

Installation Manual **Skyroof Plus** 

Dear Customer,

Installation manual contains suggestions and rules for fast and exact installation of our product. We recommend you to read our instruction carefully.

During installation all necessary actions have to be carried out by authorized and specialized technicians.

All unauthorized interventions during warranty period will invalidate the warranty.

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## 1. SYMBOLS, PRECAUTIONS AND WARNINGS

# 1.1. Symbols

4

Attention: General operation notes.

Attention: General hazards; possible risk for persons.



Attention: Electrical hazard.



Attention: Risk of crushing hands.



Contact: Palmiye service department or related parties.



You can scan the barcodes located next to the titles in the page to see video demonstration of the related steps.

# 1.2. Precautions and Warnings

The installation and maintenance personals (installers, electricians etc.) must have sufficient expertise and knowledge for undertaking the task at hand.



In case of anomalies, immediately stop the work and contact service department of Palmiye.

Palmiye will not be responsible on use of non-original parts or unauthorized interventions and modifications for damage caused to people or animals or property.

It is forbidden to tamper to bioclimatic pergola system.

# **General Precautions**

Before starting of any assembly, maintenance or cleaning operations, make sure that you have fully understood the indications in this manual.

All electrical connections for Skyroof Prestige must be made by qualified personnel.



In case of any incompatibility, call Palmiye.

**General Safety Precautions** 

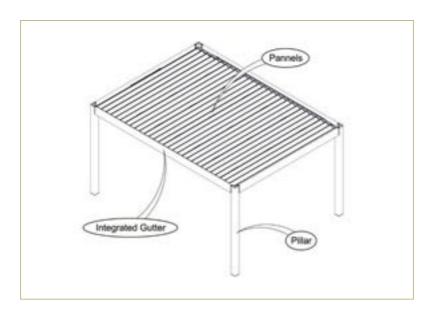
When using the panels, it is good practice to remember that all moving parts can be a source of danger.

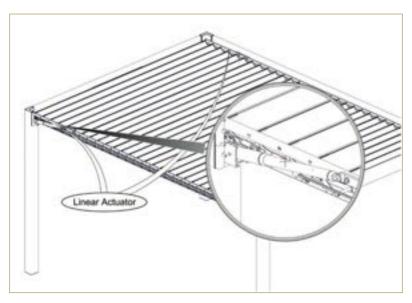


Make sure that power supply is cut off during maintenance.

It is recommended never to intervene on moving parts and to ensure that no operator is near to the panels before reactivating it after a technical or maintenance intervention.

# 2. TERMINOLOGY

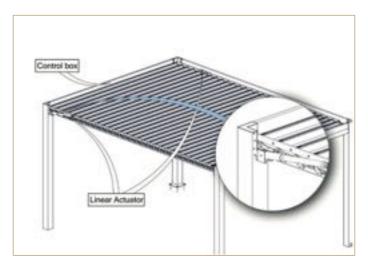




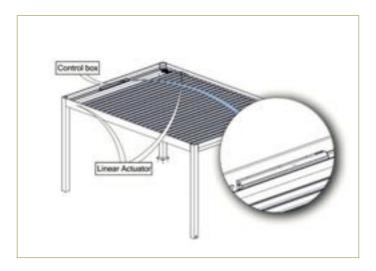
### **Linear Actuator**

The Linear Actuators works with 24V power. The control box provides needed power for each linear actuator. The control box works with 120V or 230V~50/60Hz

Linear Actuators provide the movement of bioclimatic pergolas. Linear Actuators are located on lateral Integrated Gutter. (see below)



Also, each linear actuator has to be synchronized. Therefore, linear actuators synchronization settings must be done during to installation.



The control box is located on Rear Integrated Gutter. (see above)

#### 3. PACKAGING

# 3.1. Preliminary Checks

On receipt of the packed goods and before starting their assembly, check the integrity of the material and the presence of all the components necessary for the installation.

In case of anomalies, immediately stop the work and contact with hospital.

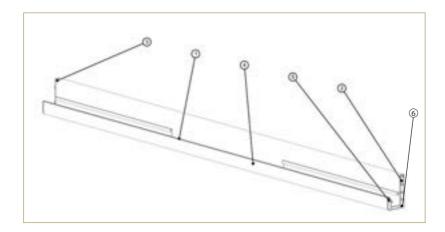
Fixing elements such as screws, plugs etc. are included in the box.

If not please contact service department of Palmiye.

Do not use a knife to avoid the risk of ruining the paint or other materials.

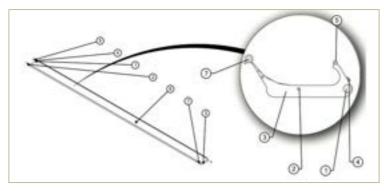
#### 3.2. Packed Parts

## 3.2.1. Integrated Gutter



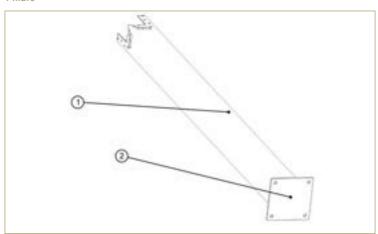
| BOM ID | Description                 | Qty |
|--------|-----------------------------|-----|
| 1      | Gutter Gasket               | 1   |
| 2      | Gutter Sealant Cap          | 2   |
| 3      | M10x60 Stay Bolt            | 10  |
| 4      | Integrated Gutter           | 1   |
| 5      | Stay Bolt For Back Covering | 1   |
| 6      | M6x40 stay Bolt             | 2   |

# 3.2.2. Panels



| BOM ID | Description                | Qty |
|--------|----------------------------|-----|
| 1      | Fixed Pin                  | 2   |
| 2      | M3x16mm Rounded Head Screw | 4   |
| 3      | Panel Cover                | 2   |
| 4      | Panel Bottom Gasket        | 1   |
| 5      | Panel Gasket               | 1   |
| 6      | Panel Profile              | 1   |
| 7      | Power Pin                  | 2   |

# 3.2.3. Pillars



| BOM ID | Description   | Qty |
|--------|---|-----|
| 1      | 150x150x3mm Pillar (CNC Operated for connection to Integrated Gutter) | 1   |
| 2      | 250x250x10mm Base Plate   | 1   |

# 3.2.4. Boxes

# 1. Electrical Box

Remote Controls, Sensors, Automations are on Electric box. It has a red label on the box.



# 2. Metal Box

U Brackets, Mounting brackets, Pillar caps. It has a blue label on the box.



# 3. Plastic Box

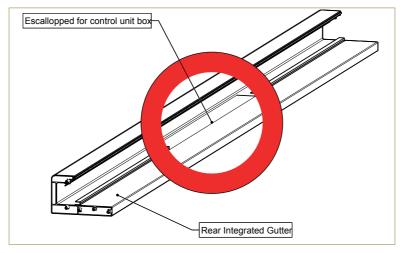
Corner Plastics,



#### 4. INSTALLATION STEPS

#### 4.1. Structure Installation

**Note:** Rear Integrated Gutter has escalloped completely by CNC machine in order to place to Motor tube.



Follow related product step;

- 4.1.1. Wall installation (move to step 4.1.1.)
- 4.1.2. Ceiling installation (move to step 4.1.2.)
- 4.1.3. Free standing (move to step 4.1.3.)

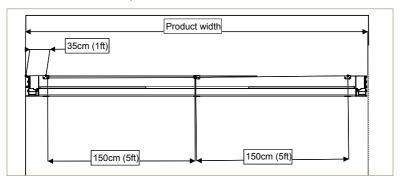


# ■ 🔭 🔳 4.1.2. Wall installation

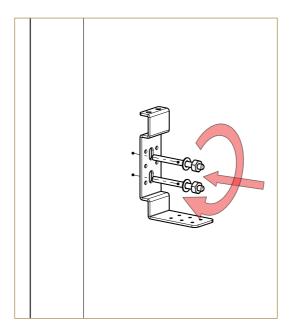
With the help of laser, all hole locations should be marked at the same level and holes should be drilled with Ø16 mm drill. The bracket must away 35cm (1′ – 2″) from

the corner.

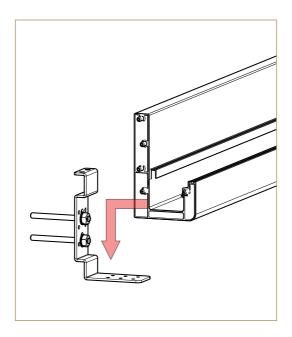
Brackets should be fixed for every 150cm (5ft).



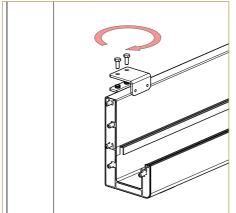
Fasten of the M12 steel rod to the wall and tighten of rods.



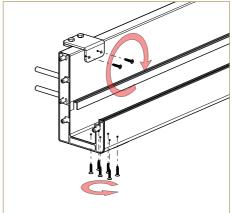
Place the Integrated gutter to the wall mounting bracket.

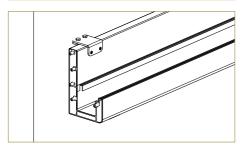


top and tighten by M8x25mm bolt.



Fasten the wall mounting bracket cover on Fix by self-drilling screw to integrated gutter and wall mounting bracket.





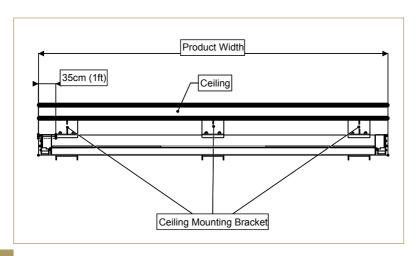
Important: All screwing should be discarded after product size control.

The Final view:

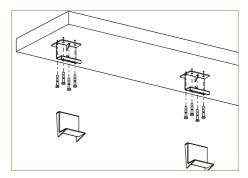


# 4.1.3. Ceiling installation

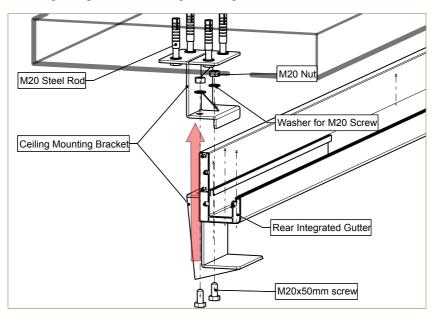
Define to ceiling mounting bracket position on the ceiling and make a hole with



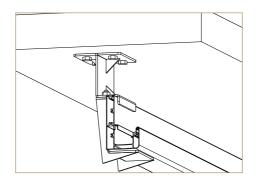
Fasten of the M20 steel rod to the ceiling and tighten of rods;



Place the Integrated gutter to the ceiling mounting bracket.



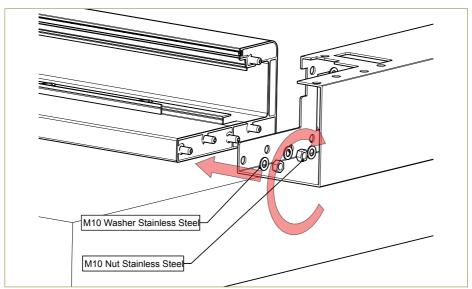
# The final view;

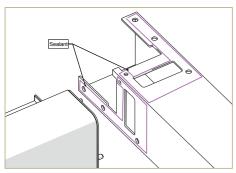


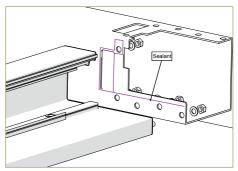


# 4.1.4. Free Standing (Pillar and Integrated gutter connection)

Fix Aluminium Pillar on both side and Rear Integrated Gutter on ground with M10 Sealed Nut as you see in below figure.

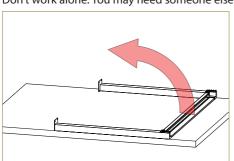


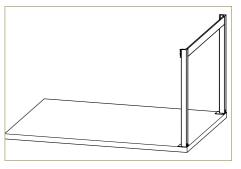




Lift up a rear frame.

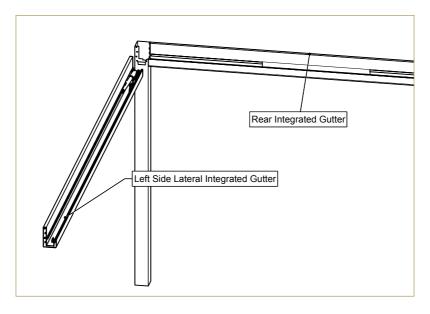
Don't work alone. You may need someone else.



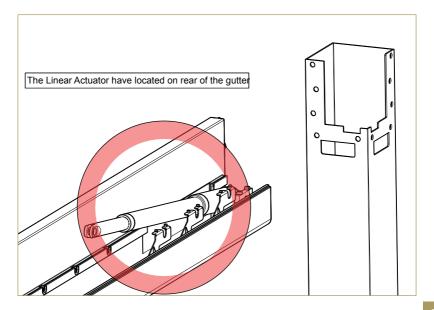


Important: All screwing should be discarded after product size control.

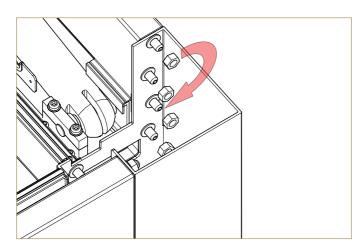
Rear Integrated Gutter and Lateral Integrated Gutter position shown at below figure.



Linear Actuator placed on the back side on lateral integrated gutter which is shown at below figure.

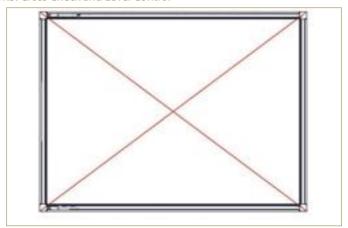


The fixing Lateral side integrated gutter to rear integrated gutter with M10 Sealed Nut.

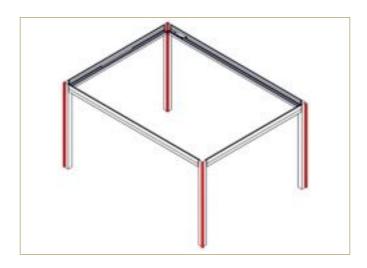




4.1.5. Cross Check and Level Control



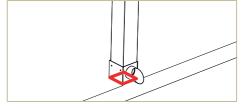




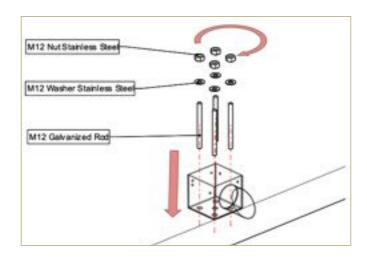


4.1.6. Pillar Fixing4.1.6.1. Stainless Steel Anchorage

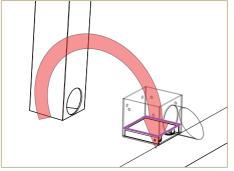
First of all, define to exact pillar position and mark it.



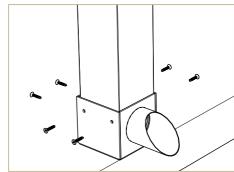
Slide the pillar then place the stainless steel anchorage to marked location. For flange installation please refer to freestanding model.



pillar into the anchorage.

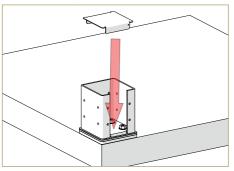


Place the cap. Apply a sealant then place the At the end, fix by M4,8x25mm self-tapping screw.

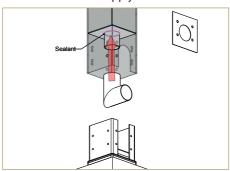


# 4.1.6.2. Hidden Anchorage

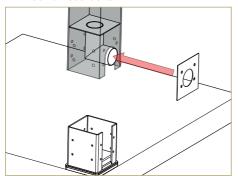
Firstly, fix the hidden anchorage to the ground with 4 M12 and chemical dowels. Then, put the washers and nuts on the rods from inside and tighten them. Put the inner cover and apply sealant to the sides.



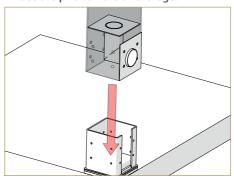
Place the elbow and apply sealant.



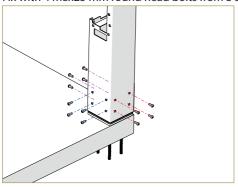
Place the front cover and fix it with 4 M8x25 mm round head bolts.

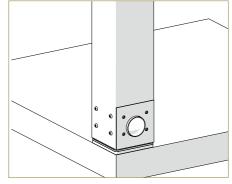


Place the pillar on the anchorage.



Fix with 4 M8x25 mm round head bolts from 3 sides.

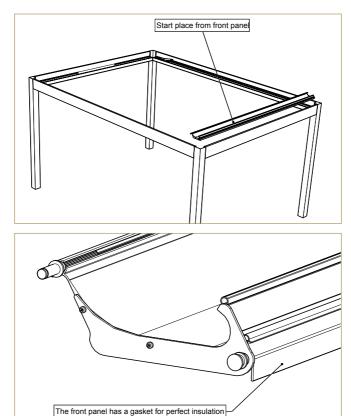


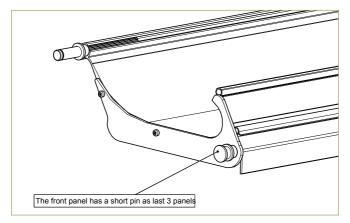




# 4.2. Panel Installation

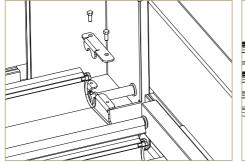
While placing the panels start front panel. First panel has a gasket for perfect insulation.

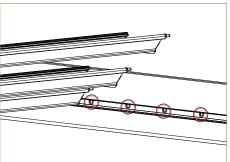




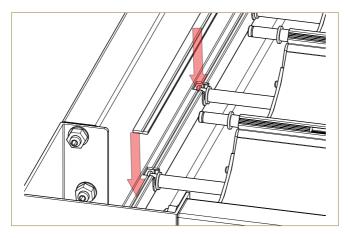
fixing plate to the integrated gutter. The fixing side integrated gutter which is shown at plate located on the gutter profile.

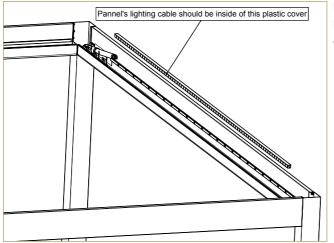
The frontier panel must be connected by Place the middle panels to escalloped lateral below figure.





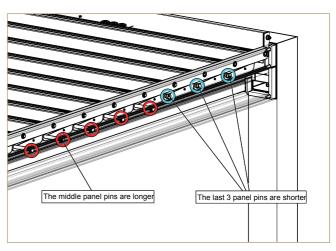
In order to prevent the dislocation of panels, to remove the panels, 1.5mm sheet should be fixed.



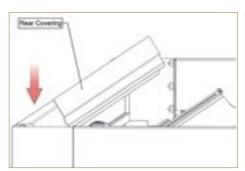


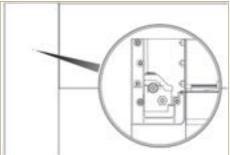
If you have lighting system, LED's cable must through from plastic cover

The last 3 panel pins are shorter than middle panels because of the reason is that prevent the pins from striking the linear actuator.



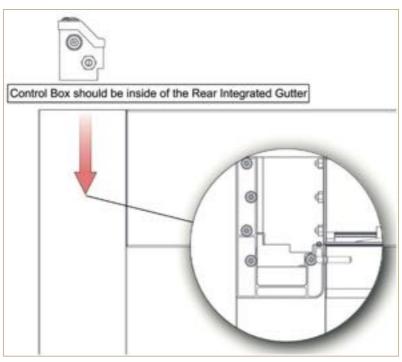
Control box can be located on rear integrated gutter.

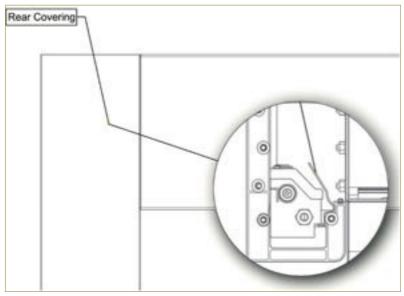




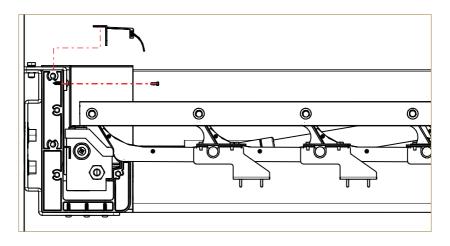


Place rear covering to rear integrated gutter.





Control box covering profile ensures that protect the control unit box. This profile places as defined at below.



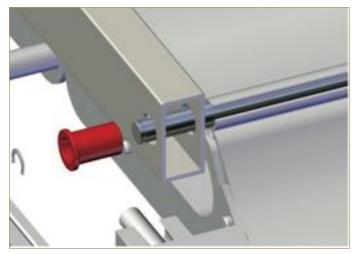
Motor konulduktan sonar enerji verilmeli,

Kalibrasyon yapılıp programlama yapılmalı.

Programlama bölümüne yönlendir. Please refer to Programming section.

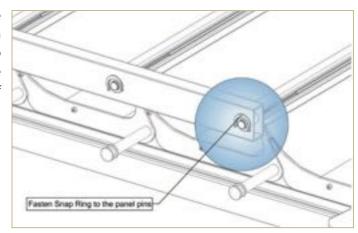
40x20mm Aluminium profile must be connect to the panels. This profile allows the movement of the actuators to pass through the panels.



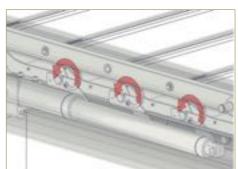


Pin house direction should be from outside to inside, as you see at below.

In order to block the 40x20mm Aluminium profile, must use to snap ring. It has to be placed to channel of the panel pin.

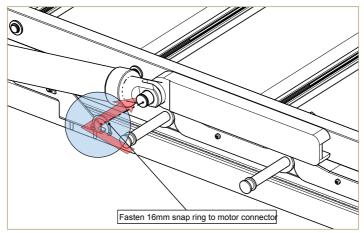


# Place and fasten to clamp for last 3 panels.





In the motor connection profile and 40x20 profile connection, the holes must catch up with each other. For this, the motors must be moved with the help of the remote control.

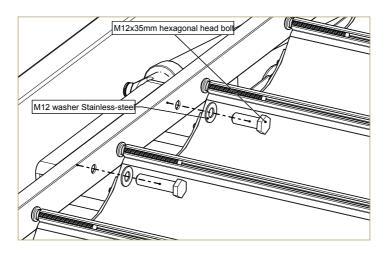


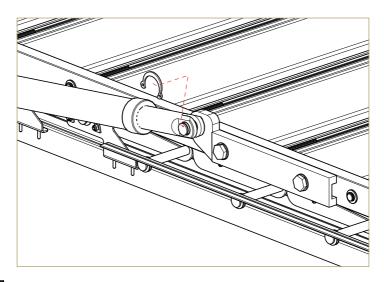
- 1. To connect actuator to panels, you need to give energy to control box and press calibration button.
- 2. Then you need to connect to remote control (Please check programming)
- 3. To allign holes of 40x20 profile and actuator profile, move actuators front or back by remote control.
- 4. Fix bolts of profile to eachother.

### 4.3. Linear Actuator Connector – 40x20mm Profile connection

M12x50mm hexagonal bolt stainless steel

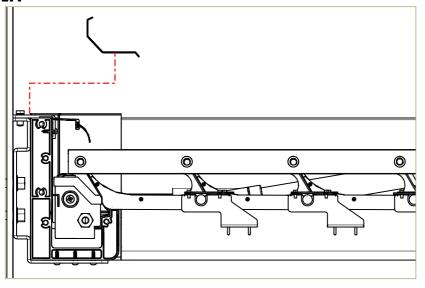
M10 Washer Stainless Steel





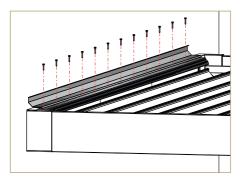


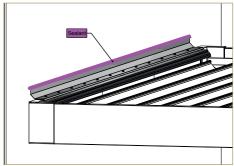
4.4. Back covering (for wall installation)
Place the back-covering profile (Z bended)



Then fix by M4,2x19mm self-tapping screw.

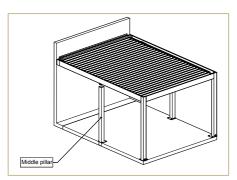
Then apply a sealant between wall and back covering (Z Bended) profile.

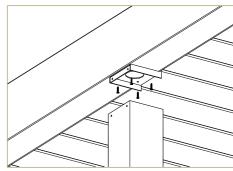


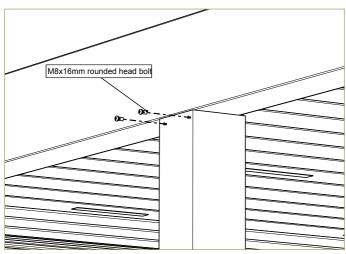


# 4.5. Middle Pillar Connection

If your projection bigger than 579,9cm (19') or you want to add a middle pillar to the structure, it will be able to connect with U bracket as you see in below picture.







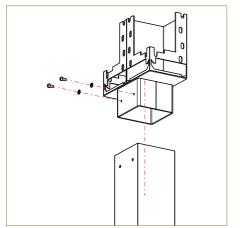
When you fix a U bracket to the integrated gutter, middle pillar can be added to the bottom of the U bracket as you see below picture.

# 4.6. 2 Module or 4 module connection

If there is a 2 module or 4 module, these modules are not welded to the pillar. That brackets and pillars will be sent separately.

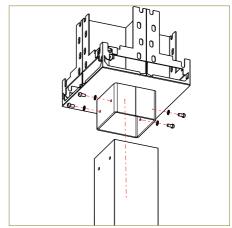


4.6.1. 2 Module and pillar





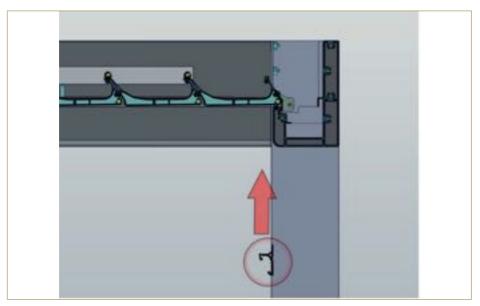
4.6.2. 4 Module and Pillar connection



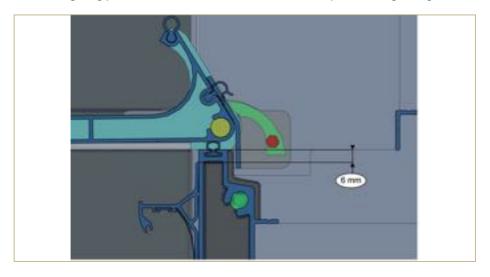


4.7. Perimeter Lighting Installation

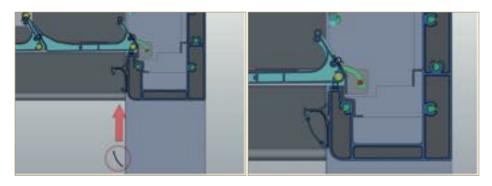
Place perimeter lighting profile to the integrated gutter.



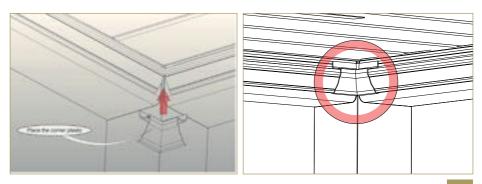
Perimeter lighting profile should be located on 6mm (15/64") top of the integrated gutter.



Place perimeter lighting profile Cap to related house on perimeter lighting profile.



Place corner plastic between perimeter lighting profile on the corner side.







Remove skyroof control box in gutter and find out RGB Led cabling instructions at the back of control box.

Black cable is for RGB Led Lighting which has water proof socket.





Open socket from middle, you will find marks (Terminal 1,2, PE and N) on that.

Fix cables according to instructions on control board



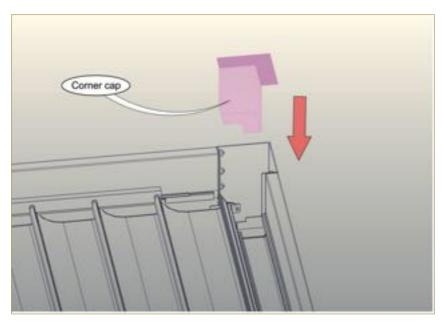


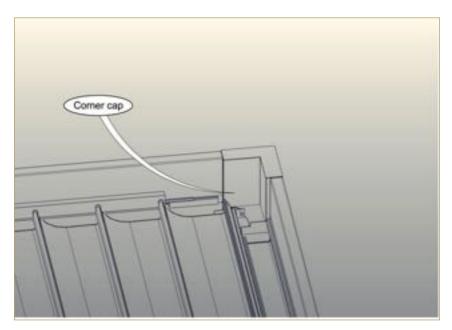
One side of socket has marks, other side has cable connection



# 4.8. Corner Cap

Place the Corner Cap on the top of the integrated gutter's joint point.





#### 5. PROGRAMMING / RESETTING OF MOTOR AND LIGHTS

#### • 5.1. Attention

The installation and initial setup procedures are the responsibility of a specialized technician. When bioclimatic pergola system is mounted, check the connection of drive system which is control box - actuator and also actuator – 40x20mm aluminium profile.

### Power supply (120 or 230VAC / 50~60 Hz)

- All wiring must conform to NEC (National Electrical Code) and local codes.
- The Control Unit Boxes can be wired in PARALLEL.
- A means of disconnecting the power at each motor independently should be provided.
- Power only needs to be supplied to the Control Unit Box. The receiver is completely
  enclosed inside the Control Unit Box.
- PALMIYE Reserves the right to void the motor warranty if wiring recommendations are not followed.
- The Control Box works 120 or 230 V AC / 50~60 Hz

# **Installation Requirements**

- If the installation is made up of several RTS system, only one RTS system must be powered
  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 transmitters.

# **Control Box Button Configurations**



<sup>\*</sup>These colors only schematic. In real parts always Grey color

# 5.2. Remote Control

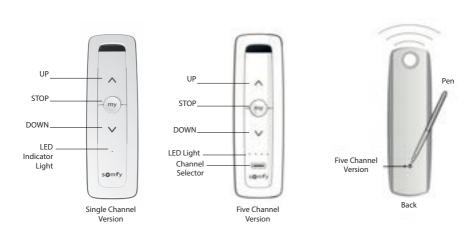
# 5.2.1. Button Configurations

Skyroof Plus is integrated with actuator driven with radio control, for opening, closing or stopping the panels use the respective buttons (see figure).

There are 4 different remote-control models.

Pure, Patio, Lounge, Modulis;

- Situo 1 RTS (has only one channel. It means it can control 1 RTS motor).
- Situo 5 RTS (has 5 channels. It means it can control 5 different RTS motor).
- Telis 16 (has 16 channels. It means it can control 16 different RTS motor).



# 5.3. Remote Types

|                          | my - v · · · · · · · · · · · · · · · · · ·                    | (i) (ii) (ii) (iii) (iii | 000           |
|--------------------------|---|--|---------------|
|                          | Situo 1 RTS   | Situo 5 RTS  | TELIS 16      |
| Channels                 | 1   | 5  | 16            |
| Battery Type             | 2430 Lithium  |  | LR03AAA       |
| Battery Voltage          | 3V  |  | 1,5 V         |
| Thickness                | 22  |  | 18            |
| Width                    | 49  |  | 47            |
| Height                   | 145   |  | 151           |
| Colour                   | Silver  |  | Silver & Pure |
| Compatibility            | Compatible with a range of Somfy RTS enabled products         |  |               |
| Radio Frequence          | For indoor use  |  |               |
| Radio Range              | 433,42 MHz  |  |               |
| Protection Index         | 200m in open field or 20m through 2 reinforced concrete walls |  |               |
| Working tempera-<br>ture | IP30  |  |               |
| Information              | 0C to + 60C   |  |               |
| Installation             | Wall brackets supplied  |  |               |



Signal indicator

targe screen LCD display

thannel number

Product icon

tow battery alert

Product name (up to 8 characters: 7 retters + 1 number)

Selection button

Navigation arrows

up/down/ "my" button



E.g.: The screen in the office



E.g.: The roller shutters on the first floor



E.g.: The awning on the roof balcony



E.g.: All products in the house

# 5.4. 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.

## 5.5. Programming

#### 5.5.1. Actuators

Step 1: Select desired channel on your remote

**Step 2:** Press the "PROGRAMMING" button. (~5sec.)

**Step 3:** Press "PROG" button on your remote control.

### 5.5.2. Perimeter and / or Panel lights

Step 1: Select desired channel on your remote

Step 2: Press "UP" and "DOWN" button simultaneously. Both lighting system will TURN ON.

**Step 3:** Press "PROG" button on your remote control.

**IMPORTANT NOTE:** At this stage, if there is only one of these systems, the lighting programming process is completed.

However, if there is both perimeter and panel lighting, both lighting systems are programmed in only one channel. It means both light systems will TURN ON at same time.

Also, you can control as separately,

# 5.5.2.1. Separation of lighting systems \* (Only if Plus product has both perimeter and panel lighting)

**Step 1:** Cut off the power entering the control box and for 10sec. supply a power again after waiting,

- **Step 2:** Select a channel you programmed both of lighting system.
- **Step 3:** If you want to leave the lighting on the selected channel, follow the steps below for other lighting;
- Step 3.1: Cut off the power as 3sec,
- Step 3.2: Supply a power as 10 sec.,
- **Step 3.3:** Cut off the power as 3sec. (The LED's will blink)
- **Step 3.4:** Press "PROG" button until the LED's will blink two times. (~5 sec.)
- **Step 4:** To program the reset lighting system to the remote control;
- **Step 4.1:** Cut off the power entering the control box and for 10sec. supply a power again after waiting,
- **Step 4.2:** Select desired channel on your remote control.
- **Step 4.3:** Press "UP" and "DOWN" button simultaneously.
- **Step 4.4:** Press "PROG" button on your remote control. Thus, the programming of lights will be done.

# 5.6. RGB Led Programming

Press the programming button on the panel for 5 seconds, then press the programming button on the back of the remote for 2 seconds.

#### 5.7. Motor Calibration

The motors must be calibrated in the first run in order to run synchronously. In any case when the panels are not completely closed, press and hold the "Motor Calibration" button on the panel until the motors move. When the panels are closed, the motors will be calibrated to synchronous operation.

## 5.8. Resetting

#### 5.8.1. Motor

- **Step 1:** Choose the channel on your remote that you want to set for the motor.
- **Step 2:** Press the "PROGRRAMING" button on the panel until the motor jogs for 2 times. (~10 sn.) All stored remotes will be deleted.

## 5.8.2. Lighting

- **Step 1:** Press the lighting button for 3 sec
- Step 2: Leave it for 10 sec
- **Step 3:** Press it for 3 sec
- **Step 4:** When you leave it, wait for leds will turn on and off for 2 times
- **Step 5:** Press programming button until leds blink 2 times

## 5.8.2.1. RGB LED Resetting

Press the programming button on the panel for 5 seconds, then press the programming button on the back of the remote for 2 seconds.

## 5.9. Using of Remote Control:

# 5.9.1. Using of Lights

- "UP" button: It's ensures Activate on your lighting system. When you press constantly "UP" button, the LED lights will up through DIMMING feature.
- "DOWN" button: It's ensures Passive on your lighting system. When you press constantly "DOWN" button, the LED lights will down through DIMMING feature.
- "MY" button: adjust to favorite light intensity automatically.

# 5.9.2. Using of motors

- "UP" button: Opens the panels.
- "DOWN" button: Closes the panels.
- "MY" button: It stops the motor from running and ensures that the panels remain where they are.

# 5.9.3. Transfer the channel on the current remote control to a different remote control.

Step 1: On the current remote, select which channel you want to transfer,

**Step 2:** On the current control, keep the "PROG" key pressed (LEDs will be turned on and off.)

**Step 3:** In the new remote, select which channel you want to choose,

**Step 4:** On the new remote, press and release the "PROG" button. (LEDs will be turned on and off.)

# 5.9.4. Favorite lighting programming

**Step 1:** After reaching the desired light intensity, press "MY" button for 5 sec., (LED lights will blink.) Thus, favorite light programmed.

## 5.9.5. Favorite lights resetting

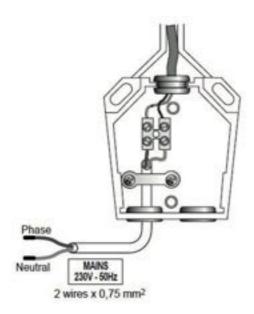
**Step 1:** While in favorite lighting press "MY" button as 5 sec., the LED's will blink two times. Thus, favorite lights will be reset.

#### 6. SENSORS & AUTOMATION

#### 6.1. Sensors

# 6.1.1. Connection to EOLIS RTS (Wind Sensor)

# 6.1.1.1. Cabling



# 6.1.1.2. Programming

The motor must be in its learning mode to record an EOLIS RTS Sensor.

Up to three EOLIS RTS Sensors can be memorized in a motor and one EOLIS RTS Sensor can be memorized in several motors.

- Enter the "learning" mode;
  - Press more than 2 seconds on the programming button of a RTS control which is already memorized in the motor.
  - Press briefly on the "prog" button of the EOLIS RTS Sensor.
  - The awning moves shortly (DOWN/UP).
- Record or delete a sensor:
  - Press briefly on the "prog" button of the EOLIS sensor RTS.
  - The awning moves shortly (DOWN/UP).
- Erase all the sensors and record a new one;
  - Press more than 7 sec. on the "prog" button of the new EOLIS RTS sensor.
- The awning moves shortly (DOWN/UP)

# 6.1.1.3. Functioning

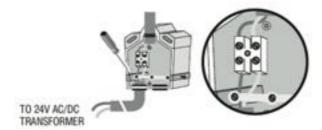
The WIND threshold can be adjusted by a potentiometer accommodate wind speed between 10 to 50km/h (6 to 31mph)

- When the wind speed exceeds the threshold set by the EOLIS sensor RTS, an UP order is given to the pergola after 2 sec.
- As long as the measured wind speed is higher than the adjusted threshold, any
  order is inhibited.
- When the wind speed falls below the threshold setting, an order can be given with the RTS control after 30 sec.

## 6.1.2. Connection to SOLIRIS RTS (Sun and Wind Sensor)

Motor connection to SOLIRIS RTS (Sun&wind Sensor);

## 6.1.2.1. Cabling



## 6.1.2.2. Programming

- The motor must be in programming mode to record a SOLIRIS RTS Sensor
- One SQLIRIS RTS Sensor can be memorized into several motors.
- It isn't recommended to memorize more than 1 SOLIRIS RTS Sensor into motor's memory.
- To Enter the Programming mode;
  - Activate the receiver's memory by pushing (for more than 2 seconds) the programming button of a transmitter already recorded in the motor's memory.
- To Record or delete a sensor;
  - Press briefly on the programming button of the SOLIRIS RTS briefly sensor.
- To delete all the sensors and record a new one;
  - Press for more than 7 sec. on the "programming" button of the new SOLIRIS
     RTS

### 6.1.2.3. Operation

 The SOLIRIS RTS Sensor controls and provides a measure of protection for a retractable pergola according to the sun and wind conditions. The WIND and SUN thresholds can be

- adjusted by two potentiometers, one for wind speed and the other for daylight intensity.
- The adjustment range is between 9 50 km/h (6 31 mph) for the WIND and between 0 to 50 kilolux for the SUN
- By using the SOLIRIS RTS Sensor it is possible to configure the functioning of the receiver (wind only or wind/sun). Please refer TELIS SOLIRIS RTS to the operating instructions.
- A short UP/DOWN movement of the retractable pergola indicates the modification of the sensor settings.

## 6.1.2.4. Connection to SUNIS (Sun) sensor

### IMPORTANT REMARKS BEFORE INSTALLATION

- Expose the sensor 20min. to the daylight to initialize its autonomous system (put the cells under the maximum daylight intensity).
- To verify charging level of sensor, press briefly the Mode button: if LED lights=ready for use.

#### FEATURES

- Up to 3 sensors can be memorized in one motor, it could be combined with other RTS sensors (EOLIS RTS, SOLIRIS RTS)
- One Sunis sensor RTS can be memorized in several motors
- Supply: "SOLAR"
- Autonomy: 24 hours without new daylight intensity.

#### PROGRAMMATION

- To proceed to programming, sensor must be charged (refer to important remarks before installation step).
- Enter the "Programming" Mode.
- By pressing > 2 sec. PROG. button of Remote Control (for single motor) or Centralis (for tandem system) until motor feedback.
- Record a sensor.
- By pressing briefly PROG. Button of sensor until motor feedback.

#### SETTING INSTRUCTIONS

LED reaction in "DEMO" mode or "USER" mode.

| THRESHOLD                 | USER MODE                     | DEMO MODE                     |
|---------------------------|-------------------------------|-------------------------------|
| Under sun level: RED LED  | Continues light during 5 sec. | Blinking light during 30 sec. |
| Over sun level: GREEN LED | Continues light during 5 sec. | Blinking light during 30 sec. |

- Enter the "DEMO" mode
- By pressing MODE button > 2 sec. > the light will start blinking for
- 30 sec. + feedback motor.
- · Adjust the sun threshold with the potentiometer
- The blinking led will be green once you have reached the current sun level.
- The level you set will be the one to set off the sun function
- Verify the functioning
- Let the demo mode works (if no sun, use a lamp)
- Enter the "USER" mode
- By pressing MODE button > 2 sec. > feedback motor
- DEMO mode will move back automatically after 3 min. in USER mode

#### MOUNTING INSTRUCTIONS

- Make sure to install sensor vertically and in place where solar cells can catch daylight intensity.
- Sensor delivered without screws, use the screw adapted to your wall support.

### **SUN FUNCTIONNING**

Use the Telis with sun function to activate or deactivate the sun function (Telis Soliris RTS, Telis Modulis Soliris RTS.)

Manual Mode: Sun function deactivated
Automatic mode: Sun function activated.

# Sun appearing

When the intensity of the daylight exceeds the threshold set by the Sunis sensor RTS, a Down order is sent to the blind after 2 mins. The blind goes to the MY position or to its down end limit position if no My position has been memorized.

## Sun disappearing

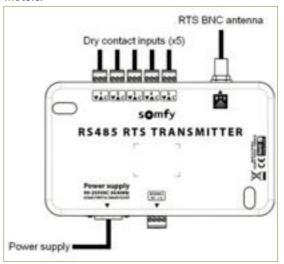
When the daylight level fails below the threshold setting, a variable time delay from 12-30 mins. is activated (depending on the sun presence duration). After this time delay, an UP order is given to the blind.

#### **READJUSTING**

| ADJUST THE SUN LEVEL WITH THE POTENTIOMETER ACCORDING TO YOUR WISHES |                                       |  |
|--|---------------------------------------|--|
| 1 turn to left (-)   | 2 Turn to right (+)                   |  |
| LESS sun is needed to lower the blind                                | MORE sun is needed to lower the blind |  |

### 6.1.2.5. Connection to ONDEIS (Rain) sensor

- Rain sensor requires a dry contact input. Our single motors (ALTUS) works with RTS
- In order to use ONDEIS rain sensor you must use Dry Contact Transmitter
- The RTS motors can communicate with dry contact transmitter or RS485 (multiple dry contact transmitter. Up to 5 channels.) Then dry contact transmitter communicates with ONDEIS Rain sensor and also RTS motors.
- The ONDEIS Rain sensor has a two-cable output. One cable must go to main voltage (230V/50Hz) and other is to dry contact signal cable.
- You must joint rain sensor dry contact cable to RS485's channel input jacks (from 1 to 5)
- In this case there is only one solution, if your products have more than 2 rails you can upgrade to tandem motor system. Otherwise, there is no solution.





When you plug all cables now you can program to rain sensor.

Select the RTS address on the channel selector corresponding to dry contact connectors.

- Press to PROG button on your remote control
- Then press PROG button on RS485 or Dry Contact Transmitter.



#### 6.2. Automation

## 6.2.1. Adaptable to Somfy systems

Our Retractable Pergola System can control by Somfy Home Automation Smart System which is CONNEXOON® Window RTS

You can download from below link:

## For IOS system:

https://apps.apple.com/tr/app/connexoon-window-rts/id1168009218?l=tr

# For ANDROID system:

https://play.google.com/store/apps/details?id=com.somfy.connexoon\_window&gl=TR

- The retractable pergola system motors can control by CONNEXOON® Window RTS application on smart phone.
- CONNEXOON® Window RTS device has to connect to the Ethernet modem connection.
- Download it,
- Create an account,
- Log in to the system,
- Enter the pin code which is below of the Connexoon transmitter,
- Read and Skip information tabs,
- Click 3 line on left top,
- Click configuration,
- Click (+) add button,
- Select your product,
- Program to your product,
- Give a name to your product,
- Now, you can control by your smart phone.

## 6.2.2. Adaptable To Other Automation Systems

In order to connect to different automation home smart system, there is RS485 RTS Transmitter or Dry Contact Transmitter.

- Only RTS motors can control by RS485 RTS Transmitter or Dry Contact Transmitter
- RS485 have a 5 dry contact input and Dry Contact Transmitter have only one input.
  - Select the RTS address on the Channel selector corresponding to dry contact connectors.
- The dry contact connector n<sup>0</sup>1 has per default, the RTS address n<sup>0</sup>1
- The dry contact connector n<sup>o</sup>2 has per default, the RTS address n<sup>o</sup>2

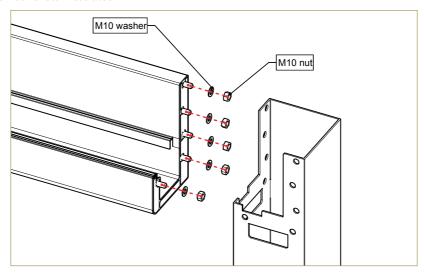
- The dry contact connector n°3 has per default, the RTS address n°3
- The dry contact connector n<sup>0</sup>4 has per default, the RTS address n<sup>0</sup>4
- The dry contact connector n<sup>o</sup>5 has per default, the RTS address n<sup>o</sup>5
  - Press the programming button on the back of the RTS control point or the RTS receiver until the motor jogs.
- The product is in programming mode
  - Press the programming button on the RS485 RTS transmitter or Dry contact
     Transmitter until the motor jogs
- The product is assigned to the transmitter.
- It can up to 16 groups of Somfy RTS motors and receivers.
  - Press the programming button on the back of the RTS control point or the RTS receiver until the motor jogs
- The product is in programming mode.
  - Send by the RS485 control or Dry Contact Transmitter, the corresponding RTS frame on the desired channel.
- The product is assigned to the transmitter's channel with a motor jog.
- It is impossible to set a motor or receiver with this RS485 RTS transmitter or Dry Contact Transmitter.

# 7. HARDWARE

# 7.1. Integrated gutter - Pillar connection

M10 nut Stainless Steel

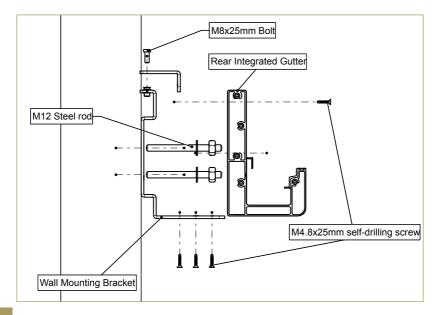
M10 washer Stainless Steel



# 7.2. Wall bracket – Integrated Gutter

M8x25mm Bolt

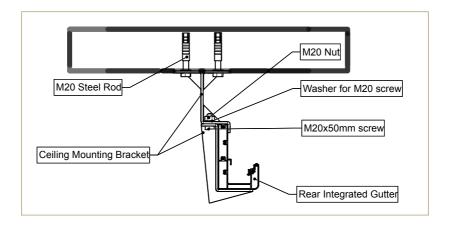
M4,8x25mm self-drilling screw



# 7.3. Ceiling Bracket - Integrated Gutter connection

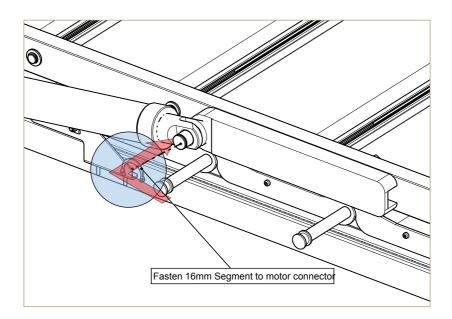
M20x50mm bolt M20 nut

Washer for M20 bolt



# 7.4. Linear Actuator – Linear Actuator Connector

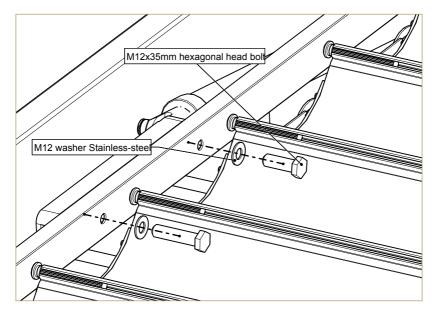
16mm Snap ring



# 7.5. Linear Actuator Connector – 40x20mm Profile connection

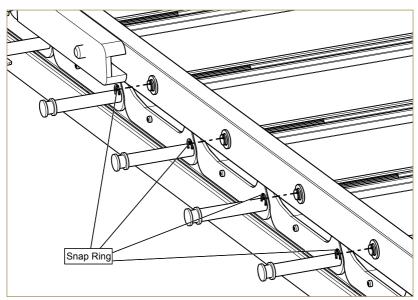
M12x50mm hexagonal bolt stainless steel

M10 Washer Stainless Steel



# 7.6. 40x20mm Profile - Panel Connection

8mm Snap ring



# **8. TOOLS**

| Image  | Product                      | Description   | Product Code       |
|--|------------------------------|---|--------------------|
|  | Palmiye T-Shirt              | for Installation teams  | HZM.ISG.G1009.BRUT |
|  | Palmiye Trousers             | for Installation teams  | HZM.ISG.G1014.BRUT |
| H  | Palmiye Waistcoat            | for Installation teams  | HZM.ISG.G1013.BRUT |
|  | Sealant   NP1 Dark<br>Brown  | to block the passage<br>of water through the<br>surface or joints or<br>openings in materials | HRD.KMY.C0018.KAHV |
| /  | Sealant   NP1 Light<br>Brown | to block the passage<br>of water through the<br>surface or joints or<br>openings in materials | HRD.KMY.C0018.AKAH |
| A STATE OF THE STA | Sealant (Black)              | to block the passage<br>of water through the<br>surface or joints or<br>openings in materials | HRD.KMY.G0016.SYAH |
|  | Sealant (White)              | to block the passage<br>of water through the<br>surface or joints or<br>openings in materials | HRD.KMY.G0017.BYAZ |
|  | Sealant (Grey)               | to block the passage<br>of water through the<br>surface or joints or<br>openings in materials | HRD.KMY.G0022.GREY |

| Image  | Product                                 | Description  | Product Code       |
|--|---|--|--------------------|
| A STATE OF THE STA | Ероху                                   | to anchor rods to<br>concrete                                      | HRD.KMY.G1027.BRUT |
|  | M12 Rod                                 | to fix and stabilaze<br>products to ground/<br>wall/ceiling        | HRD.CVT.G0100.ZINC |
|  | M30 - Rod Galvanized                    | to fix and stabilaze<br>products to ground/<br>wall/ceiling        | HRD.CVT.G0105.ZINC |
|  | M12 Rondela Washer<br>- Stainless Steel | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.CVT.G1062.PSMZ |
| 0  | M12 Washer Stainless<br>Steel           | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.PUL.G0003.PSMZ |
|  | M30 Washer -<br>Galvanized              | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.PUwG0014.ZINC  |
| 9  | M12 Acorn Nut                           | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.SMN.G0008.ZINC |
|  | M12 Nut Stainless<br>Steel              | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.SMN.G0011.PSMZ |
|  | M30 Nut - Galvanized                    | part to to fix and<br>stabilaze products to<br>ground/wall/ceiling | HRD.SMN.G0022.ZINC |

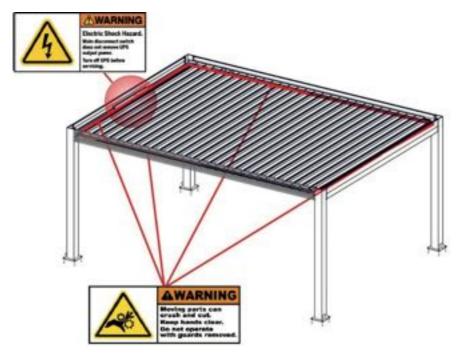
| INSTALLATION TOOL LIST   |                       |       |  |
|--|-----------------------|-------|--|
|  | Tool box with wheel   | 1 pc  |  |
|  | Spiral grinder        | 1 рс  |  |
| 7  | Batery driller.       | 1 рс  |  |
| 7  | Electric impact drill |       |  |
| 3  | Lighting              | 2 pc  |  |
| <b>_</b>   | Extansion lead        | 2 pc  |  |
| The state of the s | Ladder                | 2 pc  |  |
| 8-   | Tape measure 5m       | 1 pc  |  |
| 8-   | Tape measure 10m      | 1 рс  |  |
| 10 40  | Water gauge           | 2 pc  |  |
|  | Laser Meter           | 1 рс  |  |
|  | 35 cm angle           | 1 рс  |  |
| 10   | Wrench Set            | 2 Set |  |
| 6  | Flush Cutter          | 2 pc  |  |
| L  | Pliers                | 2 pc  |  |

| Allen wrench set        | 2 Set   |
|-------------------------|---|
| Socket wrench           | 1 pc  |
| Screw driver            | 1 Set   |
| Plastic hammer          | 1 pc  |
| Iron hammer             | 2 pc  |
| Electrical screw driver | 2 pc  |
| Cutter                  | 1 pc  |
| Slicon gun              | 2 pc  |
| Bits                    | 2 Set   |
| PH2X100 Bits            | 2 pc  |
| APEX 493 A Bits         | 2 pc  |
| Insulating Tape (Black) | 6 pc  |
| Insulating Tape (White) | 6 pc  |
| Glue                    | 2 pc  |
| Punch driller 70 mm     | 2 pc  |
| Guide drill bit         | 1 set   |
|                         | Socket wrench  Screw driver  Plastic hammer  Iron hammer  Electrical screw driver  Cutter  Slicon gun  Bits  PH2X100 Bits  APEX 493 A Bits  Insulating Tape (Black)  Insulating Tape (White)  Glue  Punch driller 70 mm |

# 9. FREQUENTLY ASKED QUESTIONS

| FAQ                     | REASON                               | HOW TO RESOLVE?   |  |
|-------------------------|--------------------------------------|---|--|
| The product motor       | The motor is not energized           | Check the switch of the current distri-<br>bution board connected to the motor<br>is on.  |  |
| would not start         | 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.  |  |
| The product does not    | Erroneous installation               | Please call our technical service.  |  |
| work properly           | Natural disasters                    | Please call our technical service.  |  |
| Lights are not on       | Not all lights are on                | It should be checked if the product is<br>energized. The power must be discon-<br>nected and connected again. Please<br>call our technical service if nothing<br>changes at lights. |  |
| Lights are not on       | Part of the lights is not on         | Please call our technical service.  |  |
| The remote controller   | It does not control the product      | The battery should be replaced. Please call our technical service if it still does  |  |
| does not work           | Lights are not on                    | not work.   |  |
| The product leaks water | Eaves troughs overflow               | It should be checked if drains inside<br>eaves troughs are unblocked.   |  |
| e product reals witer   | The product isolation leaks<br>water | Make sure that areas of the system water tightness gaskets are clean (leaves, branches, etc.). Please call our technical service if the problem is not solved.                      |  |

#### 10. RISK TABLE



## **Guarantee of Quality and Certificates**

Palmiye consolidates its quality understanding starting with the selection of raw material with modern production techniques, functionality and visual design approaches. We are aware that the "Quality" is not only a fact of production and that we may never be successful without turning this into a common "feeling" shared by all of our employees. Our efforts aimed at offering its customers products they can use for many years with great satisfaction has turned Palmiye into one of the leading brands in national and international market.

Palmiye is the sector leader in terms of adopting and applying ISO 9001: 2008 standards. As an outcome of the meticulous studies conducted by the R&D department, all of our products have been awarded the CE quality certificate.

By attaching the CE mark to its products, Palmiye declares that it meets the EU safety, health, and environment requirements.



www.palmiye.eu

