

the Imperial

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

We also refer you to our General Terms and Conditions of Sale and Delivery which are available on request. We accept 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 canopy. 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 we 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 canopy!

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



This manual should be kept in a safe, dry and shady place. In the event of damage or loss, the user should obtain another copy.

## 2. Safety precautions and warnings

#### **Important:**

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



- 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 us. We reserve the right to make technical changes without written notice.
- We normally recommend that the canopy 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 us 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 canopy, place the parts on a smooth, clean surface. Place the profiles on a flat surface, protected from sun and rain.
- Adding or removing parts, the use or installation of materials other than described in this manual, may adversely affect the safety of the canopy and is therefore strongly discouraged!
- Cordon off the assembly location so that others are kept at a safe distance.
- Always place a ladder on a firm, stable surface.
- 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.

## 2. Safety precautions and warnings



- 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.
- Ensure that you consult a suitably qualified gas engineer if you are placing the canopy near or above a boiler flue point.
- **Never** step or walk on the panel system.
- You must maintain and clean your canopy at least once a year. During this yearly maintenance make sure all fasteners are properly tightened.
- When safety regulations and instructions are not followed correctly, we will not accept responsibility for damage(s) and injuries.

## 3. Product description

The Imperial is a pergola/gazebo system which features remote controlled, retractable roof panels which can be opened to reveal approximately 80% of the covered area.

When closed, the panels will protect you from the sun and rain. The Imperial can also carry limited and defined snow loads (see below).

#### **Available dimensions of the Imperial:**

Width (mm): 3000 / 3500 / 4000

Projection(mm): 3014 / 3571 / 4128 / 4964 / 6078\*

\* Additional centre posts can be added to the Imperial to cover local snow load requirements.

**NOTE:** All posts come at a standard length/height of 3500mm. The maximum recommended height from floor to underside of the gutter is 2500mm so posts will need to be cut down accordingly.

### **Optional additions:**

• Perimeter lighting system

### **Snow load & Wind resistance**

The snow load and wind resistance is adaptable to the steel construction according to the statically calculated profile section and connection type.

Snow load [kg/m2]:

| No. panels: | Projections [mm]: |      | Width [mm]: |      |
|-------------|-------------------|------|-------------|------|
|             |                   | 3000 | 3500        | 4000 |
| 10          | 3014              | 245  | 223         | 195  |
| 12          | 3571              | 229  | 195         | 173  |
| 14          | 4128              | 190  | 156         | 132  |
| 17          | 4964              | 98   | 78          | 68   |
| 21          | 6078              | 243* | 221*        | 193* |

<sup>\*</sup> Based on additional centre post

### Wind resistance:

Max. wind resistance for all available dimensions: 24.7 m/s (10 Beaufort / 0.38 kN/m2) in open position.

### **Placement options:**

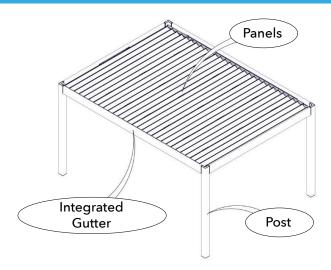
It is possible to place the Imperial canopy freestanding or mounted to a wall.



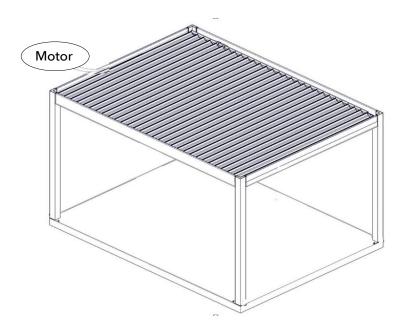


# 4. Parts Overview

## 4.1 Terminology



The motor requires 230V / 50Hz. If you have added a LED lighting strip to your Imperial, you must use the lighting control box. The control box requires 230V / 50-60Hz as well.



## **4.2 Delivery Inspection**

The canopy shown is an example. The type and number of components supplied depends on your order.

### 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. Preparation for assembly

### 5.1 Conditions for assembly

#### **Ground & wall**

- A good flat stable surface is required for construction of the canopy.
- 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**

- The Imperial is 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.

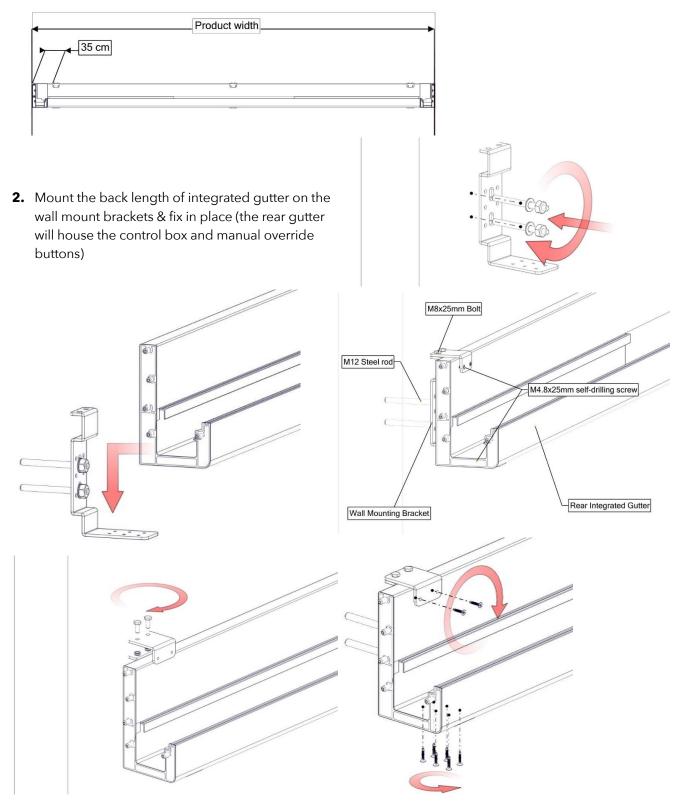
Warranty is void if the Imperial is not assembled and installed in accordance with the instructions.

## 6. Assembly

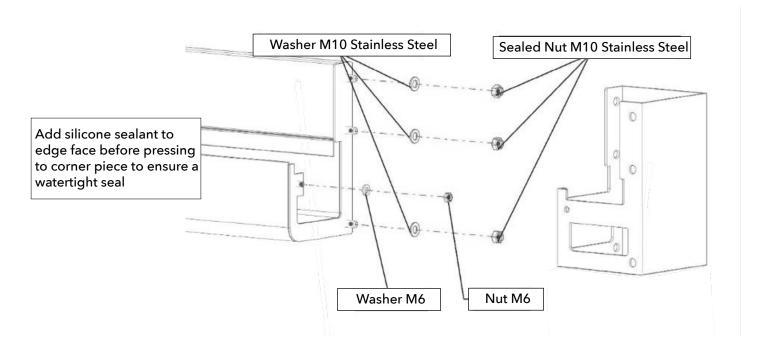
### 6.1 Mounting the wall profile (in case of wall installation)

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

1. Determine the mounting bracket position on the wall and fix using suitable fixings for your wall. We suggest a minimum size of M12 fixings but these are not supplied as need to be chosen depending upon your wall.



### **3.** Fix the 2 wall-corner pieces in place:



**4.** Now continue to section 6.2

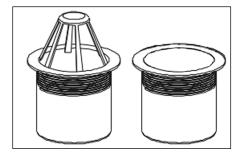
### 6.2 Post and integrated gutter connection

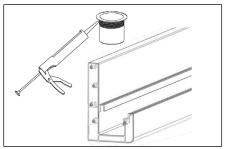
1. Determine how rainwater will be discharged from the gutter. A post can be used for simple discharge by drilling in a hole in the gutter above a post and at the bottom of the post so the water can drain out. A 60mm hole is recommended.

For more effective rainwater discharge a downpipe can be attached using a downpipe outlet running through the gutter (a hole will need to be drilled in the gutter) and rainwater then fed into a downpipe which can be run to a suitable location.

If fitting using a downpipe outlet then it should be placed through a hole cut for it in the gutter and it should be sealed to the inside of the gutter. Note the top will need to be trimmed off as the available height in the gutter below the panels is very limited:

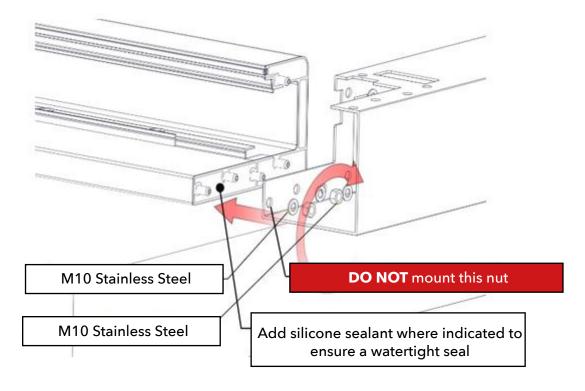
The outlet should then be pushed through the hole so the flange sits flat against the bottom of the gutter and is sealed to it

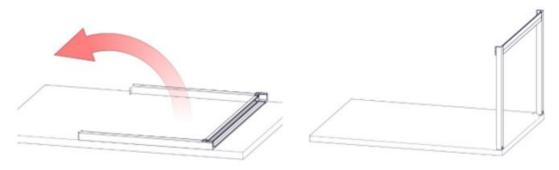




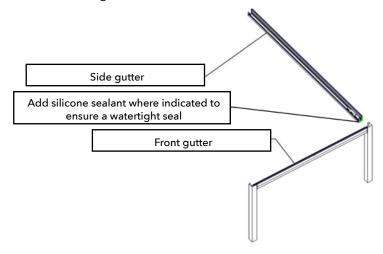
- 2. Measure and trim the posts to the required length by cutting off at the bottom. The maximum floor to underside gutter height should be 2500mm so trim accordingly depending upon whether fixing into the
  - ground using a suitable cement-based foundation mix or fixing to a solid surface using the floor mounting brackets. Also consider whether the ground is flat as the Phoenix must be fitted with no greater than a 5mm difference in height across the full width or height to enable proper drainage.
- 3. \*\*If you have a wall mounted option then go to step 5\*\*\*

Lay the back integrated rear gutter profile on the ground and fix the two posts to it adding silicone sealant where indicated to ensure a watertight seal.



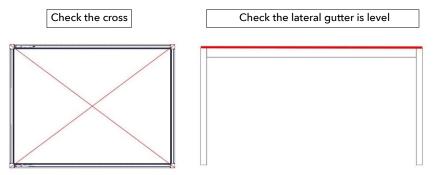


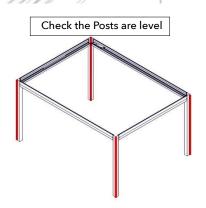
- **5.** Lay the front gutter on the ground and attach the posts as shown in point 3 but fixing all nuts onto the bolts.
- **6.** Lift up the front frame and fix in place ensuring it is both level and aligns with the rear gutter and at the required distance so that the side gutters will fit properly between the front and rear frames.
- 7. Install the side gutters ensuring that the linear actuator is located to the rear where the control box will be placed inside the gutter. Make sure to seal them to the posts/corner connectors using silicone sealant at the joins to ensure a watertight seal.







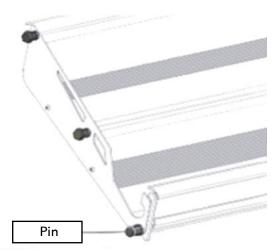




**10.** If you have connected a downpipe outlet for drainage then fix the downpipe run at this point ensuring that a bracket is placed within the first 300mm of the downpipe outlet. If this is not possible the either glue the downpipe to the spigot at the bottom of the outlet or fix with a screw through the downpipe into the outlet spigot.

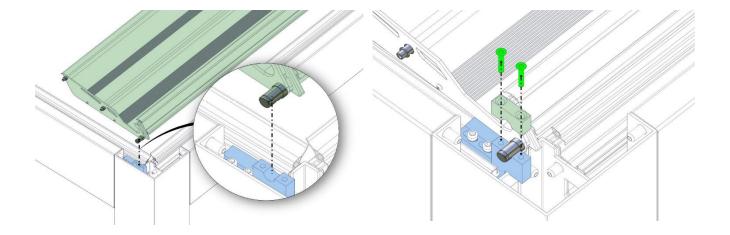
## 6.3 Panel installation

**1.** When placing the panels, start at rear(motor side). The rear panel has a short pin.

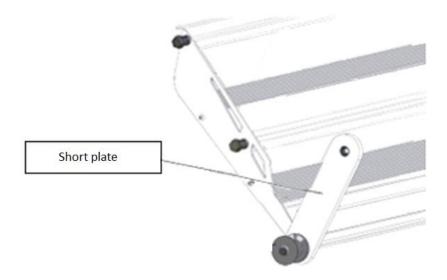


Lamel Type 1 Mounted on motor side

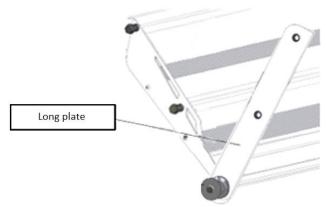
2. Place the short pin into the housing and fix it with the clamp and the a M5 countersunk head bolt.



**3.** When you fixed the short panel, the next panel in line is a type-2 panel. There is a short plate, a long plate and its carrier. Place the panel in front of the first panel and fasten with the M6 special bolts.

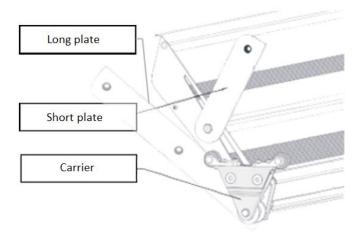


**4.** In front of the panel type-3 there should be standard panels (the number of panels depends on your projection). The standard panels are all the same.

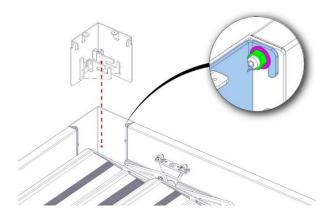


Lamel Type 3 this type is directly after type 2, comes in plural

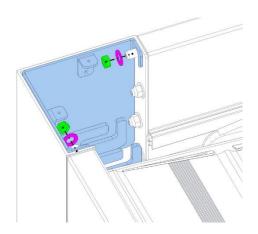
**5.** The last panel is the panel with a locomotive carrier.

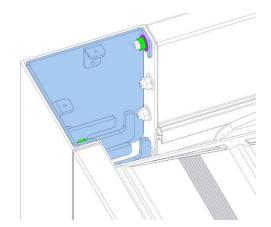


**6.** This is the front house mechanism placing; The gear housing should be on each side. The housing has to be aligned with your projection direction. Also mount the top nut, coloured green in the picture.



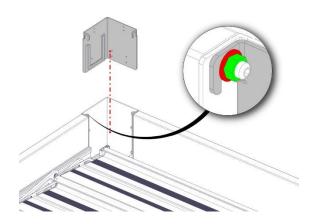
**7.** The bracket's housing will fit exactly on the pins. After that place the washer and fasten the nuts.



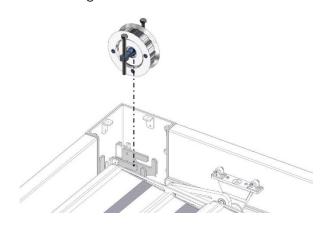


## 6.4 Rear mechanism house placing

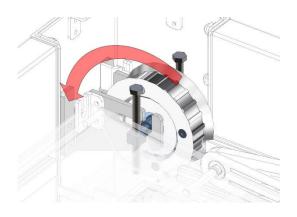
**1.** There is a suitable bracket for each side.

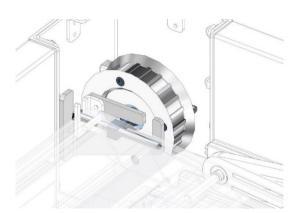


**2.** Place the front gear into the 'front mechanism house'.



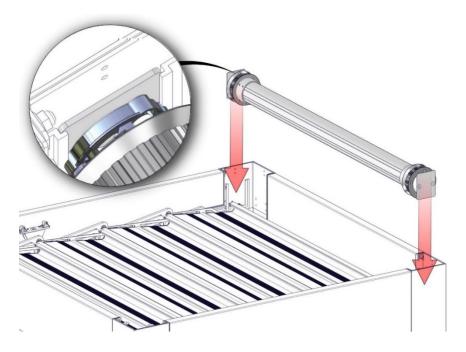
**3.** Turn and place the stretching bolts. The stretching bolts must be placed in the related housing.





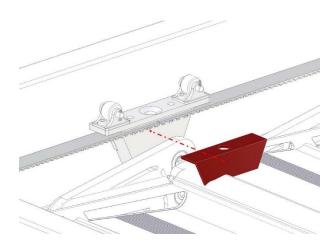
### 6.5 Place the tube-motor set

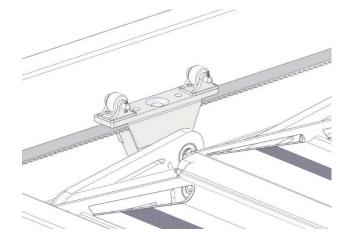
**1.** The tubular motor set has to be on the rear side of the canopy. It has a square plate that fits exactly in the rear housing bracket as shown below.



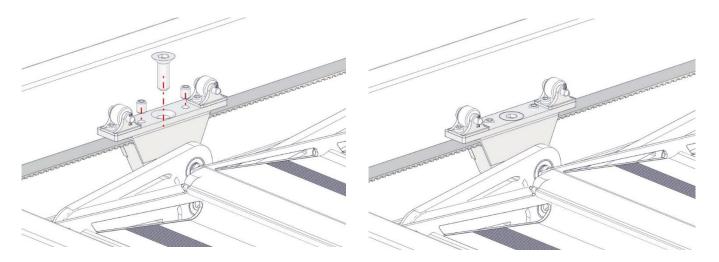
### 6.6 Rail belt installation

**1.** The rail belt goes over the front and back gear. The belt connection point should be in the centre of the locomotive carrier.

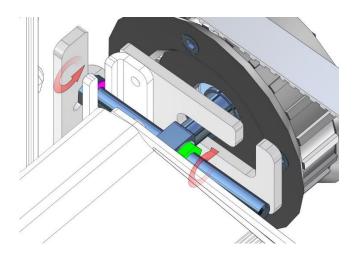




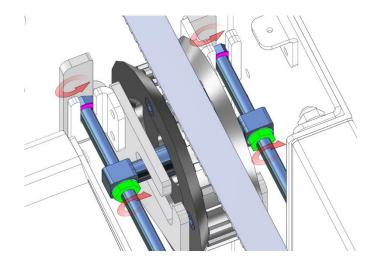
**2.** Fasten the brackets with a stay bolt and countersunk head bolt.



**3.** Rail belt stretching; This bolt ensures the tension on the belt is adjustable

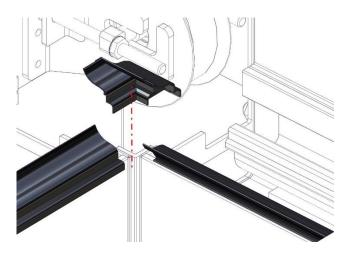


**4.** Make sure there is the same stretch level of the belt on both sides. It should be just so tight that it just doesn't sag. Do not tighten.

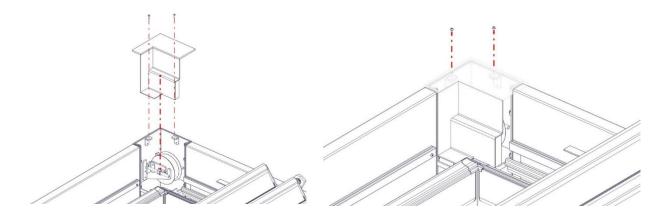


### 6.7 Finishing

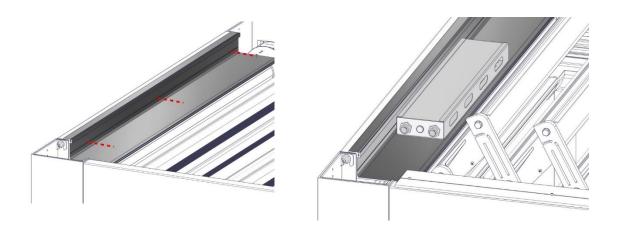
**1.** Place the special designed gasket into corners.



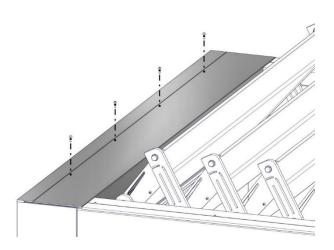
2. The corner cap should be on the frontside. Fix it to the housing with the M2,9x13mm rounded head screws.

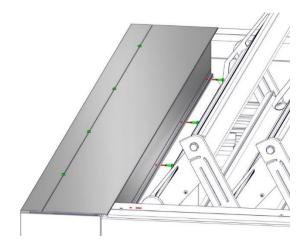


**3.** Place the tubular Motor covering profile; This profile should be on the rear and fixed with M2,9x13mm screws. If there is perimeter lighting, the lighting control box should be placed on the profile as you see at below. The cables should go from the corner to the box.

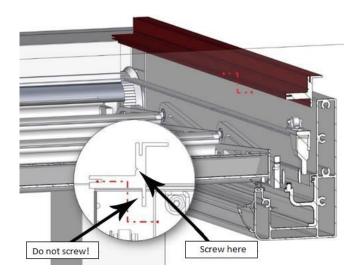


**4.** Install rear covering profile on the motor cover profile. Screw at least every 60cm.

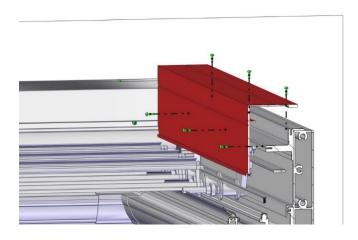




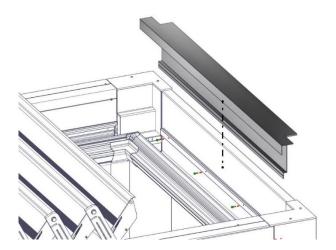
**5.** Install the side covering profile. Screw at least every 60cm



**6.** Install the side covering top profile. Screw at least every 60cm

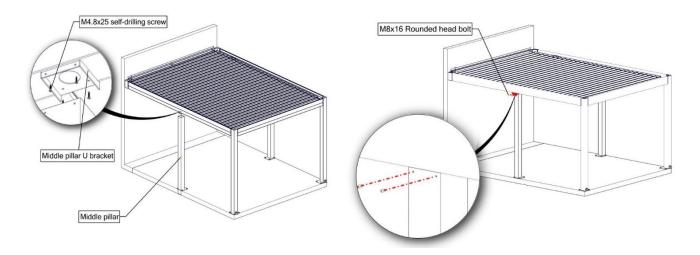


7. Install the front cover profile. Now mount the corners. Seal the opening seams with silicon sealant.



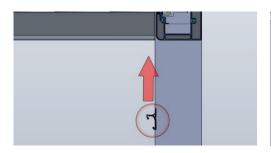
### **6.8 Middle Post connection (optional)**

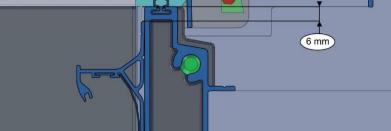
If your Imperial canopy has a projection over 500cm or you are in an area where the wind or snow is of concern then you should install a middle pillar to each side.



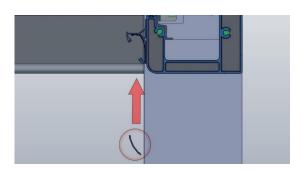
## 6.9 Perimeter lighting installation (optional)

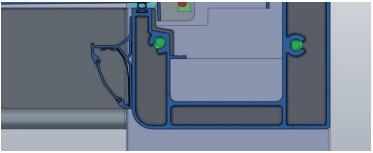
**1.** Place the perimeter lighting profile to the integrated gutter. The perimeter lighting profile should be installed 6mm down from the top of the integrated gutter and secured using short self tapping screws fitted through the groove found towards to the top of the profile.



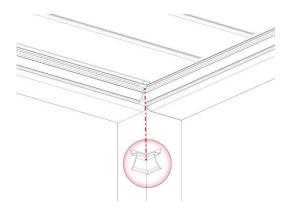


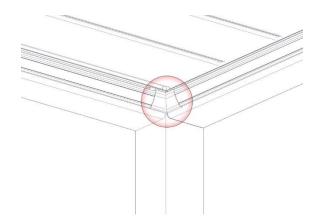
**2.** Place the perimeter lighting profile cap to the housing on the perimeter lighting profile.

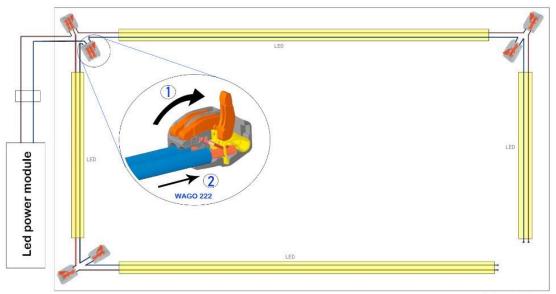




**3.** Place the corner plastic between the perimeter lighting profile in the corners.







Tip: The wires to the LED lighting are soldered and therefore more fragile on the solder point, do not pull or bend intensively at the installation.

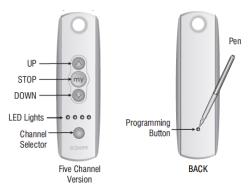
Tip: The most common wire strip length is 11mm, this may vary slightly depending on the welding cap used.

## 7. Programming instructions

### 7.1 Remote Control

The canopy is equipped with remote control. For opening, closing or stopping the panels.

(see image below).



#### **Remote control Details**

Channels: 5

Battery type: 2430 Lithium

Battert voltage: 3V
Thickness: 22mm
Width: 49mm
Height: 145mm
Colour: White

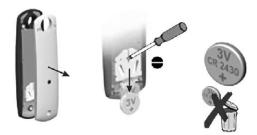
Radio frequence: 433,42 MHz

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 of the panels

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

### 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 box needs to be powered. The receiver is completely housed inside of the control unit box.
- We 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 than 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.

#### Steps to program the panels

- **Step 1:** The control box has to be connected directly to electric power unit (230VAC/50~60 Hz). The motor will not respond to any transmitter until a transmitter is assigned to communicate with the motor.
- **Step 2:** Choose the channel on your transmitter that you want to set for the motor.
- **Step 3:** Press the UP and DOWN button together until the motor will jog briefly once.
- **Step 4:** Check the direction. The UP button should open the system.
- **Step 5:** Open the panels to the back limit position where panel side caps is shouldn't touch each other and push MY button. Motor will stop automatically.
- **Step 6:** In order to set the back limit, press DOWN and MY button constantly. The panels will close. When the panels reach the middle of the projection press MY button.



Back limit position is defined.

**Step 7:** Reach the front limit position where panels close completely and push MY button. Motor will stop.

**Step 8:** In order to set front limit, press UP and MY button constantly. The panels will open. When the panels reach the middle of the projection press MY button.



Front limit position defined.

**Step 9:** Press again the MY button.

**Step 10:** Press PROG button on your transmitter.

### 7.3 Programming of the lights (optional)

#### **Programming**

- **Step 1:** While there is no power in the control box, power ON and power OFF 5 times max. within 5 seconds.
- **Step 2:** Leave while power ON. The LED lights will blink within 10 seconds.
- **Step 3:** Select a channel from your remote control you desired.
- **Step 4:** Press the 'PROG' button for 2 seconds. The button located on the rear of your remote control.

Done

#### **Resetting the LED control panel**

- **Step 1:** While there is no power in the control box, power ON and power OFF 10 times max. within 10 seconds.
- Step 2: Leave while power ON. The LED lights will blink within 10 seconds. The lighting control box will be reset.

Done

### Using the remote control

**'UP'-Button:** It ensures activate on your lighting system. When you press the UP-button constantly, the LED light will up through DIMMING feature.

**'DOWN'-button:** It ensures Passive on your lighting system. When you press the DOWN-button constantly, the LED lights will down through DIMMING feature.

### Transfer the channel on the current remote control to a different remote control:

- 1. On the current remote, select which channel you want to transfer.
- 2. On the current remote, keep the PROG button pressed. (LEDs will be turned on and off)
- **3.** In the new remote, select which channel you want to choose.
- **4.** On the new remote, press and release the PROG button. (LEDs will be turned on and off)

### **8. FAQ**

| FAQ                                 | REASON                                     | HOW TO RESOLVE?  |
|-------------------------------------|--|--|
| The product motor would not start   | The motor is not powered                   | Check if there is power to the unit control box.   |
|                                     | The motor is in thermal protection         | Wait for 30 minutes, the motor is now too hot.   |
|                                     | The motor has no regular current           | Disconnect the power and wait for 15 minutes then try to start again.  Please call our technical service if the motor is not started again.          |
| Lights are<br>not on                | Not all lights<br>are on                   | Check if the product is powered. The power must be disconnected and connected again. Please call our technical service if nothing changes at lights. |
| The remote controller does not work | It does not control the product            | The battery should be replaced.  |
|                                     | Lights are not on                          |  |
| The canopy leaks<br>water           | There is a leak in the canopy 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 canopy 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. Warranty conditions

Warranty in accordance with the warranty conditions and our general terms and conditions. These can be found on our website.

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.).