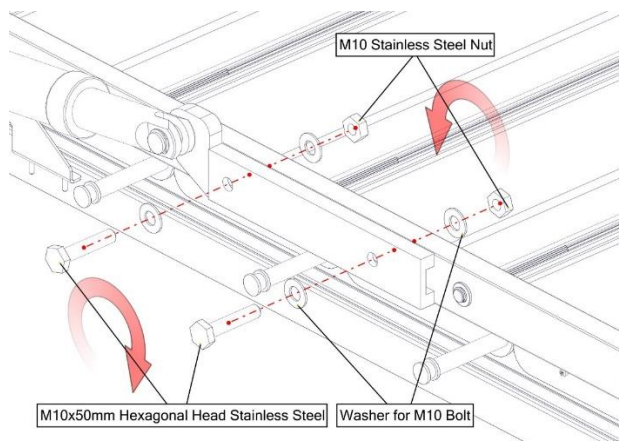
Linear Actuator – Linear Actuator Connector:

- a. 16mm Segment



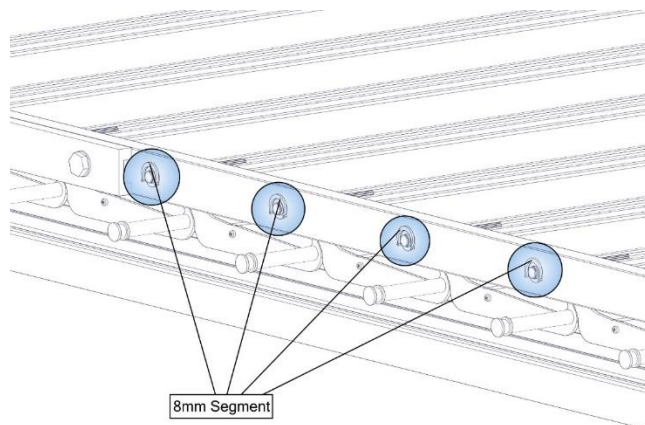
Linear Actuator Connector– 40x20mm Profile connection:

- a. M10x50 hexagonal bolt stainless steel  
 b. M10 washer stainless steel  
 c. M10 nut stainless steel

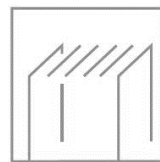


40x20mm Profile – Panel Connection:

- a. 8mm Segment

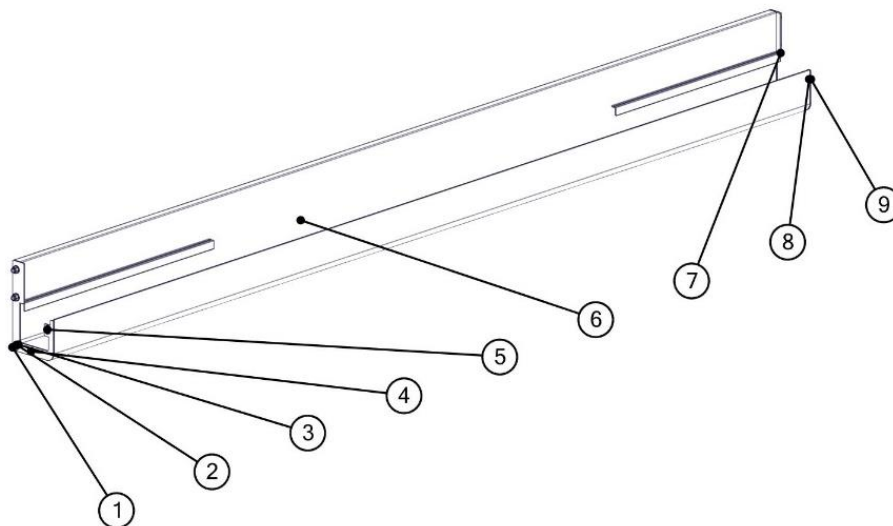






### 4.3 Exploded view

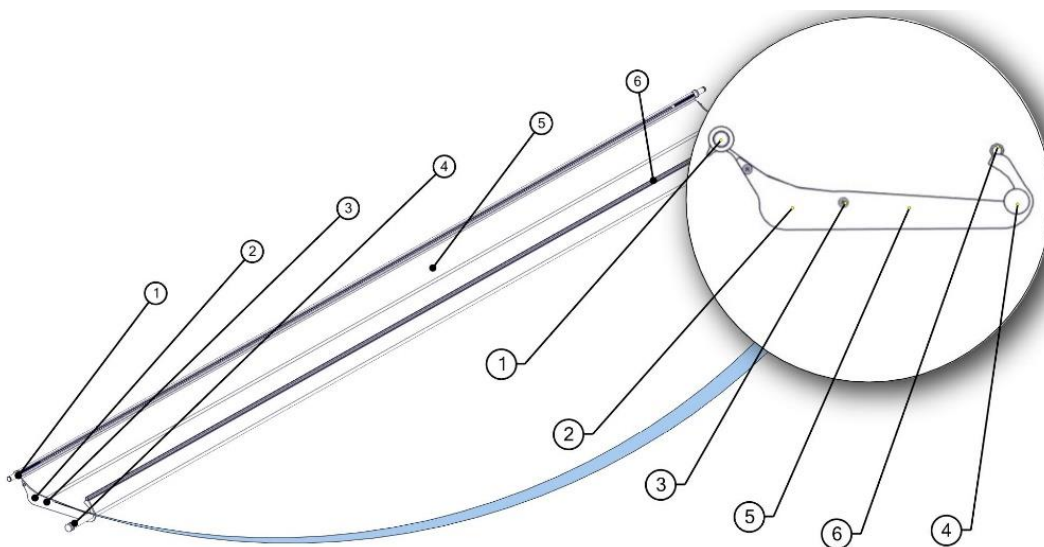
#### Exploded view integrated Gutter



BOM ID	Description	QTY
1	M8x60 stay bolt	6
2	Sealed Nut M8 stainless steel	6
3	Washer M8 stainless steel	6
4	Insulation cover - right	1
5	Washer M6	2

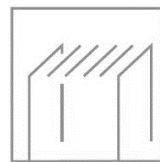
BOM ID	Description	QTY
6	Integrated gutter for Pinela	1
7	Insulation cover - left	1
8	M6x40 stay bolt	2
9	Nut (M6)	2

#### Exploded view panels

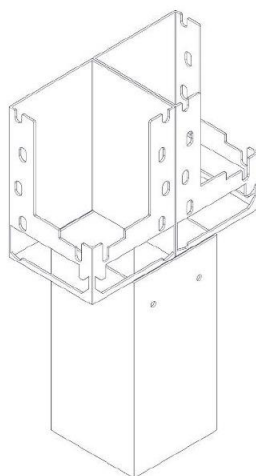
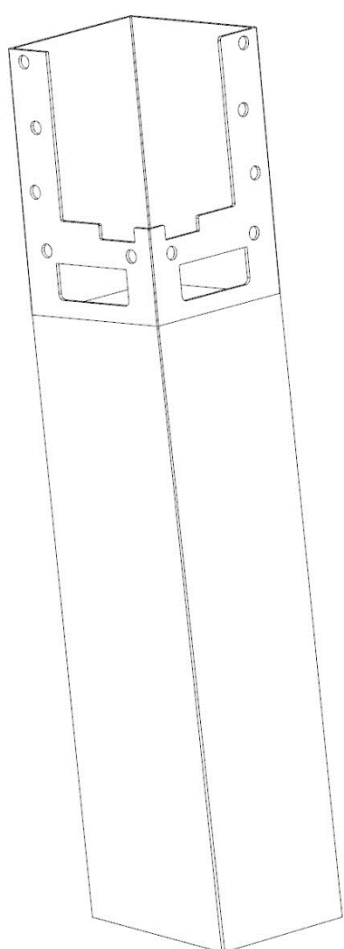


BOM ID	Description	QTY
1	Power pin	2
2	Side cover cap	2
3	Side cover cap screw	4
4	Fixed pin	2

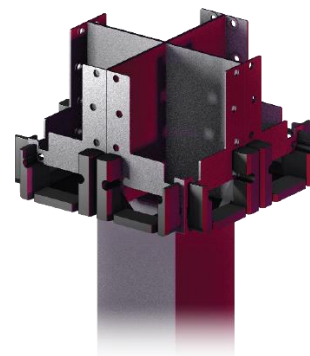
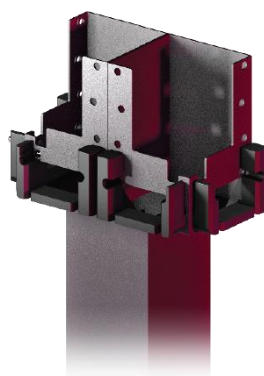
BOM ID	Description	QTY
5	Panel profile for Pinela	1
6	Top Gasket	1



### Exploded view Pillar



Optional a two or four module connector is available.

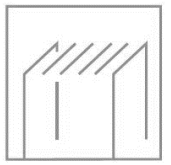


## 4.4 Delivery Inspection

Always carefully check the delivered items against the accompanying delivery note to ensure that the quantity and quality are correct. Any visible defects must be reported in writing within 7 days of delivery.

**Note:**

- Boxes with red label: Electronic parts like Control Unit Box. Remote Controls.
- Boxes with blue label: Metal parts like U Brackets. Mounting brackets. Pillar caps.



## 5. Preperation for assembly

### 5.1 Conditions for assembly

#### Ground & façade

- A good flat stable surface is required for construction of the pergola.
- The location where the system is placed must be construction-ready and free of obstacles (garden furniture, flower boxes, etc.) so installers can perform their work without hindrance.
- Any obstacles, including utility lines (such as power cables, etc.), roots and debris, must have been removed from the ground.
- The façade must be free of sun shades, etc.
- The area where the wall profile will be placed must be firm, even and flat.

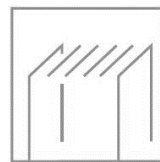
#### Attachments at walls

- Due to expansion of the materials, the pergola may not be placed tightly between two walls; there must be a gap of 1.5 mm per metre of width of the pergola.

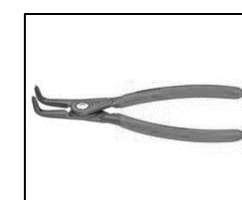
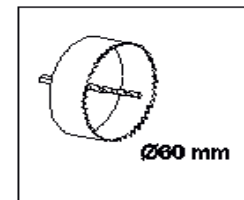
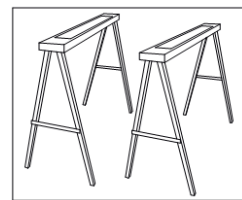
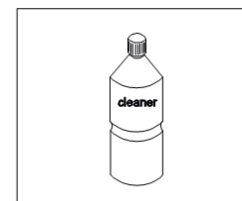
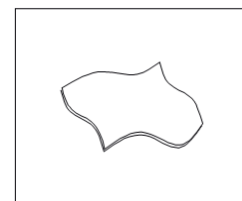
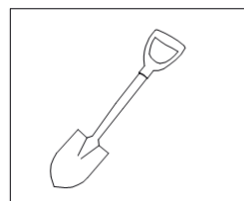
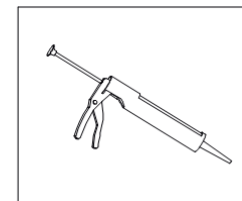
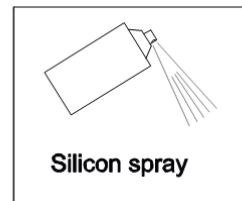
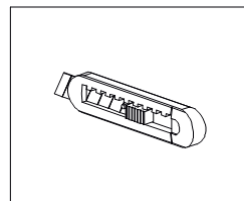
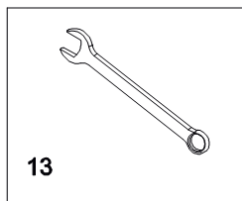
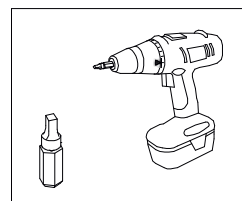
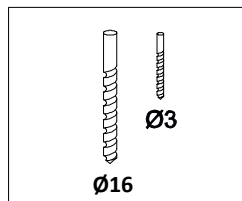
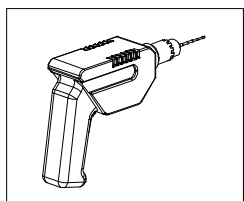
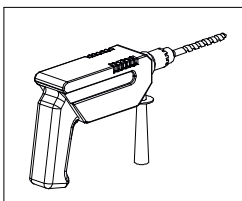
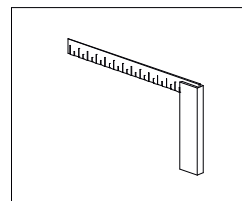
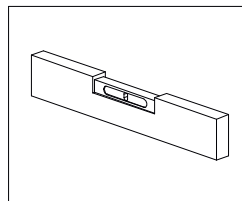
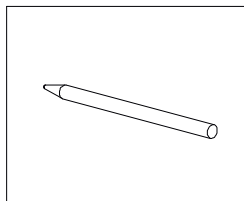
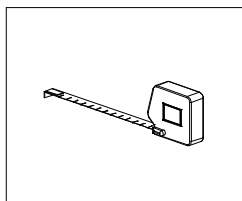
#### Rubber seals

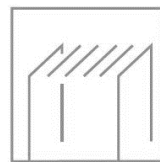
- A Deponti pergola is standard equipped with pre-assembled rubber seals.
- If the rubber seals are deformed, they can be straightened with a little heat, from a hot air heater or hair dryer for example.

**Warranty is void if the Pinela pergola is not assembled and installed in accordance with the instructions.**



## 5.2 Inspection of tools and accessories



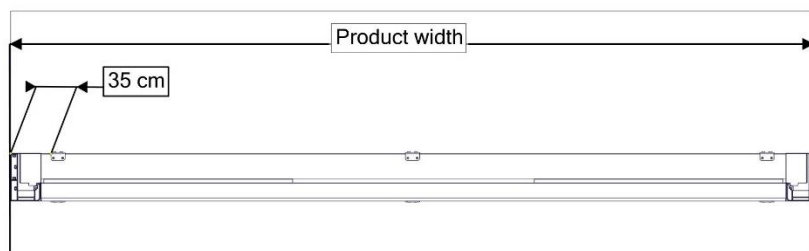


## 6. Assembly

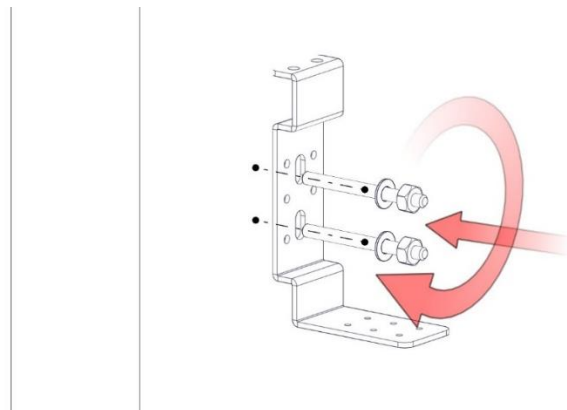
### 6.1 Mounting the wall profile (in case of wall installation)

**Determine which post will be used as the rainwater discharge post. An rainwater discharge hole has to be drilled in this post.**

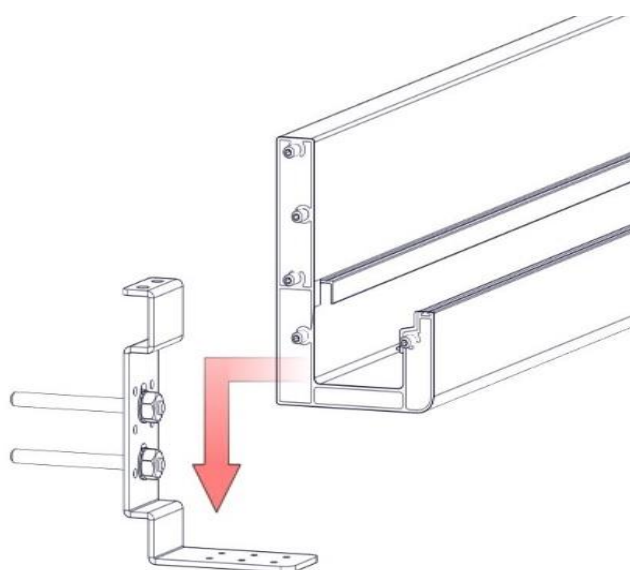
**1.** Define the mounting bracket position on the wall. Decide which way the panels will open, they only open one way.

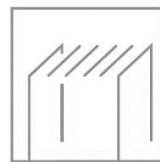


**2.** Fasten the brackets to the wall with the correct hardware for your situation. We suggest a minimum size of M12.

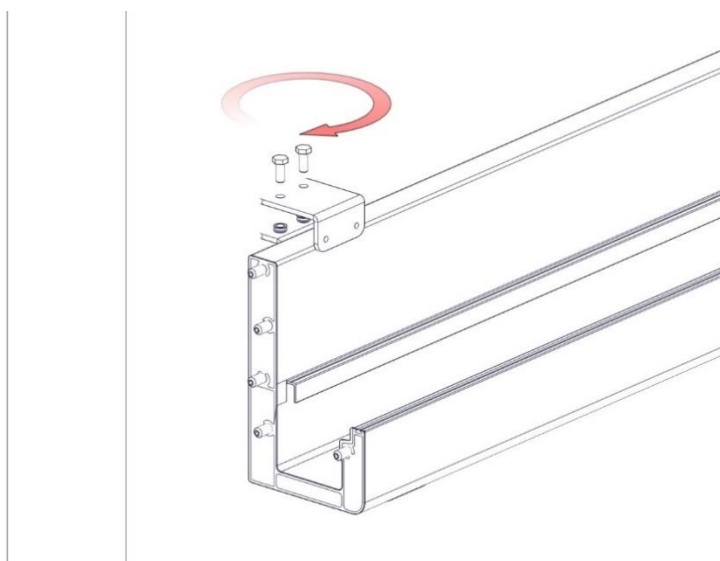


**3.** Place the integrated gutter on the wall mounting bracket

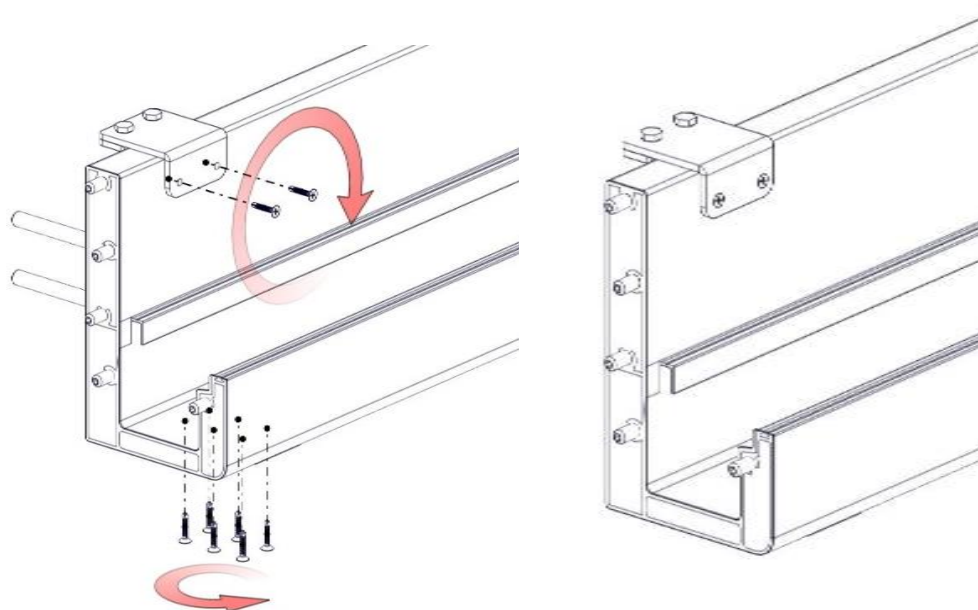


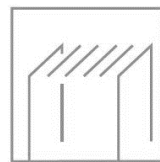


4. Fasten the wall mounting bracket cover on top and tighten it with a M8x25mm bolt.



5. Fix the (M4) self-drilling screw in the integrated gutter and wall mounting bracket.

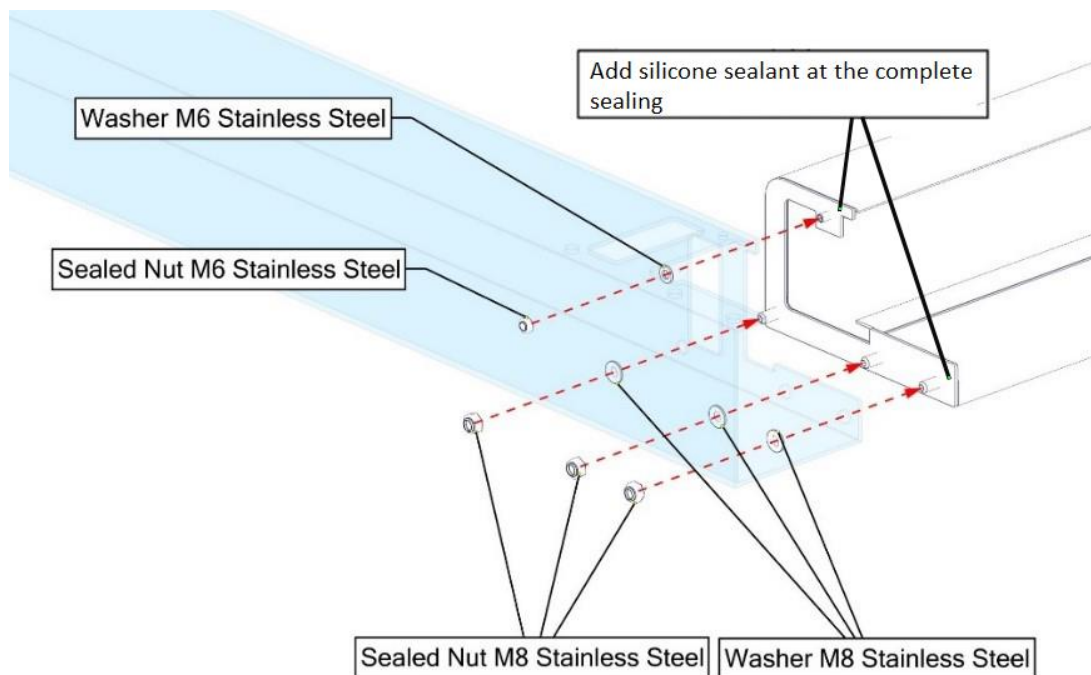




## 6.2 Pillar and integrated gutter connection

1. Determine which post will be used as the rainwater discharge post. An rainwater discharge hole has to be drilled in this post. Place this upright on a flat, solid surface and determine the location for the hole. Now drill a hole in the post. Although the diameter of the hole is flexible, we recommend a diameter of 60mm.

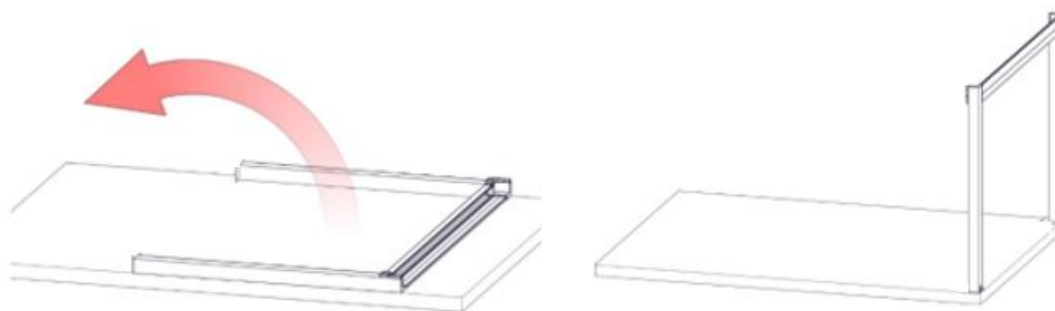
2. Fix the aluminium pillar on both sides of the rear integrated gutter (the one with the black controlbox inside) with a M8 and M6 sealed nut . (check below image)

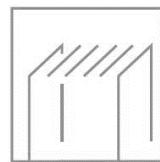


### NOTE:

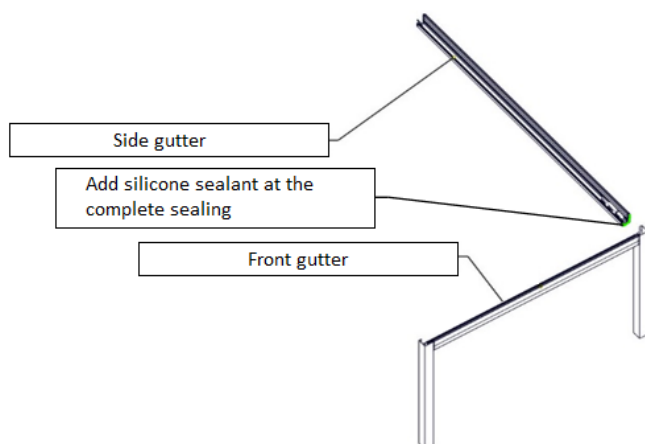


- Lift up the rear frame.
- Don't work alone. You may need an extra hand.
- Rear frame should be lifted up and fixed to the ground.

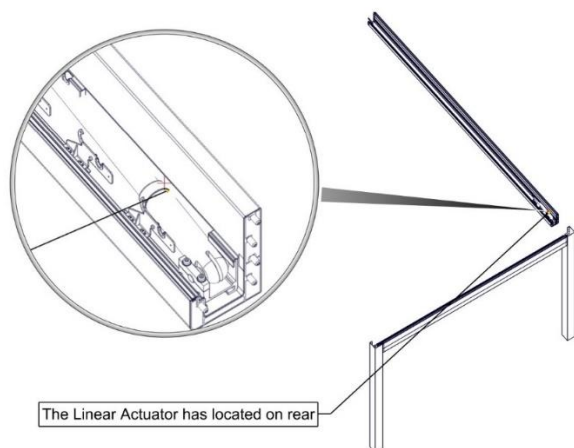




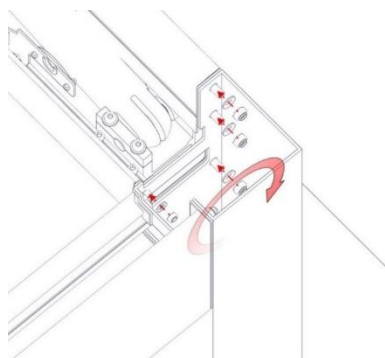
**3.** Connect the rear integrated gutter and lateral integrated gutter (with the spindle motor inside) into the position as shown in below image.



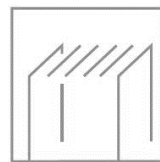
**4.** The linear actuator should be placed on the back side of the lateral integrated gutter which (check below image)



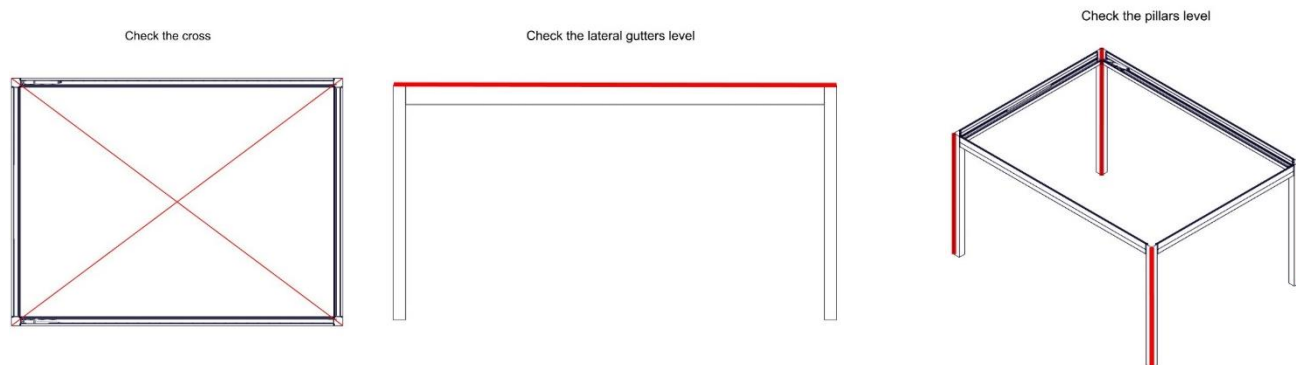
**5.** Fix the lateral side integrated gutter to the rear integrated gutter with M8 and M6 Sealed Nuts.





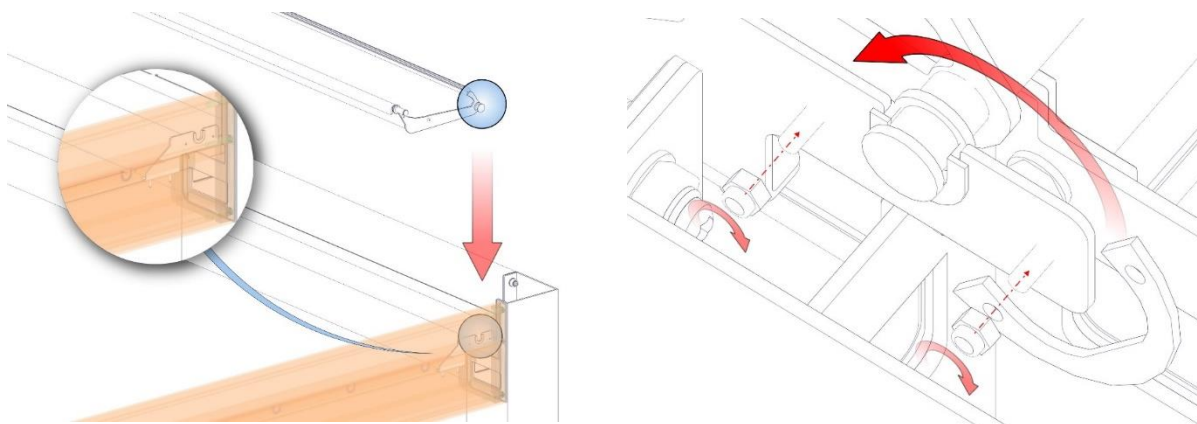


6. Check if the structure is level on all sides. 5mm difference in the full length (for water) is allowed

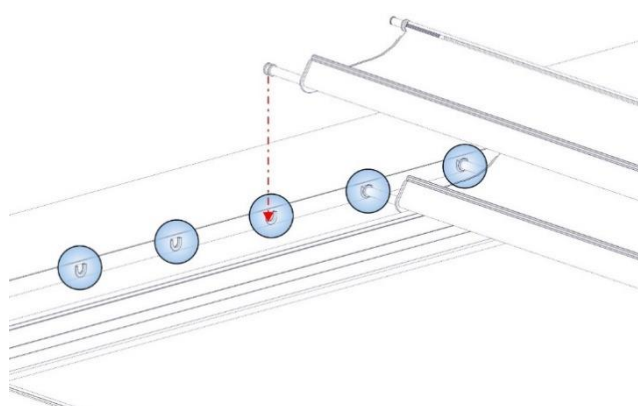


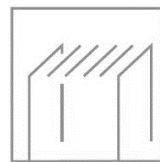
### 6.3 Panel installation

1. When you start placing the panels, always start with the first front panel. This first panel has a gasket (big rubber flap) for perfect insulation and has a clamp. The first panel should connect to the clamp. The clamp is already installed to the lateral side integrated gutter.

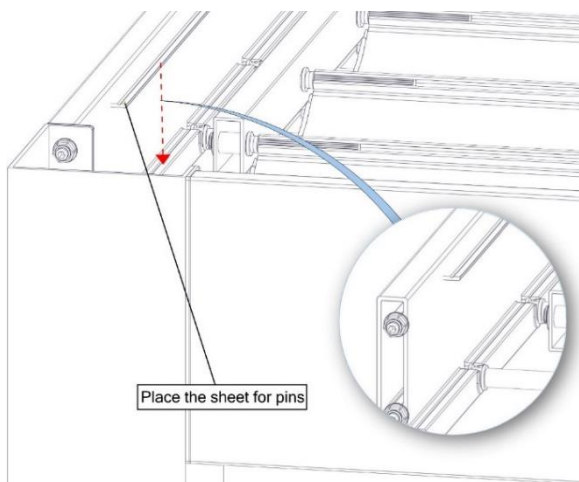


2. Place the middle panels in to the integrated lateral side gutter which is shown in the figure below.

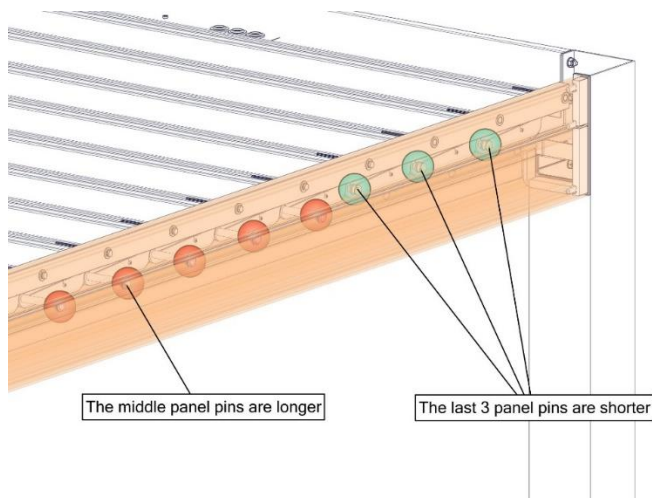




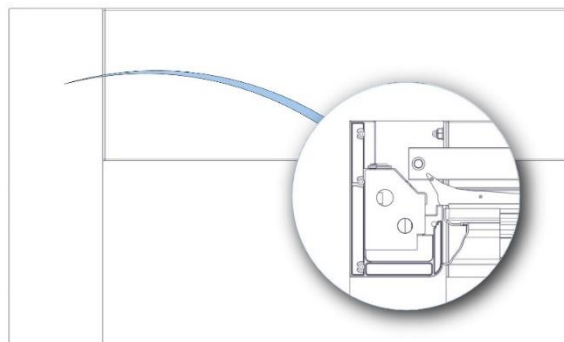
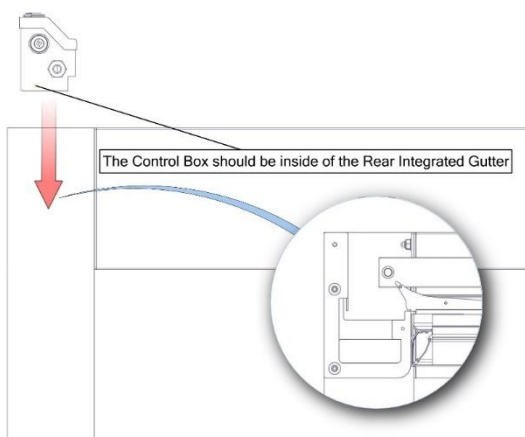
3. To secure the panels in place install the 1.5x1.5mm sheet (strip profile).

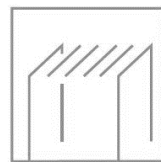


4. The pins of the last 3 panel are shorter than the pins of the middle panels. This is to prevent the pins from hitting the linear actuator.

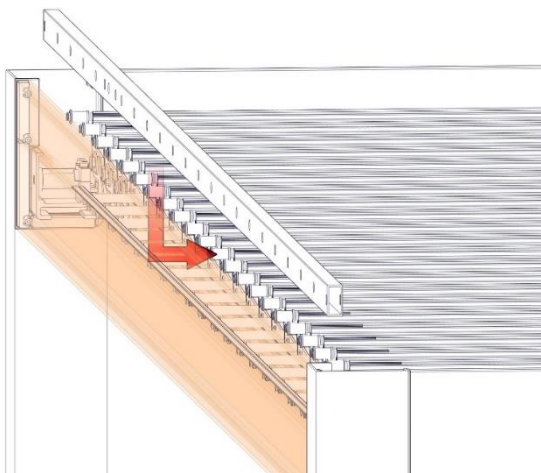


5. The control box should be placed in the rear integrated gutter.

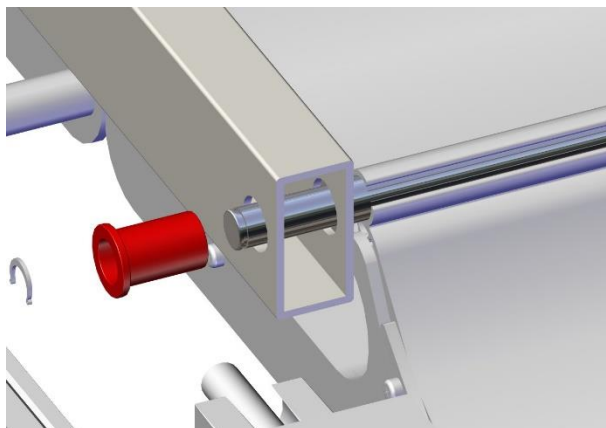




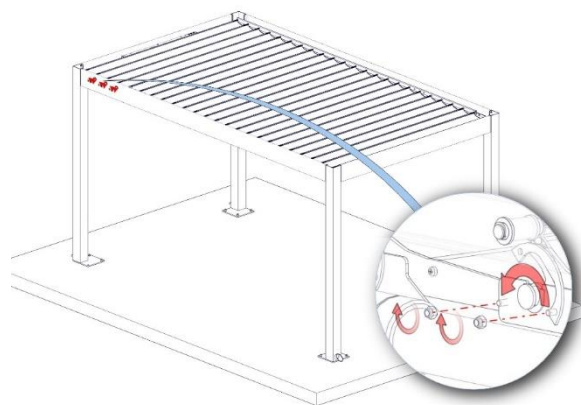
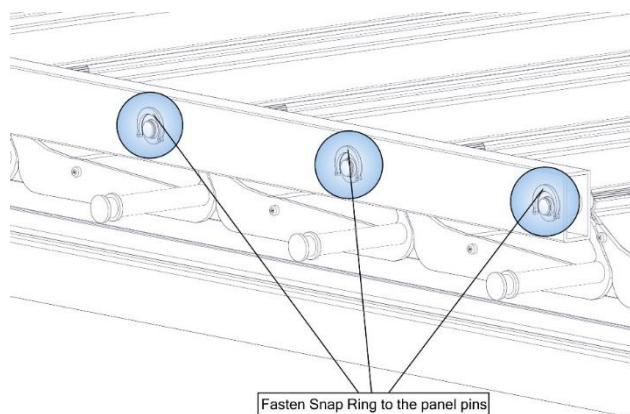
6. The aluminium profile (20x40mm) must be connect to the panels. This profile allows movement of the actuator to the panels.

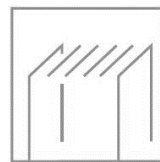


7. The housing of the panel pin should be from outside in as in image below.

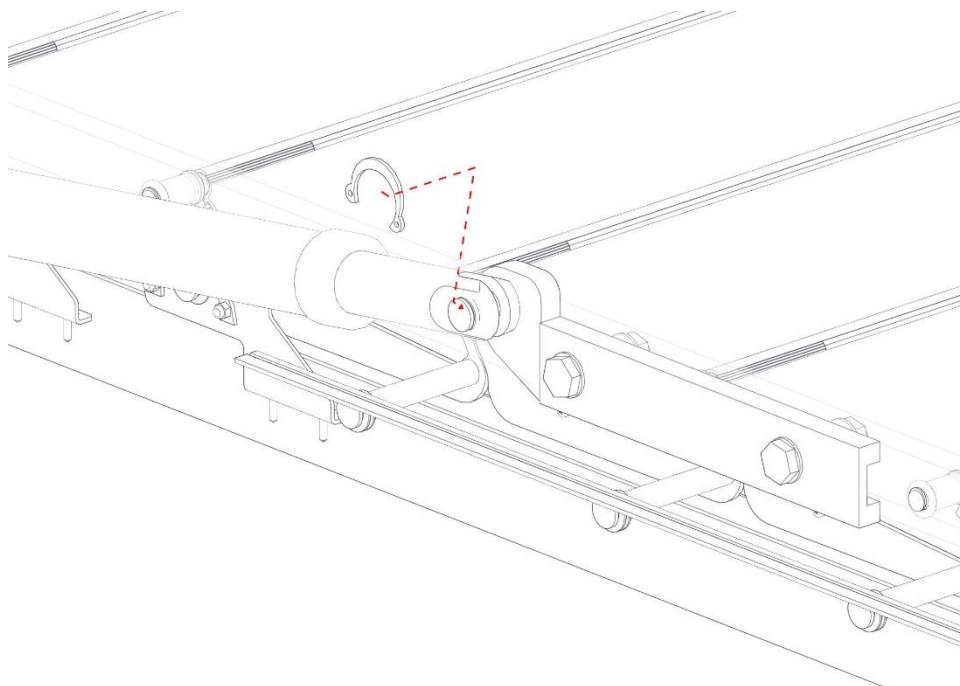


8. In order to secure the 40x20mm aluminium profile. install the snap ring. The snap ring has to be placed on the groove of the panel pin. Place and fasten the clamp for the last 3 panels.



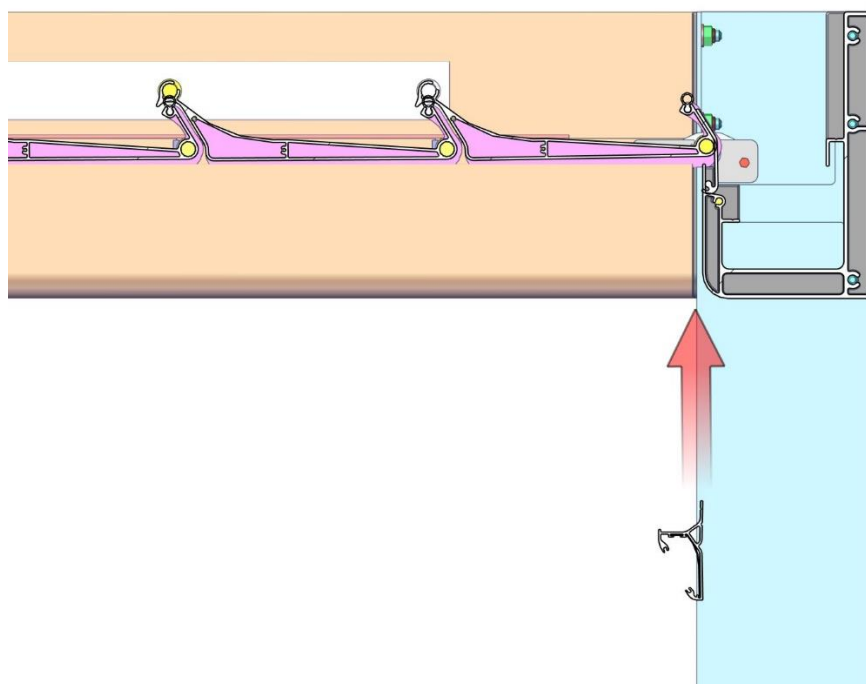


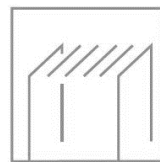
9. Secure the actuator to the 40x20mm aluminium profile with the snap ring.



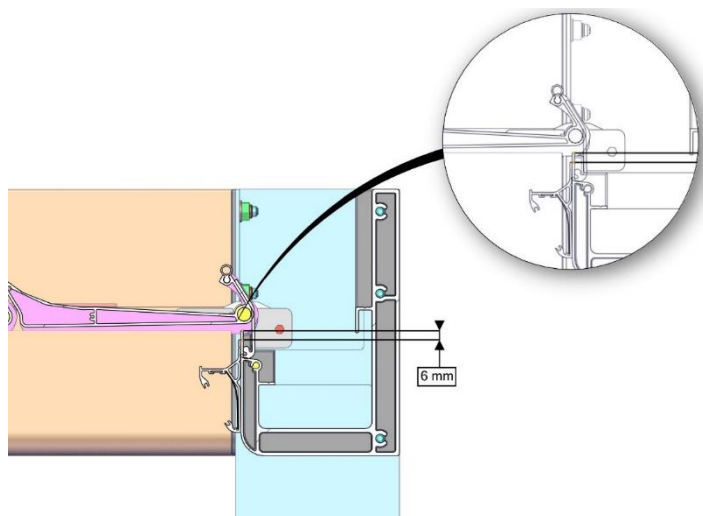
## 6.4 Perimeter lighting installation

1. Place the perimeter lighting profile on the inside of the integrated gutter. (optional)

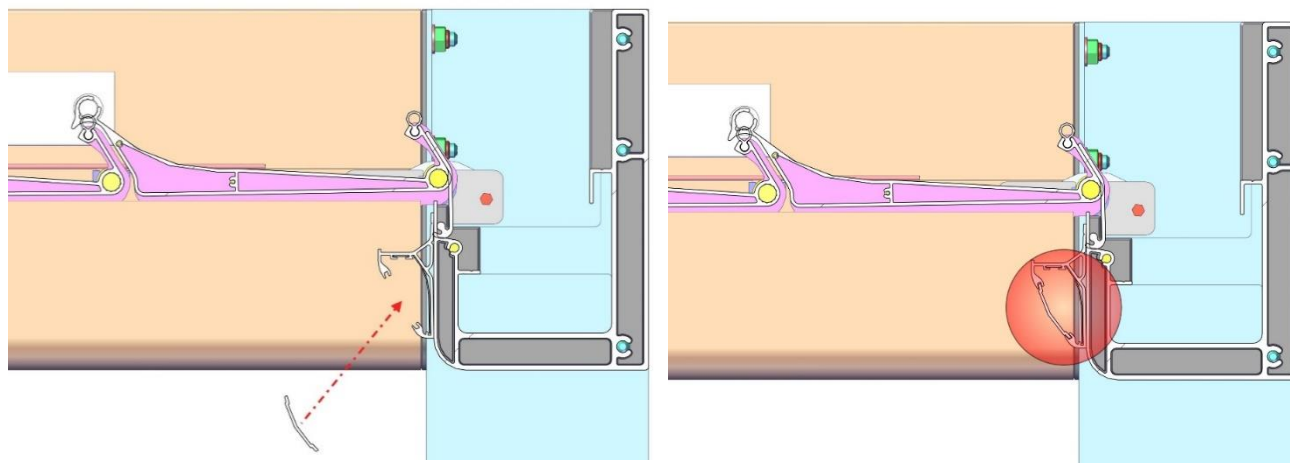




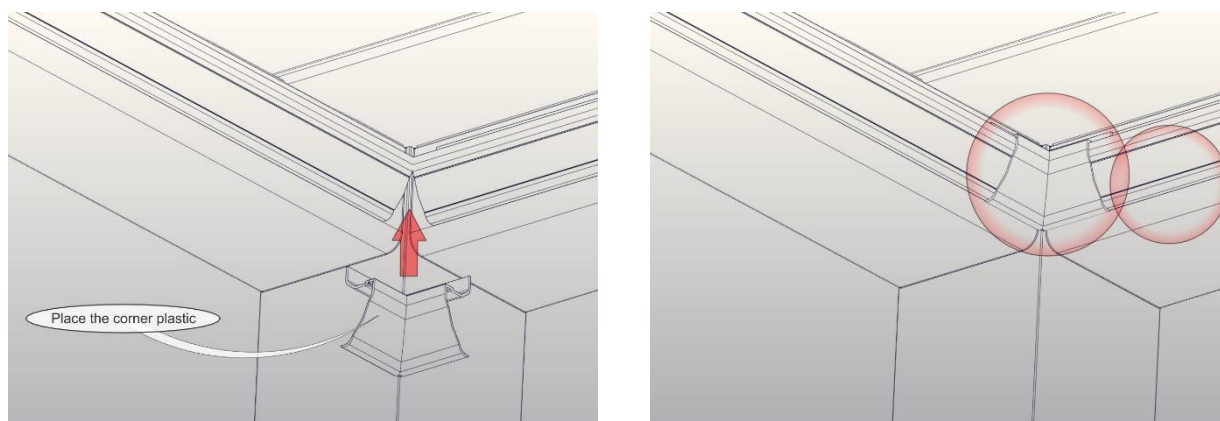
2. The perimeter lighting profile should be installed 6mm down from the top of the integrated gutter.

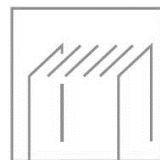


3. Place the perimeter lighting profile cap to the housing on the perimeter lighting profile.

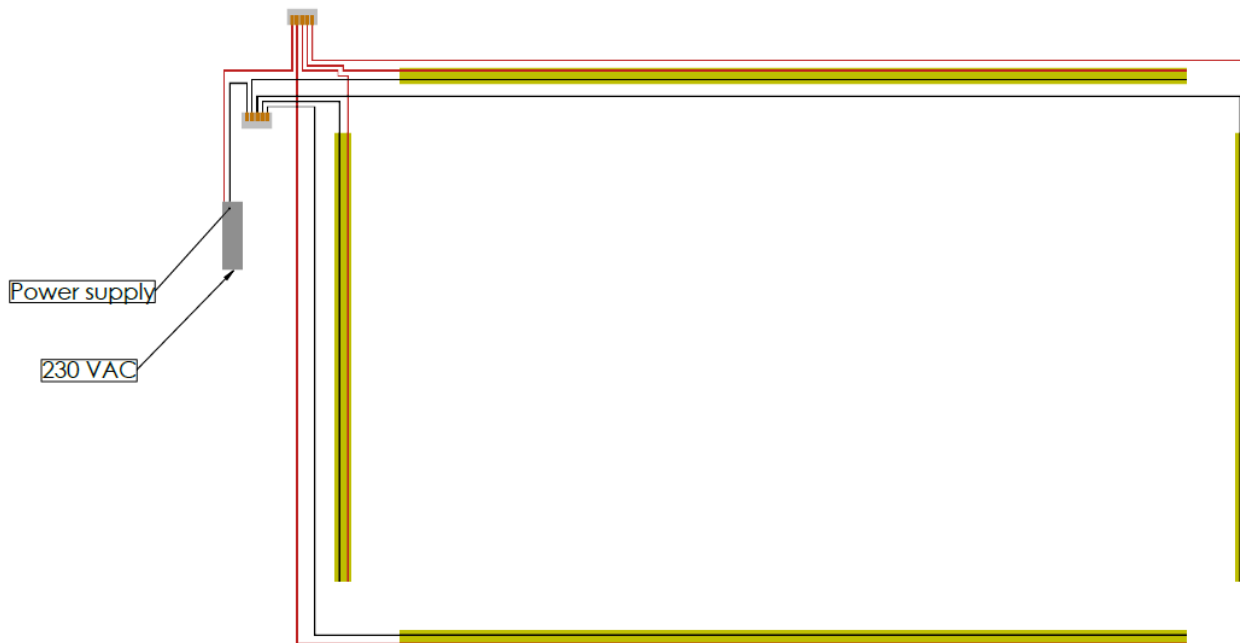


4. Place the corner piece between the perimeter lighting profile in the corners.

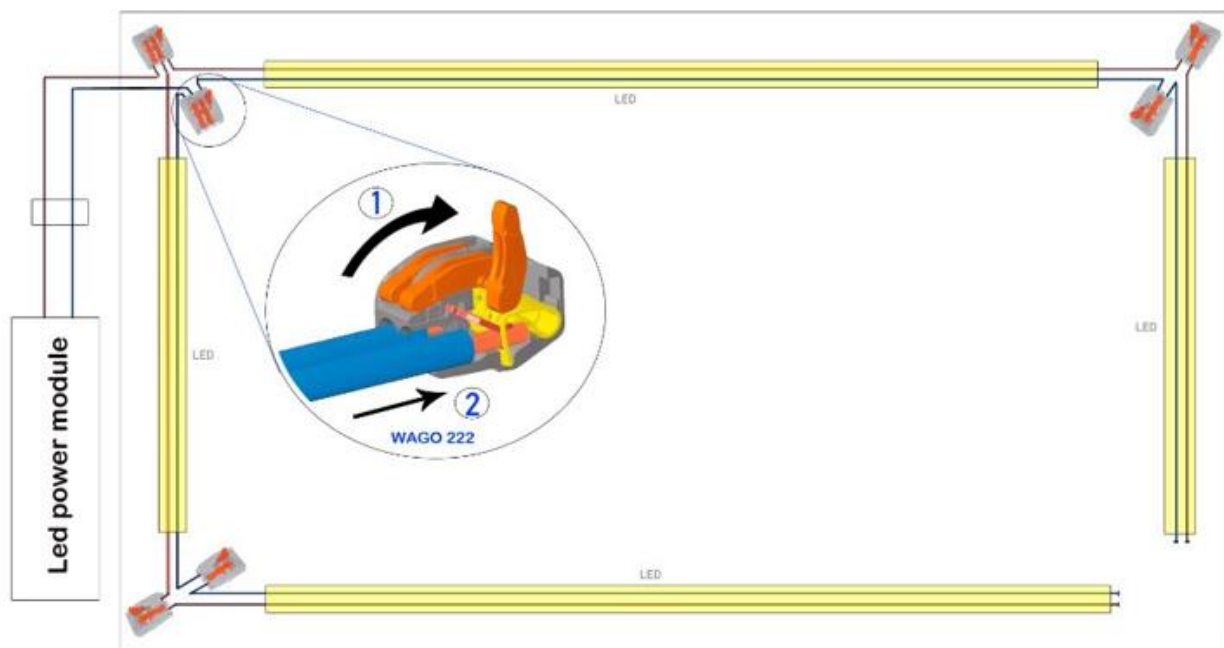


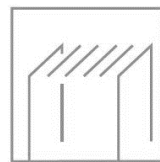


When the LED strips have cables on 1 side, option 1:



When the LED strips have cables on 2 sides, option 2:

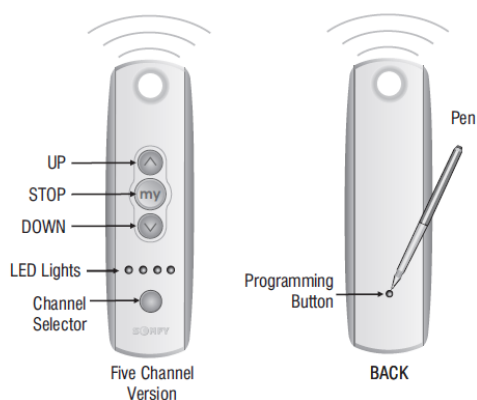




## 7. Programming Instructions

### 7.1 Remote Control

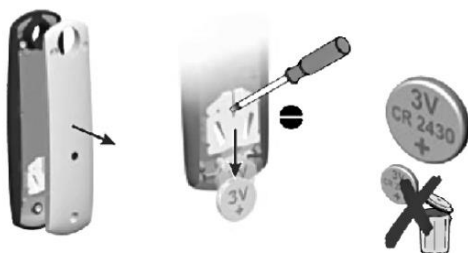
The Pinela is equipped with an integrated actuator that is operated by remote control. For opening, closing or stopping the panels you can use the respective buttons of the remote control. (see image below).

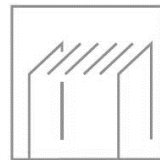


#### Remote control Details

Channels:	5
Battery type:	2430 Lithium
Battert voltage:	3V
Thickness:	22mm
Width:	49mm
Height:	145mm
Colour:	Wit
Radio frequency:	433.42 MHz
Radio Range:	20m through walls
Protection index:	IP30
Details:	Shockproof / For indoor use

#### Replacing the battery





Using a small screwdriver loosen the screws on the reverse side of the remote control and remove the back cover. Replace the battery with one 2430 Lithium 3V Battery.

## 7.2 Programming

The installation and initial setup procedures are the responsibility of a specialized technician.

When the Pinela is installed, check the connection of the drive system with its control box - actuator and also actuator to the 40x20mm aluminium profile.

### Power Supply (230 V AC / 50~60 Hz)

- All wiring must conform to local electrical code.
- The control unit boxes can be wired in PARALLEL.
- There should be a way to disconnect the power at each motor independently.
- Only the control unit needs to be powered. The receiver is completely housed inside of the control unit box.
- Deponti reserves her right to void the motor warranty if wiring recommendations are not followed.
- The control box only works with 230 V AC / 50~60 Hz.

### Installation Requirements

- If the installation is with more that one RTS system, make sure only one RTS system is powered on during programming. All other RTS systems must be disconnected. This will avoid interferences during the initial programming of each motor.
- Use only SOMFY RTS radio controls. The receiver (433.42 MHz) must be programmed with the transmitters.

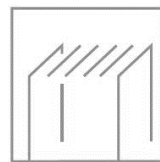
### Programming of Actuators / panels

- **Step 1:** The actuator has to be connected directly to electric power unit (230VAC/50~60 Hz). Notice that the control unit box will not respond to any transmitter until a transmitter is assigned to communicate with the control unit box receiver.
- **Step 2:** Choose the channel on your transmitter that you want to set for the actuators / panels.
- **Step 3:** Press the remote control button on the box until the motor will jog briefly once.
- **Step 4:** Press and hold the programming button of the transmitter, until the actuators / panels will jog again.

The actuators / panels have been stored to the desired channel on your transmitter.







### Deleting of Actuators / Panels

Keep the remote control button on the box pressed until the actuators / panels jog two times. (all stored remotes will be deleted). The actuators / panels has deleted on your transmitter.

### Programming of LED perimeter lighting - optional

- **Step 1:** De-energize the LED box and wait 4 seconds.
- **Step 2:** Energize the LED box and wait until the red light on the panel turns on (min. 2 seconds).
- **Step 3:** Cut off the power of the product 5 times in a row and after 10 seconds, the leds in the system will flash once.
- **Step 4:** Press the program key for at least 7 seconds, the LED box will be introduced to the remote control.

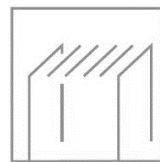
The lights have been stored to desired channel on your transmitter.



### Deleting of the LED perimeter lighting

- **Step 1:** Turn off the power for 2 sec.
- **Step 2:** Turn on the power for 10 sec.
- **Step 3:** Turn off the power for 2 sec.
- **Step 4:** Turn on the power. after that. the lights will go on
- **Step 5:** Press the programming button on your transmitter.

The lights have been deleted from your transmitter.



## 8. FAQ

FAQ	REASON	HOW TO RESOLVE?
The product motor would not start	The motor is not powerful	Check if there is power to the unit control box.
	The motor has no regular current	Disconnect the power and wait for 15 minutes then try to start again.
Lights are not on	Not all lights are on	Check if the product is powered. The power must be disconnected and connected again.
The remote controller does not work	It does not control the product	The battery should be replaced.
	Lights are not on	
There is a leak in the pergola	There is a leak in the pergola installation	Make sure that areas of the system water tightness gaskets are clean (leaves, branches, etc.)

## 9. Maintenance

We recommend that you maintain and clean your pergola at least once a year.

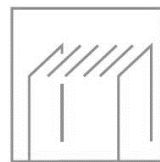
Check whether the screw connections are tight. If not, tighten them firmly.

The aluminium profiles that are dirty can be cleaned with lukewarm water and a cleaning product.

- Use a soft brush or sponge.
- Never use abrasives, aggressive solvents or a pressure washer.
- Wet first and rinse off with lots of water, and then wipe with a soft cloth.

## 10. Disposal of waste

Dispose of the product according to local laws and regulations.



## 11. Warranty conditions

Warranty in accordance with the warranty conditions and Deponti's general terms and conditions. These can be found on the website [www.deponti.com](http://www.deponti.com).

Please review the respective articles indicated under the main titles include in the manual for the details of aforementioned special cases. All manufacturing defects are under scope of warranty within the following periods.

Paint (Aluminium Standard Parts)	5 Years *
Motor	5 Years
Motor Parts	2 Years
Electronic Remote Controller and Receivers	2 Years
Electronic Cards. Circuits. Boards	2 Years
LED Lights	2 Years
Plastic Parts	2 Years
Paint (Steel Components Special Parts)	1 Year

*\* The paint warranty is 2 years under ambient conditions at places that have moisture spray with salty and chemical steam (port. coastline. swimming pool. etc.).*

## 12. Contact

**IMPORTANT:** Your Deponti partner is your first point of contact for questions and comments.