

**ISOTRA®**

TECHNICAL MANUAL

PERGOLAS



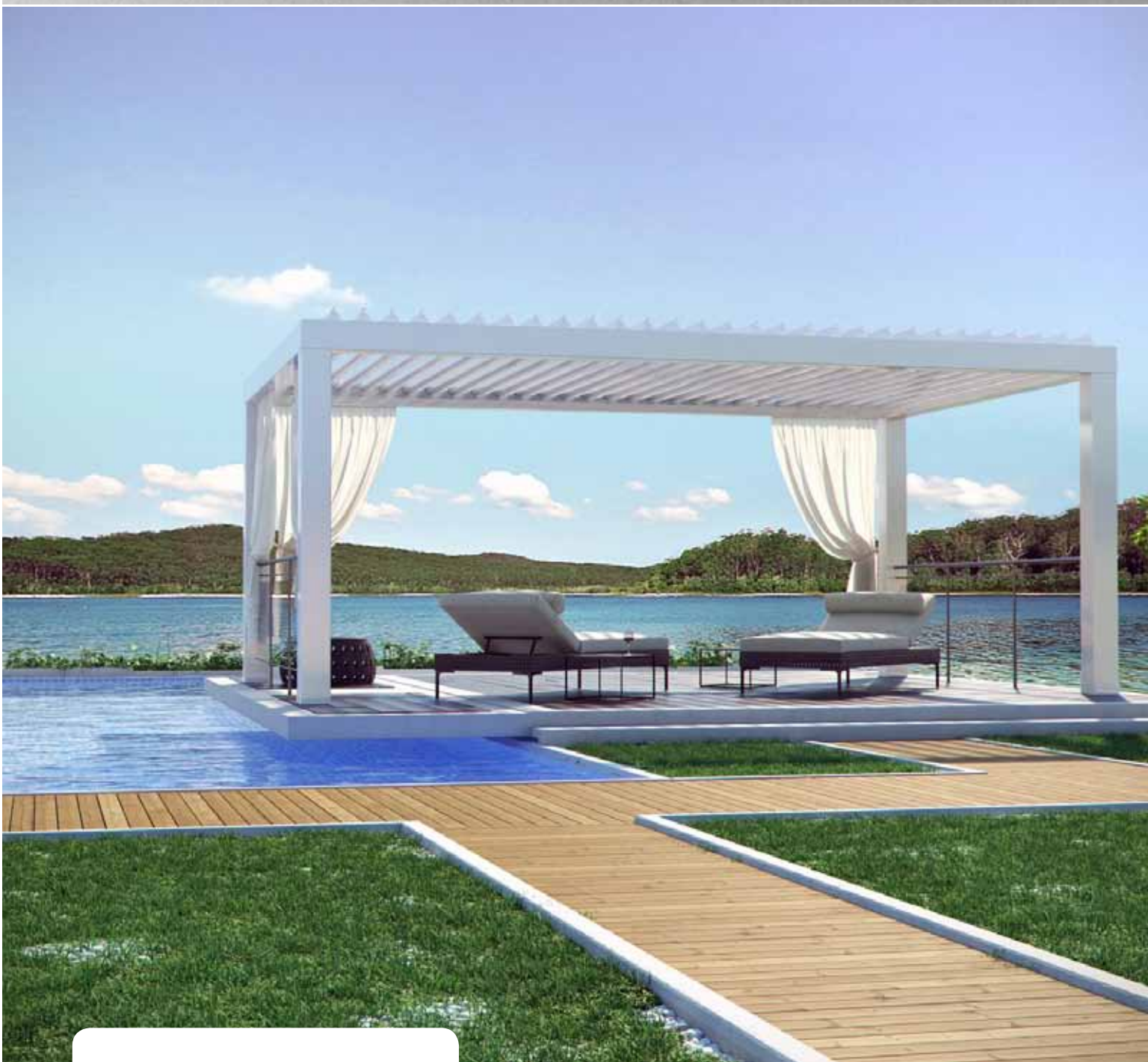
Content - Pergolas

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ISOTRA *Quality*

A mark symbolising long tradition, inestimable investment into development, the use of quality materials, state-of-the-art technologies, reliable work from hundreds of employees and numerous other parameters, contributing one entity - the final product of ISOTRA.

MIRA 4

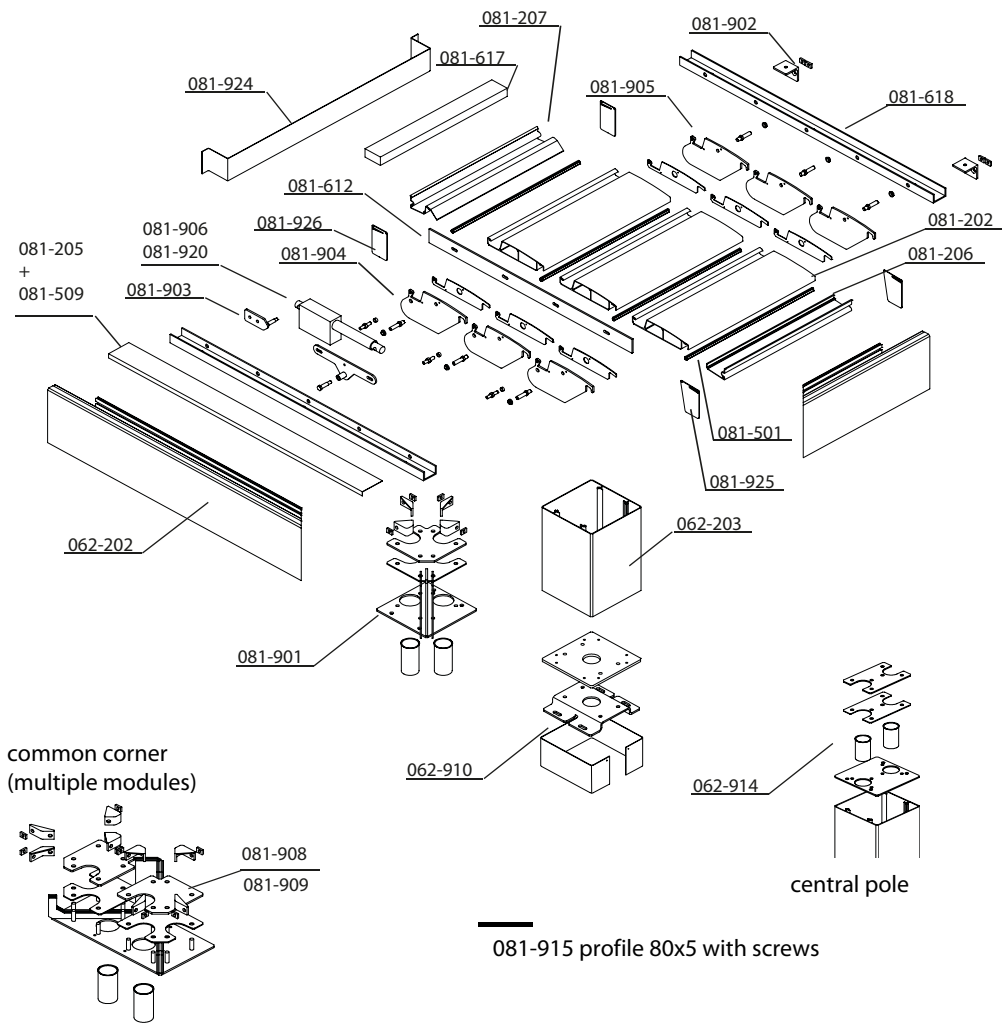


- ▲ Aluminum lamellas with orientation 0° to 140°,
- ▲ lateral water drainage integrated into the stands,
- ▲ protection against rain and snow (max. load 140 kg / m²),
- ▲ high resistance to wind,
- ▲ possibility of integration of screen blinds or outdoor blinds,
- ▲ possibility to couple pergolas,
- ▲ any RAL construction color including the anthracite structure.

ISOTRA *Quality*

MIRA 4

Basic Product Specification



2-01447-0000

Control

It is used to open, tilt and close the aluminium slats in the pergola roof.
 Motor - Linak motor with linear motion of the shaft.

Standard Dimensions

Pergola	Control	Projection (mm)		Width (mm)		Height H (mm)	Guaranteed area (m ²)
		min.	max.	min.	max.	max.	max.
MIRA 4	motor	2000	7000	2000	4500	3000	31,5
Standard colour	RAL 9003 white RAL 8014 brown RAL 9006 light silver Other RAL colors upon request			RAL 7016 anthracite grey V01 pearl silver V05 black sandblasted			

Mira 4 (2-01447-0000)

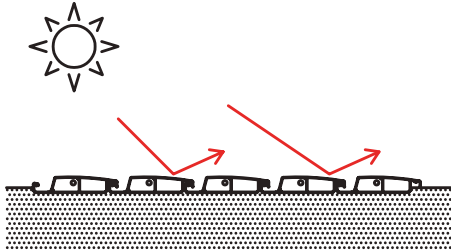
Position	Item name	Drawing number
083-501	Remote control 1 channel - BLACK	6-015380-0000
083-515	Remote control 6 channel - BLACK	6-015380-0001
081-924	Control unit holder	6-015381-0000
081-202-6m	Profile slat 220 - 6m	6-015382-00006
081-202-8m	Profile slat 220 - 8m	6-015382-00008
081-501-3m-nero	Profile seal - 3m - BLACK	6-015383-9005
081-501-3m-grigio	Profile seal - 3m - GREY	6-015383-9006
081-501-3,5m-nero	Profile seal - 3,5m - BLACK	6-015384-9005
081-501-3,5m-grigio	Profile seal - 3,5m - GREY	6-015384-9006
081-501-4m-nero	Profile seal - 4m - BLACK	6-015385-9005
081-501-4m-grigio	Profile seal - 4m - GREY	6-015385-9006
081-501-4,3m-nero	Profile seal - 4,3m - BLACK	6-015386-9005
081-501-4,3m-grigio	Profile seal - 4,3m - GREY	6-015386-9006
081-612-6m	Control profile - 6m	6-015387-00006
081-612-8m	Control profile - 8m	6-015387-00008
081-618-6m	Guide profile - 6m	6-015388-00006
081-618-8m	Guide profile - 8m	6-015388-00008
081-205	Side cover - 6m	6-015389-0000
081-509	Side cover gasket - 6m - BLACK	6-015390-0000
081-206	Profile front MIRA 4 - 4,5m	6-015391-0000
081-207	Profile rear MIRA 4 - 4,5m	6-015392-0000
062-203-6m	Profile POLE - 200x200 - 6m	6-015393-00006
062-203-8m	Profile POLE - 200x200 - 8m	6-015393-00008
062-202-6m	Profile GUTTER CHANNEL - 200x200 - 6m	6-015394-00006
062-202-8m	Profile GUTTER CHANNEL - 200x200 - 8m	6-015394-00008
081-915-6m	Profile 80x5mm with screws/compensator - 6m	6-015395-0000
081-925	Front side cover - COUPLE	6-015396-0000
081-926	Rear side cover - COUPLE	6-015397-0000
081-510	Rain sensor	6-015398-0000
081-510	Temperature sensor	6-015399-0000
081-209	Profile front MIRA 2 - 4,5m	6-015400-0000
081-208	Profile rear MIRA 2 - 4,5m	6-015401-0000
081-907	Hanging plate MIRA 2 - COUPLE	6-015402-0000
081-927	Front side cover MIRA 2 - WALL - COUPLE	6-015403-0000
081-928	Rear side cover MIRA 2 - WALL - COUPLE	6-015404-0000
081-920-1ch	2 motors + control unit + 1 channel remote control	6-015405-0001
081-920-6ch	2 motors + control unit + 6 channel remote control	6-015405-0002
062-914	Upper set of middle pole	6-015407-0000
081-901	Set of corner gutter	6-015408-0000
081-905	Disc cover - SET	6-015409-0000
081-904	Rotating disc cover - SET	6-015410-0000
081-902	Bracket MIRA 4, MIRA 2 - SET	6-015411-0000
062-910	Adjustable pole - SET	6-015412-0000
081-903	Motor hinge - SET	6-015413-0000
081-906-1ch	Motor + control unit + 1 channel remote control	6-015414-0001
081-906-6ch	Motor + control unit + 6 channel remote control	6-015414-0002
081-617	Polystyrene foam for slat insulation - 1m	6-015415-0000
081-908	Corner set - pedestal	6-015416-0000
081-909	Corner set - without pedestal	6-015417-0000

MIRA 4

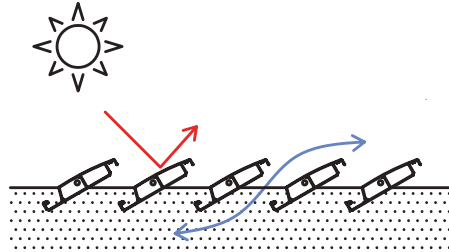
Technical Specification

Pergola features

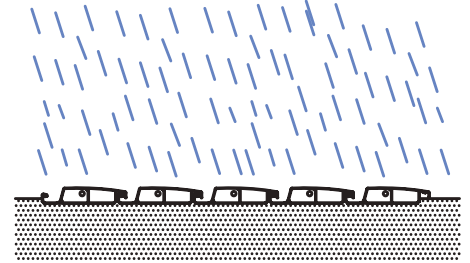
Sun protection



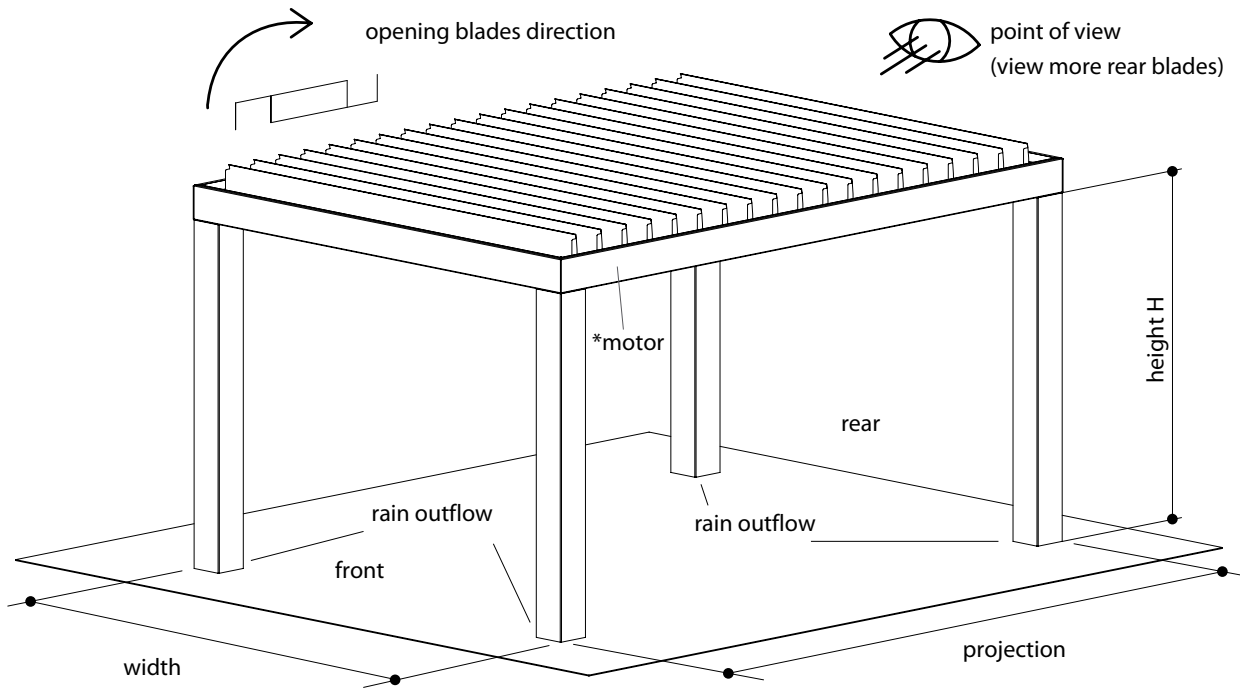
Sun protection and cooling



Rain protection



Pergola reading scheme

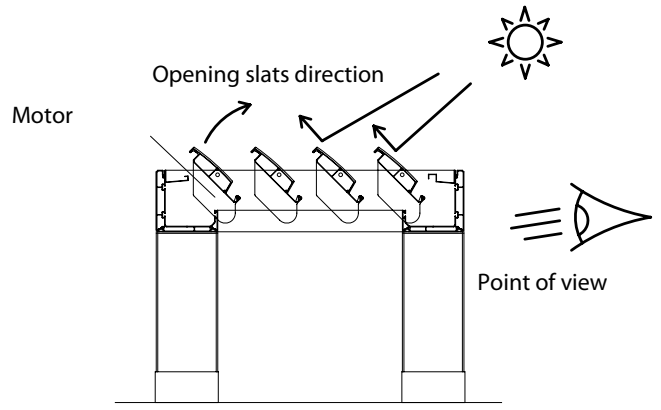
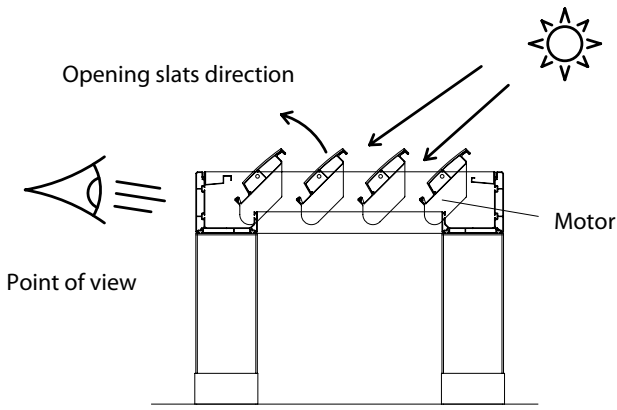


*Example of motor situated left side respect the point of view.

Slats orientation

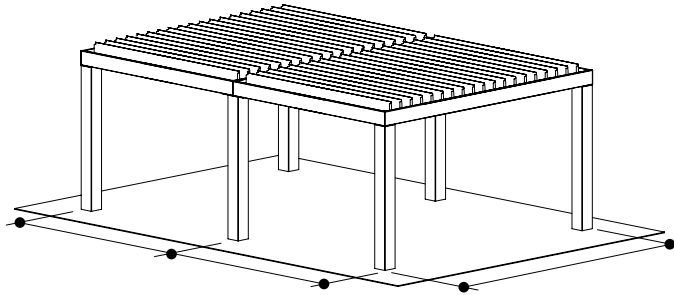
DIRECT SUNLIGHT - more luminosity

INDIRECT SUNLIGHT - more solar shading



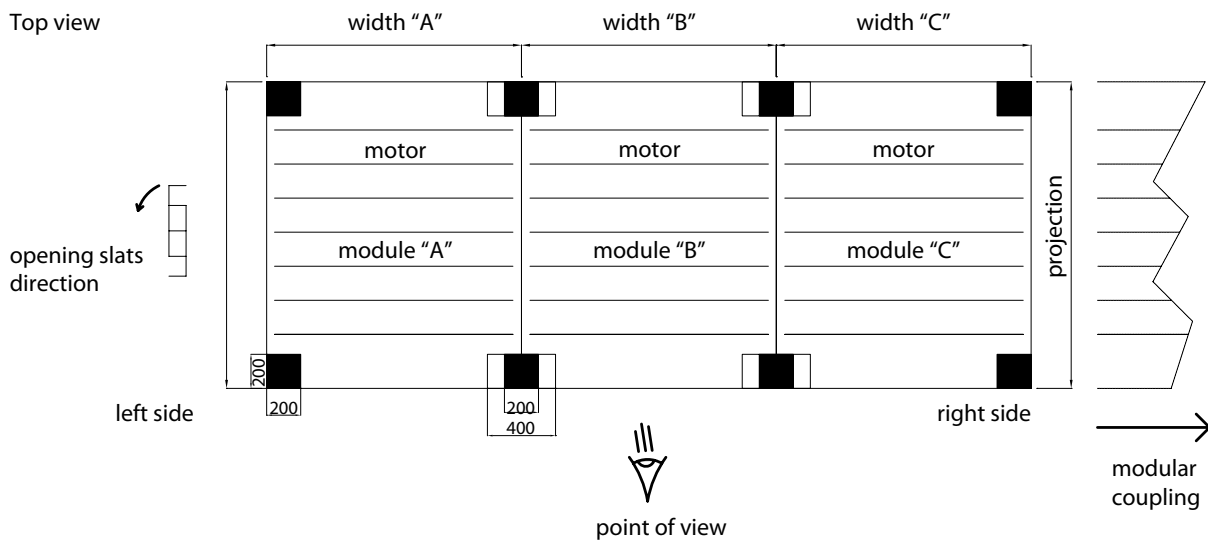
Pergola coupling

Lateral coupling

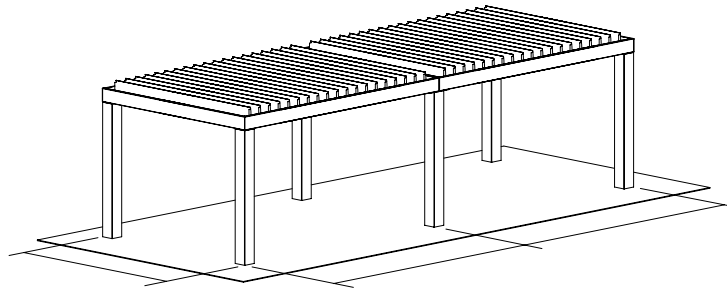


The diagram shows a lateral coupling with motors on the left, each pole allow to drain water, including those in common.

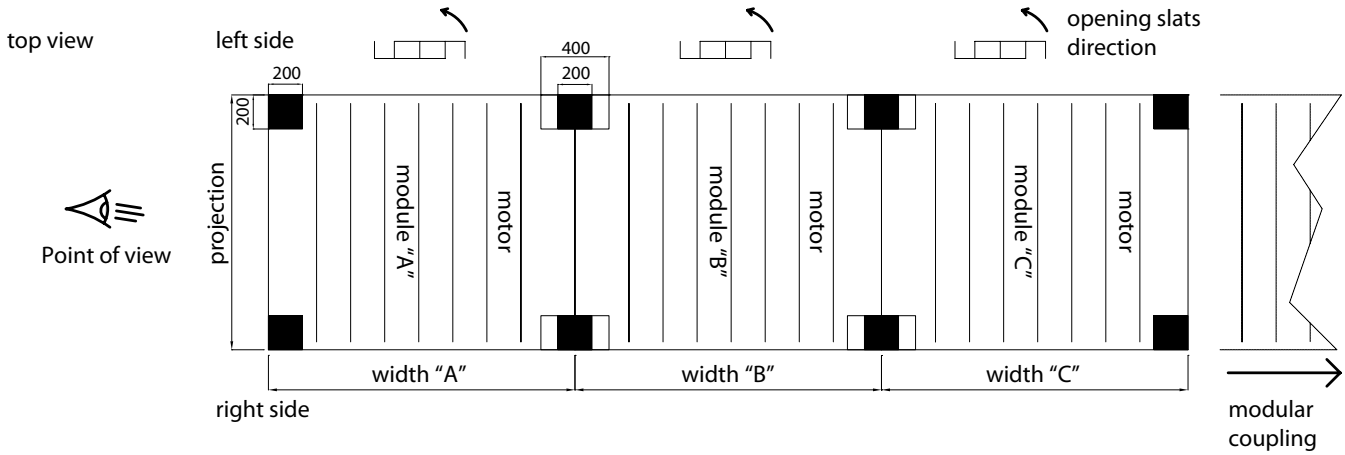
Top view



Frontal coupling

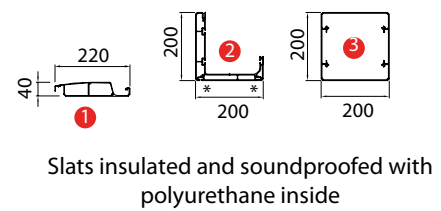
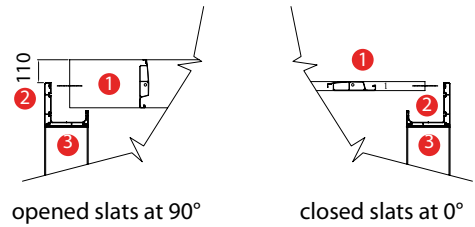
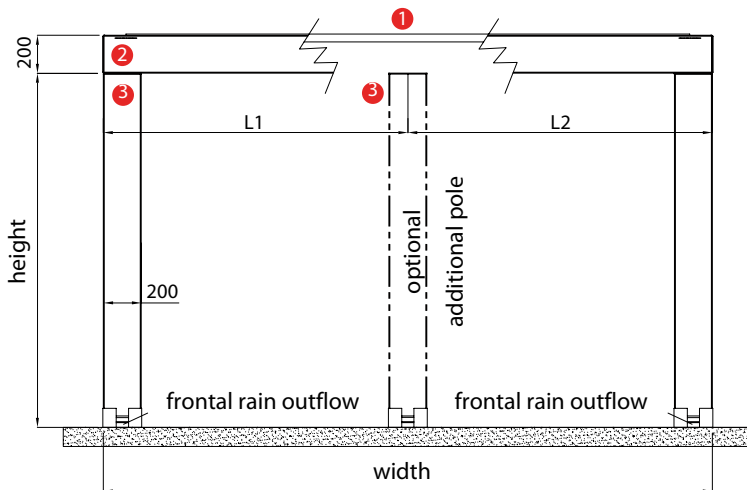


The diagram shows a frontal coupling with motors on the left, each pole allow to drain water, including those in common.



Technical data

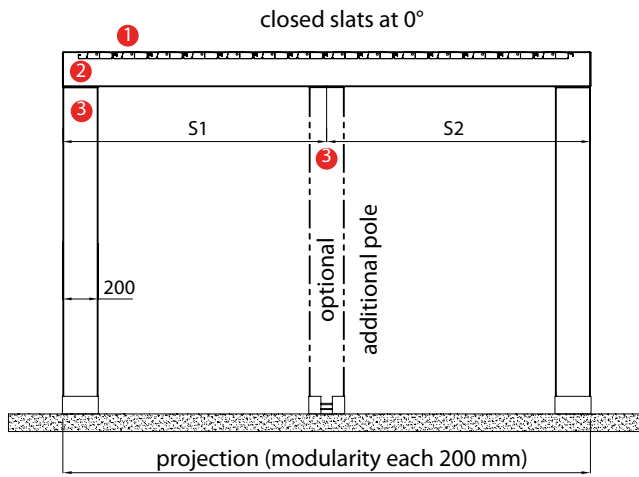
Frontal view



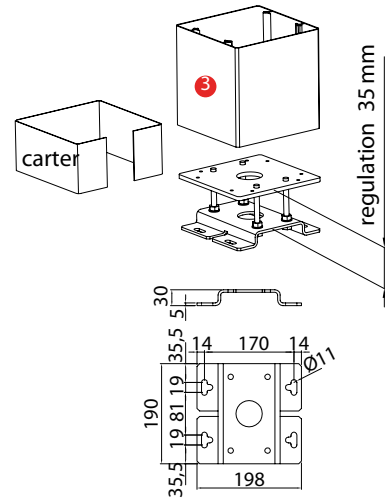
Technical legend

- ① slat
- ② perimetric water-drain profile
- ③ pole 20x20 cm

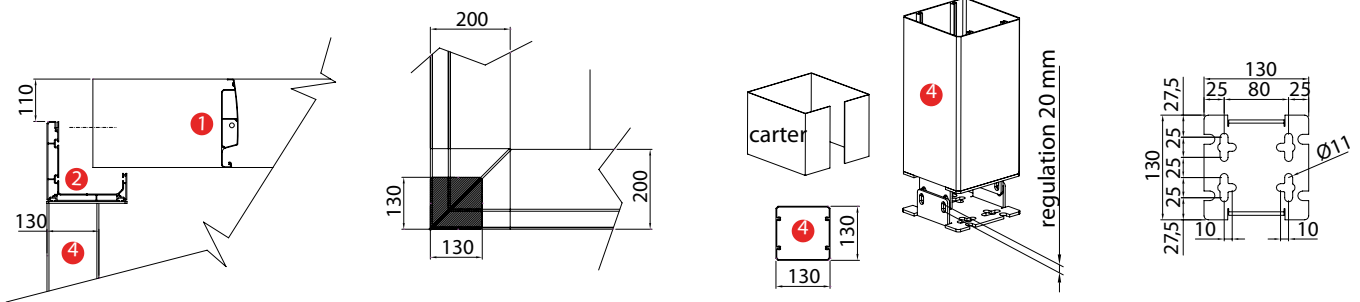
Side view



Foot



Variant by choice with poles 13x13 cm for single forms of width 4 m for 4 m max projection (no common pole).



Medium structure weight is 30 kg /m².

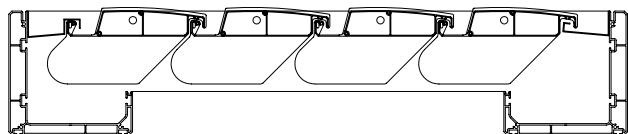
Projection	mm	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000
Slats	pc	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Technical legend

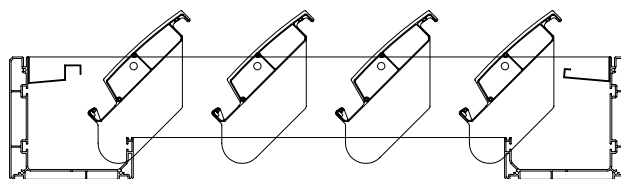
- 1 slat
- 2 perimetric water-drain profile
- 3 pole 20x20 cm
- 4 pole 13x13 cm

Slats rotation

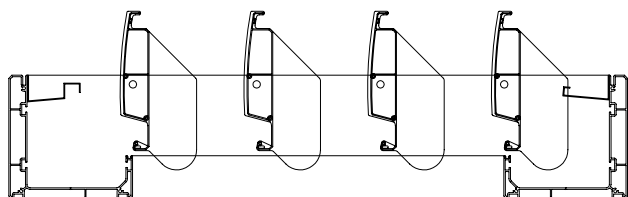
Slats rotation at 0°



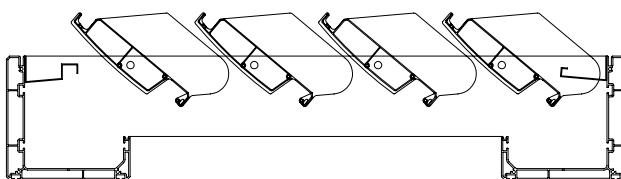
Slats rotation at 45°



Slats rotation at 90°



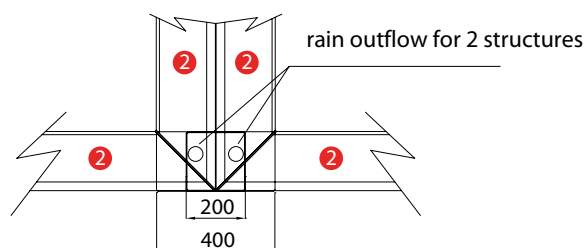
Slats rotation at 140°



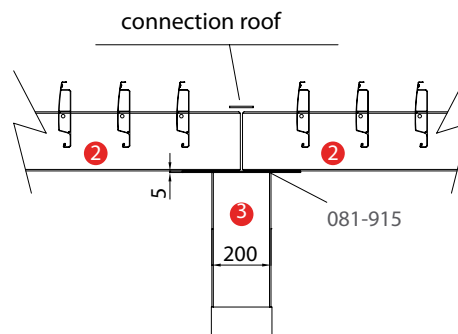
Rotation slats at 0°, 45°, 90° and 140° on 4 preset buttons on the remote control; possibility of intermediate adjustments using the three buttons on the remote control: opening, closing and stop.

Common pole for coupling modules

Top view



Side view



Art 081-915 of dimensions 80x5mm recommended in coupling of pergolas to cover the gap between the roof profiles.

Technical legend

- ② perimetric water-drain profile
- ③ pole 20x20 cm

MIRA 2

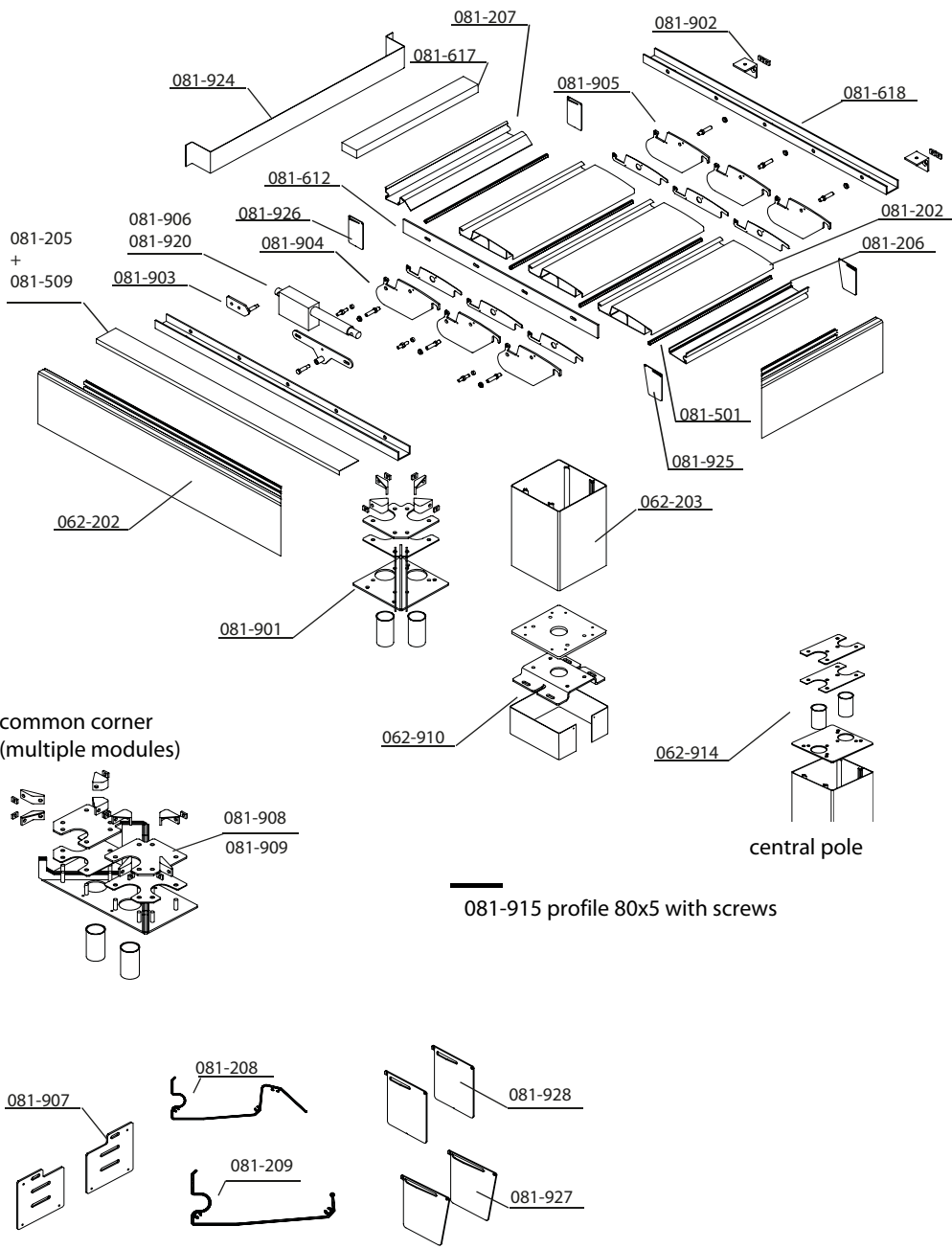


- ▲ Aluminum slats with orientation from 0° up to 140°,
- ▲ lateral water drainage integrated into the stand,
- ▲ protection against rain and snow (max. load 140 kg / m²),
- ▲ high resistance to wind,
- ▲ possibility of integration of screen blinds or outdoor blinds,
- ▲ possibility to couple pergolas,
- ▲ any RAL construction color including the anthracite.

ISOTRA *Quality*

MIRA 2

Basic Product Specification



2-01446-0000

Control

It is used to open, tilt and close the aluminium slats in the pergola roof.
 Motor - a linear motor Linak, motor with compressing/decompressing of the piston.

Standard Dimensions

Pergola	Control	Projection (mm)		Width (mm)		Height H (mm)	Guaranteed area (m ²)
		min.	max.	min.	max.	max.	max.
MIRA 2	motor	2000	7000	2000	4500	3000	31,5
Standard colour	RAL 9003 white RAL 8014 brown RAL 9006 light silver Other RAL colors upon request			RAL 7016 anthracite grey V01 pearl silver V05 black sandblasted			

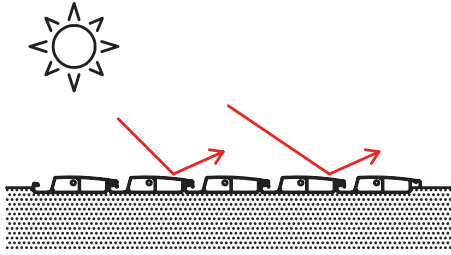
Mira 2 (2-01446-0000)

Position	Item name	Drawing number
083-501	Remote control 1 channel - BLACK	6-015380-0000
083-515	Remote control 6 channel - BLACK	6-015380-0001
081-924	Control unit holder	6-015381-0000
081-202-6m	Profile slat 220 - 6m	6-015382-00006
081-202-8m	Profile slat 220 - 8m	6-015382-00008
081-501-3m-nero	Profile seal - 3m - BLACK	6-015383-9005
081-501-3m-grigio	Profile seal - 3m - GREY	6-015383-9006
081-501-3,5m-nero	Profile seal - 3,5m - BLACK	6-015384-9005
081-501-3,5m-grigio	Profile seal - 3,5m - GREY	6-015384-9006
081-501-4m-nero	Profile seal - 4m - BLACK	6-015385-9005
081-501-4m-grigio	Profile seal - 4m - GREY	6-015385-9006
081-501-4,3m-nero	Profile seal - 4,3m - BLACK	6-015386-9005
081-501-4,3m-grigio	Profile seal - 4,3m - GREY	6-015386-9006
081-612-6m	Control profile - 6m	6-015387-00006
081-612-8m	Control profile - 8m	6-015387-00008
081-618-6m	Guide profile - 6m	6-015388-00006
081-618-8m	Guide profile - 8m	6-015388-00008
081-205	Side cover - 6m	6-015389-0000
081-509	Side cover gasket - 6m - BLACK	6-015390-0000
081-206	Profile front MIRA 4 - 4,5m	6-015391-0000
081-207	Profile rear MIRA 4 - 4,5m	6-015392-0000
062-203-6m	Profile POLE - 200x200 - 6m	6-015393-00006
062-203-8m	Profile POLE - 200x200 - 8m	6-015393-00008
062-202-6m	Profile GUTTER CHANNEL - 200x200 - 6m	6-015394-00006
062-202-8m	Profile GUTTER CHANNEL - 200x200 - 8m	6-015394-00008
081-915-6m	Profile 80x5mm with screws/compensator - 6m	6-015395-0000
081-925	Front side cover - COUPLE	6-015396-0000
081-926	Rear side cover - COUPLE	6-015397-0000
081-510	Rain sensor	6-015398-0000
081-510	Temperature sensor	6-015399-0000
081-209	Profile front MIRA 2 - 4,5m	6-015400-0000
081-208	Profile rear MIRA 2 - 4,5m	6-015401-0000
081-907	Hanging plate MIRA 2 - COUPLE	6-015402-0000
081-927	Front side cover MIRA 2 - WALL - COUPLE	6-015403-0000
081-928	Rear side cover MIRA 2 - WALL - COUPLE	6-015404-0000
081-920-1ch	2 motors + control unit + 1 channel remote control	6-015405-0001
081-920-6ch	2 motors + control unit + 6 channel remote control	6-015405-0002
062-914	Upper set of middle pole	6-015407-0000
081-901	Set of corner gutter	6-015408-0000
081-905	Disc cover - SET	6-015409-0000
081-904	Rotating disc cover - SET	6-015410-0000
081-902	Bracket MIRA 4, MIRA 2 - SET	6-015411-0000
062-910	Adjustable pole - SET	6-015412-0000
081-903	Motor hinge - SET	6-015413-0000
081-906-1ch	Motor + control unit + 1 channel remote control	6-015414-0001
081-906-6ch	Motor + control unit + 6 channel remote control	6-015414-0002
081-617	Polystyrene foam for slat insulation - 1m	6-015415-0000
081-908	Corner set - pedestal	6-015416-0000
081-909	Corner set - without pedestal	6-015417-0000

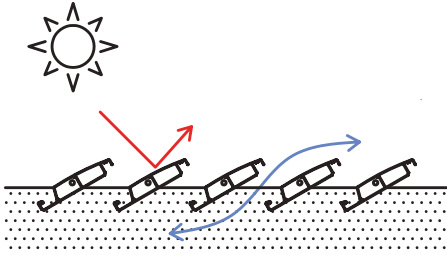
MIRA 2 Technical Specification

Pergola features

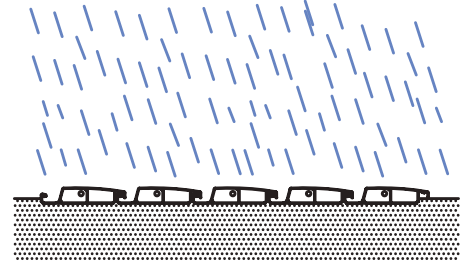
Sun protection



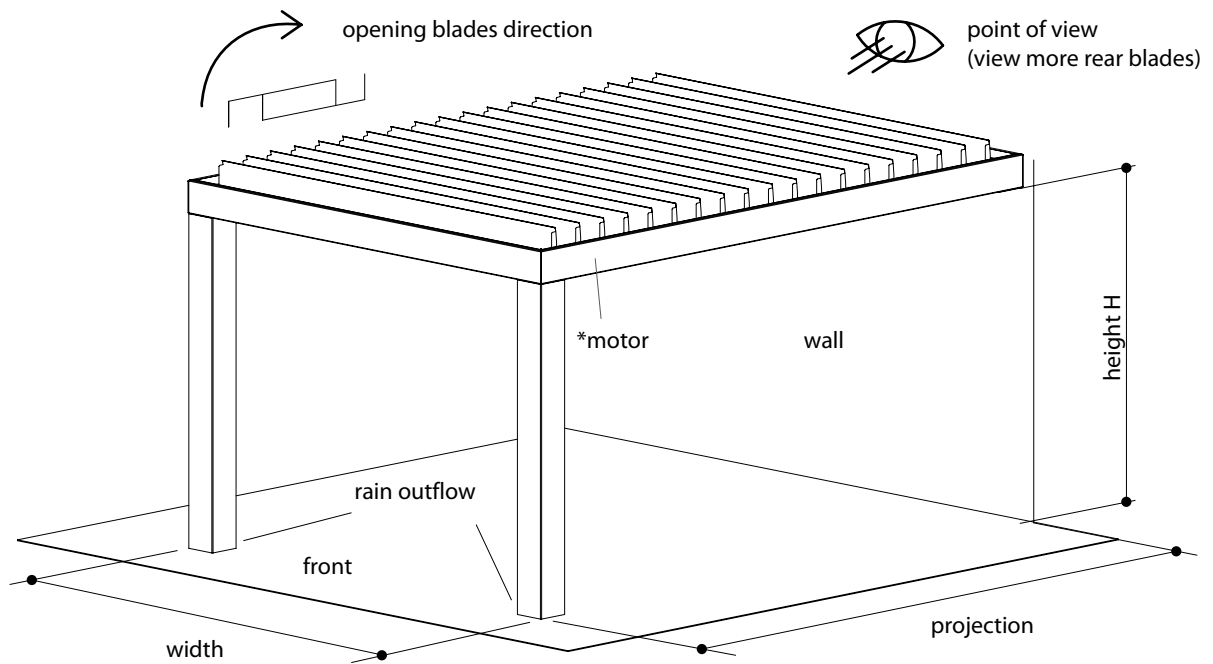
Sun protection and cooling



Rain protection



Pergola reading scheme

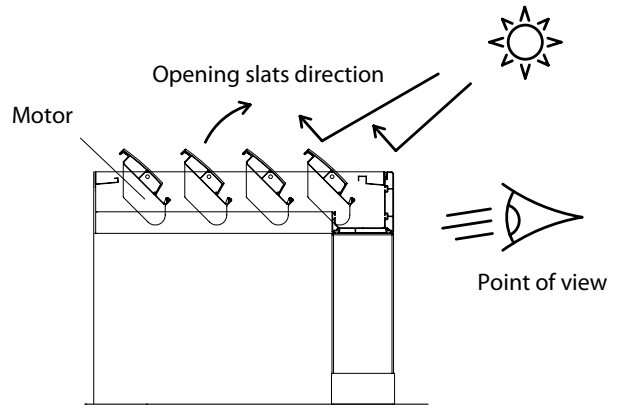
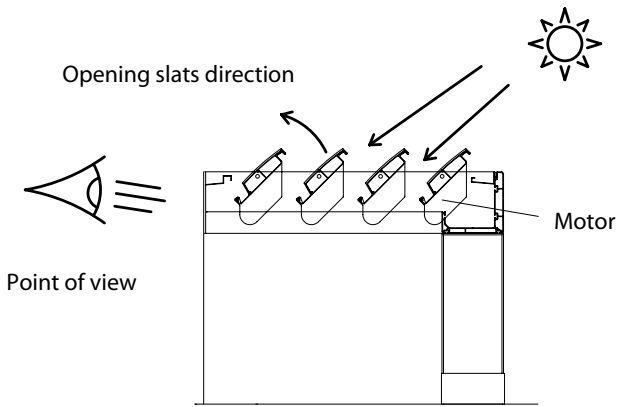


*Example of motor situated left side.

Slats orientation

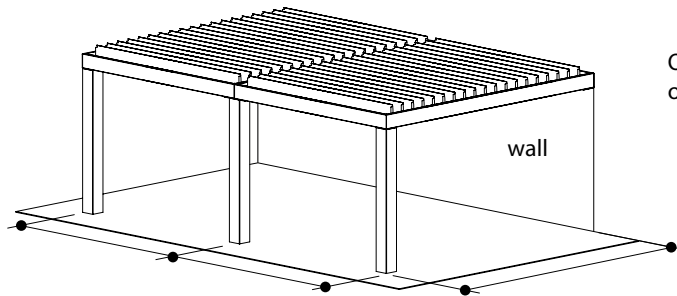
DIRECT SUNLIGHT - more luminosity

INDIRECT SUNLIGHT - more solar shading



Pergola coupling

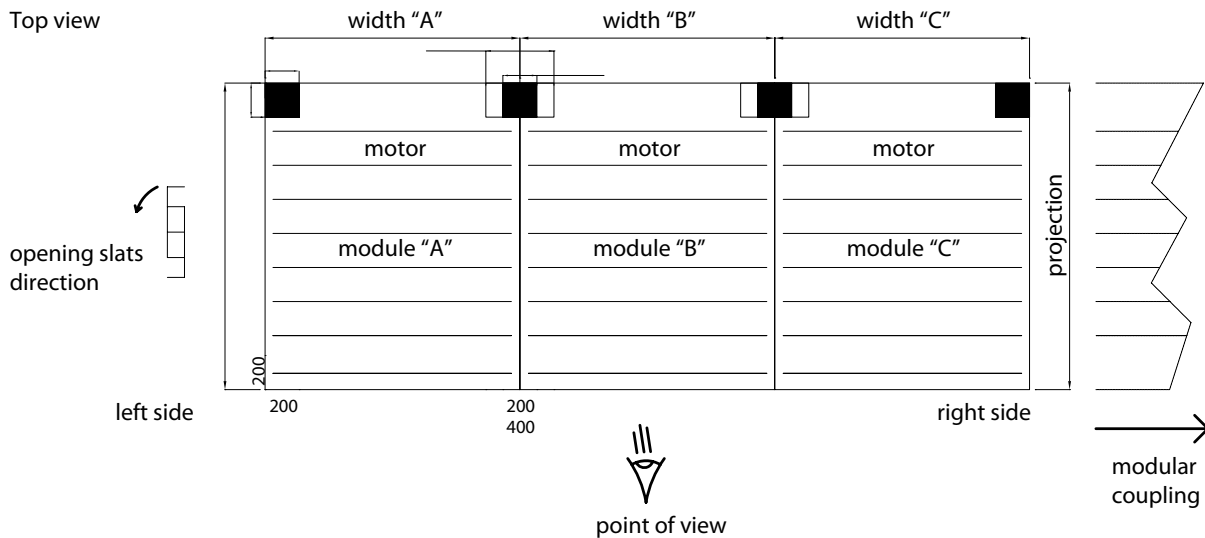
Lateral coupling



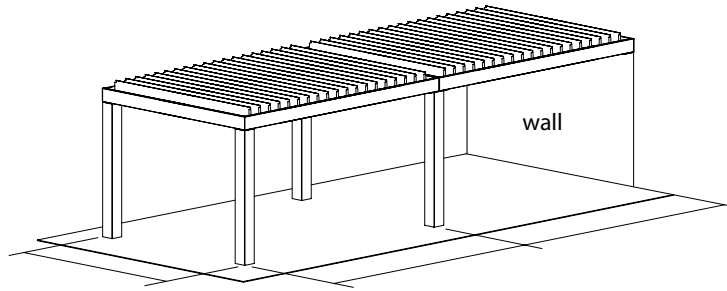
Orientation of the slats can be only parallel to the wall.

The diagram shows a lateral adjoining with motors on the left, each pole allow to drain water, including those in common.

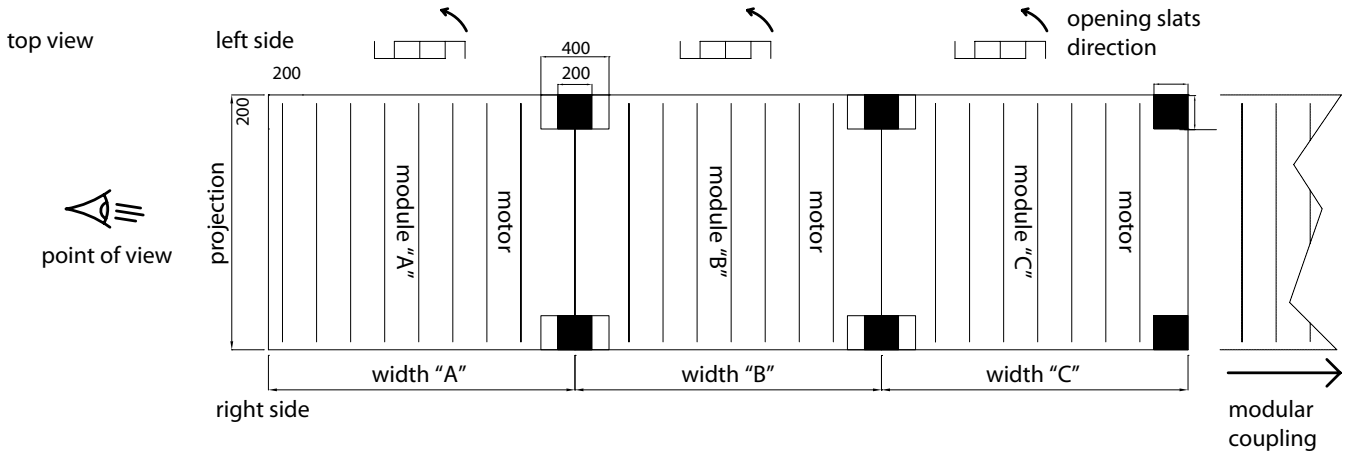
Top view



Frontal coupling

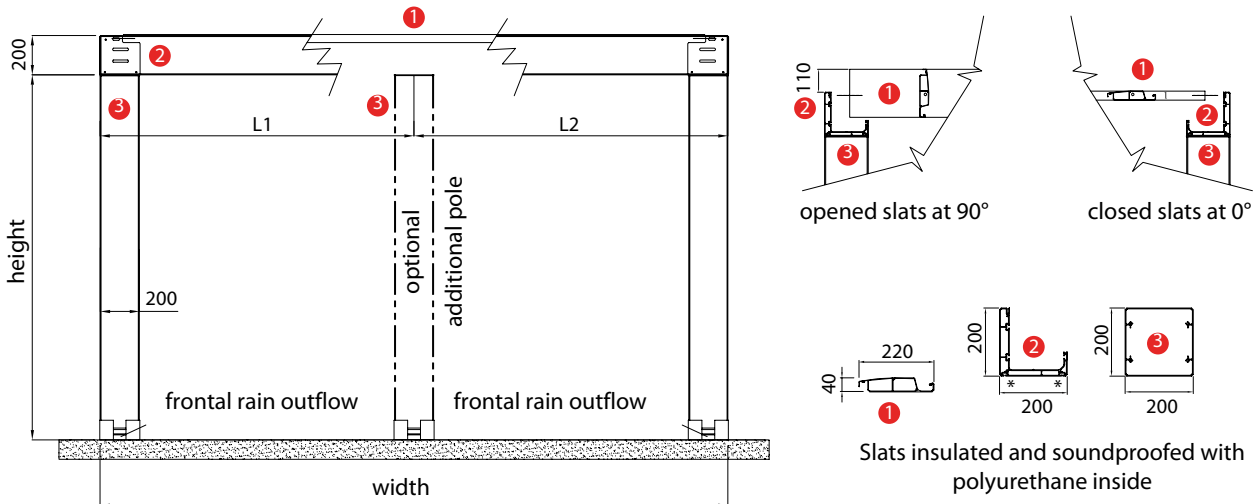


The diagram shows a frontal adjoining with motors on the left, each pole allow to drain water, including those in common.



Technical data

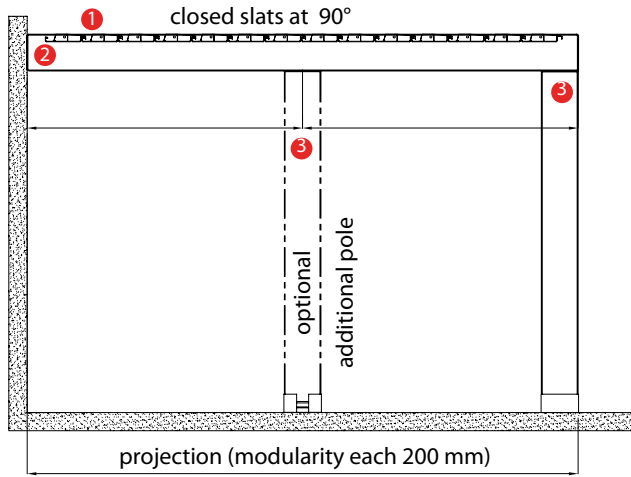
Frontal view



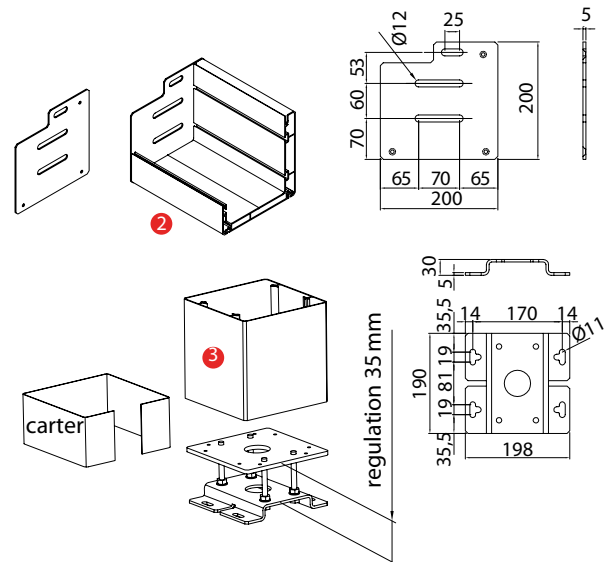
Technical legend

- ① slat
- ② perimetric water-drain profile
- ③ pole 20x20 cm

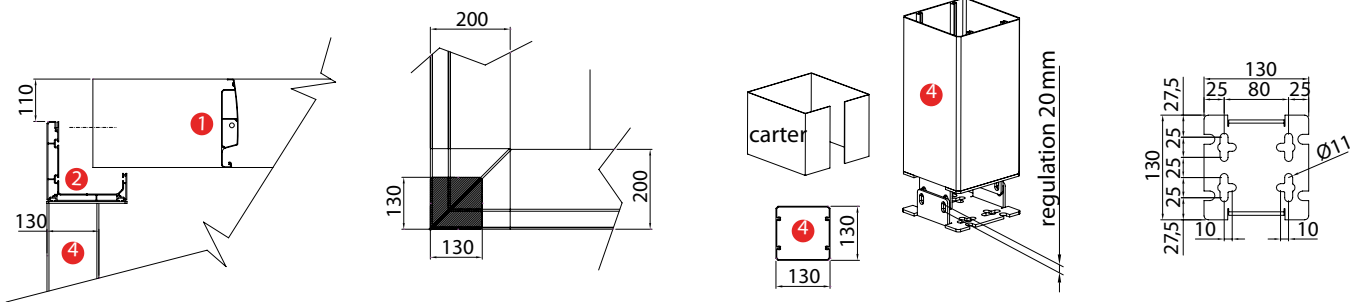
Side view



Foot



Variant by choice with poles 13x13 cm for single forms of width 4 m for 4 m max projection (no common pole).



Medium structure weight is 25 kg /m².

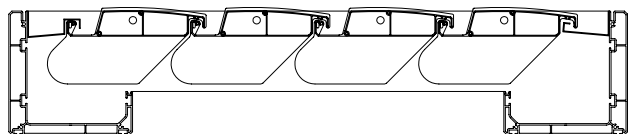
Projection	mm	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000
Slats	pc	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Technical legend

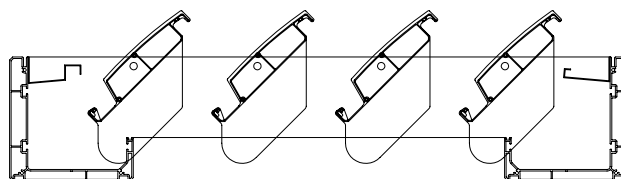
- 1 slat
- 2 perimetric water-drain profile
- 3 pole 20x20 cm
- 4 pole 13x13 cm

Slats rotation

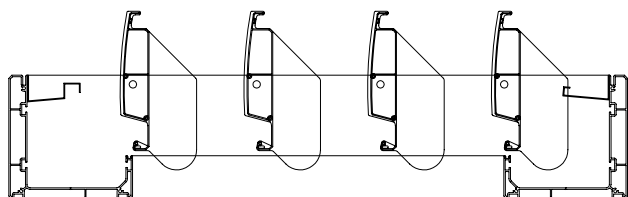
Slats rotation at 0°



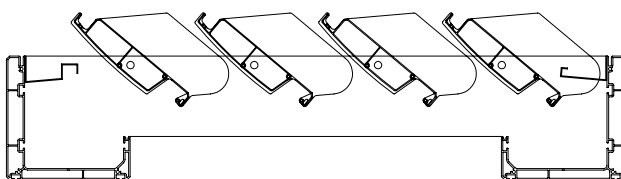
Slats rotation at 45°



Slats rotation at 90°



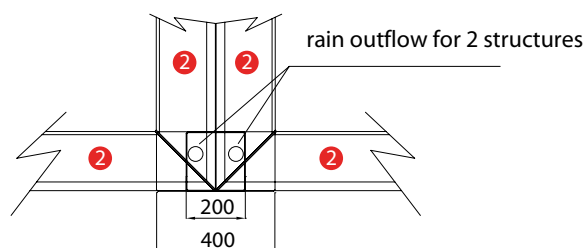
Slats rotation at 140°



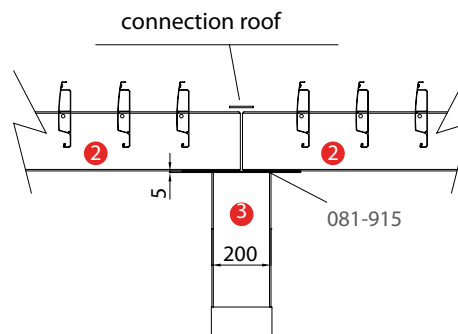
Rotation slats at 0°, 45°, 90° and 140° on 4 preset buttons on the remote control; possibility of intermediate adjustments using the three buttons on the remote control: opening, closing and stop.

Common pole for coupling modules

Top view



Side view



Prvek 081-915 of dimensions 80x5mm recommended in coupling of pergolas to cover the gap between the roof profiles.

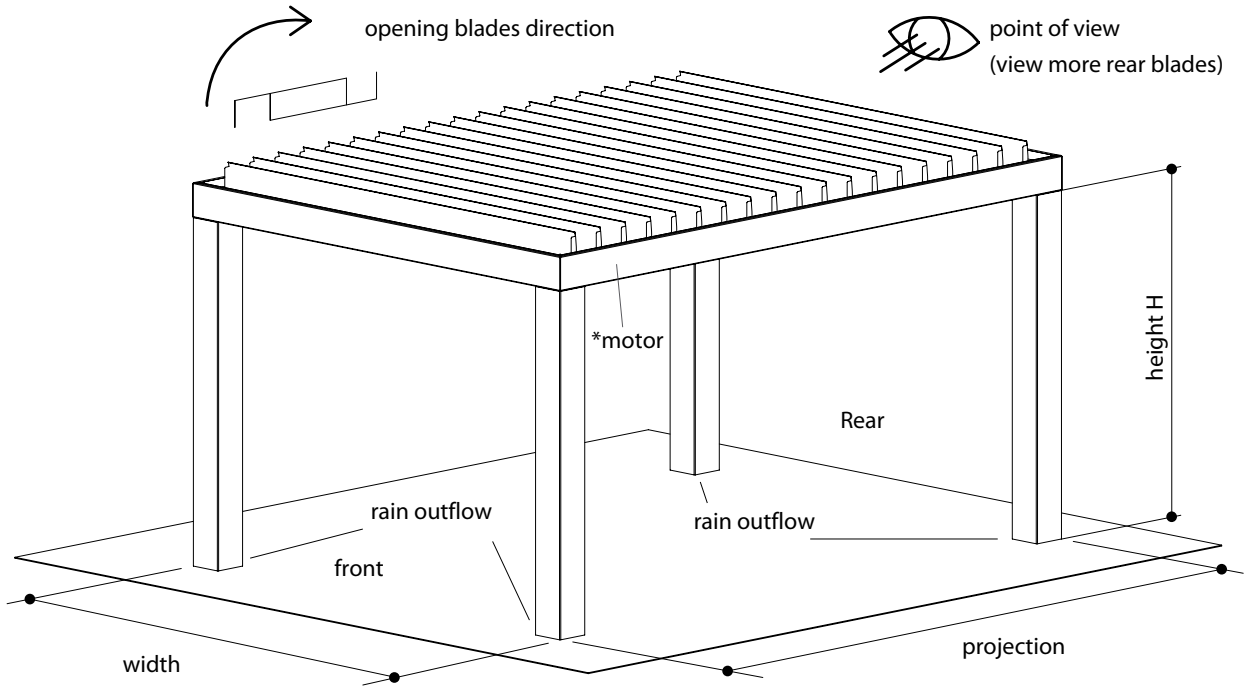
Technical legend

- ② perimetric water-drain profile
- ③ pole 20x20 cm

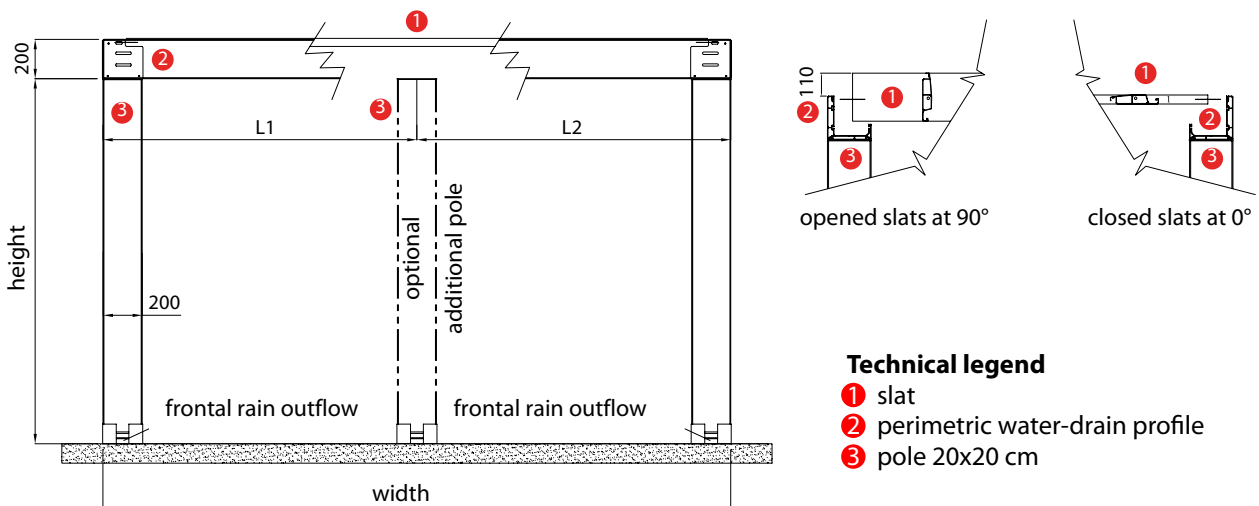
MIRA 4, MIRA 2 PERGOLAS

Measurement

At mira pergolas we always measure the outer casing of the construction. We enter total **width**, total **height (extension)** and **dimension H (sub-height of the system)**.



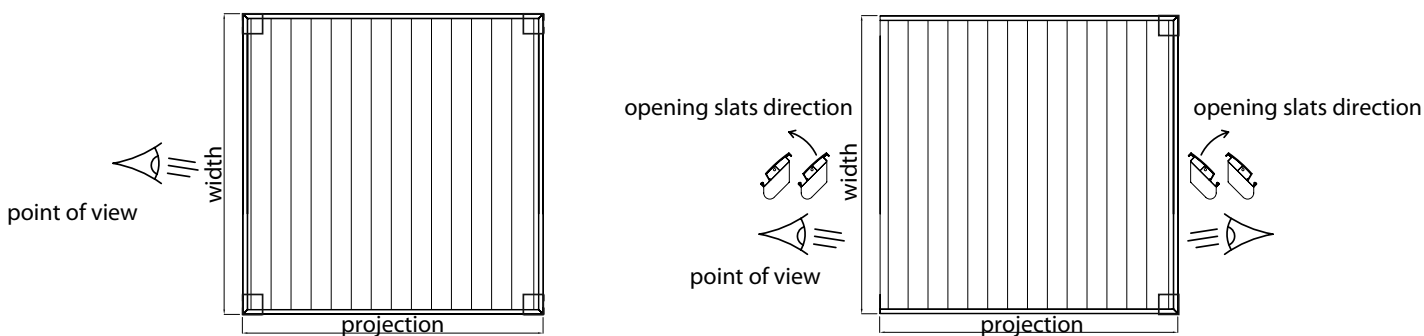
Attention! Total height of the system will always be 200 mm higher than your ordered sub-height. Furthermore, it is necessary to count with functionality of the slats where the total height of the pergola can be increased by 110 mm at 90° opening condition.



It is also necessary to specify further optional accessories, such as lighting, anti-snow system, rain and temperature sensor. It is also appropriate to specify building readiness for subsequent installation of the entire pergola system (anchor points, water drains, wiring, etc.)

MIRA 4, MIRA 2

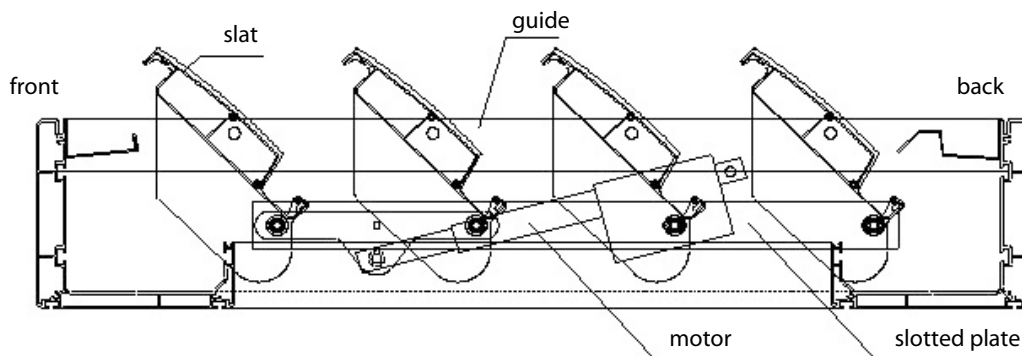
Measurement and assembly



1. INTRODUCTION

Prior to installing mira 4, mira 2 pergolas, read this measurement and installation manual carefully. This structure has been designed solely as protection from sun, rain, and wind, and cannot be considered water-tight. Incorrect use or installation shall result in the termination of the guarantee. In the case of snowfall, open the slats to vertical position.

The pole anchoring must be specified on site according to the type of wall and floor. Various circumstances must be considered: conditions, texture, surface strength and appearance. Do not use washers and bolts whose properties are inferior to those specified in this manual.



2. LIST OF NECESSARY TOOLS

- Two ladders adjustable according to the pergola height, telescopic lifting appliance;
- Socket-wrench set, Allen keys, spanners size 10, 17, 13 – 2 pc (one with very thin head – for louvre tightening);
- Flat-blade screwdriver, PH2 Philips-head screwdriver;
- Adhesive tape – for attaching the pole covers and covering the water drains (prevents falling of the fastening bolt into the poles) – remove the tape just before inserting the drainpipe 2.12;
- Transparent silicone caulk.

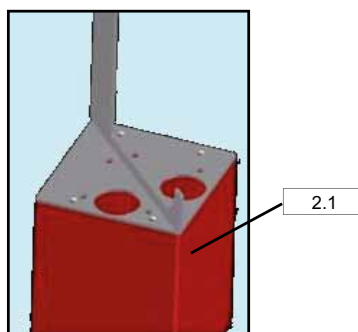
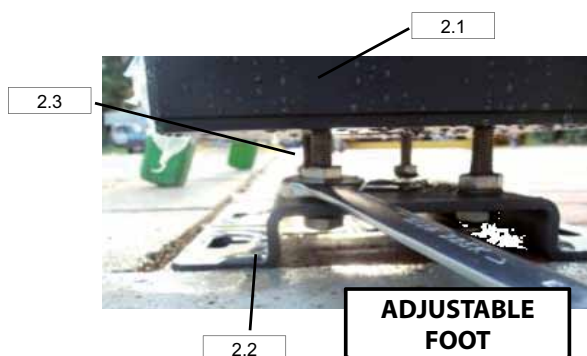
3. INSTALLATION INSTRUCTIONS

3.1. POSITIONING THE POLES

Place the poles on the ground according to the pergola dimensions specified in the data sheet.

PRIOR TO INSTALLATION, INSERT NECESSARY PLATES WITH M8 THREAD TO EACH PROFILE. SEE THE SUPPLIED SKETCH.

The poles (2.1) are equipped with adjustable feet (2.2) that compensate for any undulations. Set them up according to dimensions specified in the data sheet. Adjust using M10x60 hexagonal-head bolts (2.3).



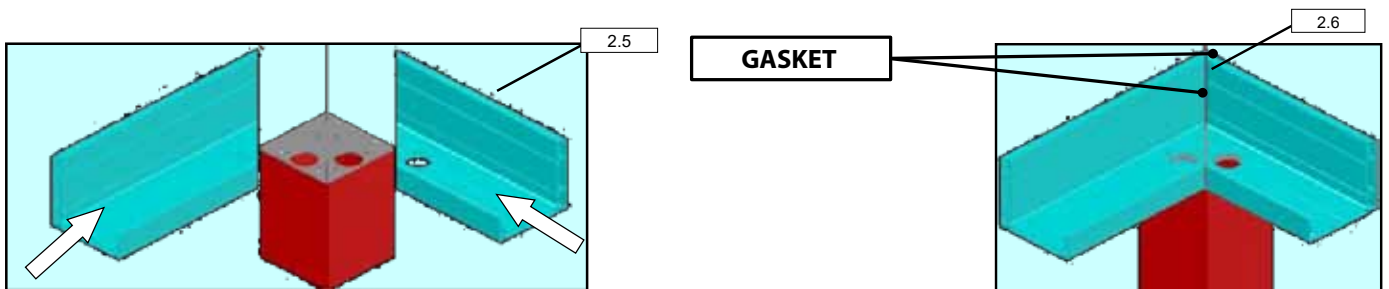
For **MIRA 2**, place the consoles to the wall (2.4) and secure by M10 bolts according to dimensions specified in the data sheet.



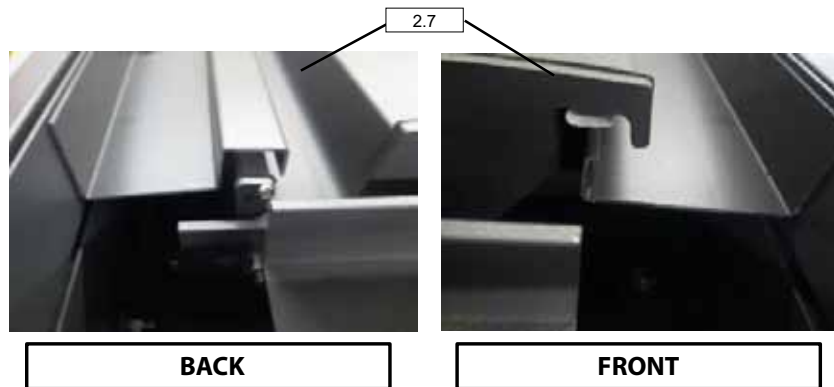
3.2. ATTACHING THE UPPER PROFILES

It is recommended to begin the installation with the front upper profile and two poles, continuing with one side upper profile and a pole, and then with the remaining upper profiles and the last pole. **DO NOT FORGET TO SLIDE THE LOWER POLE COVERS 6.1 TO THE POLES.**

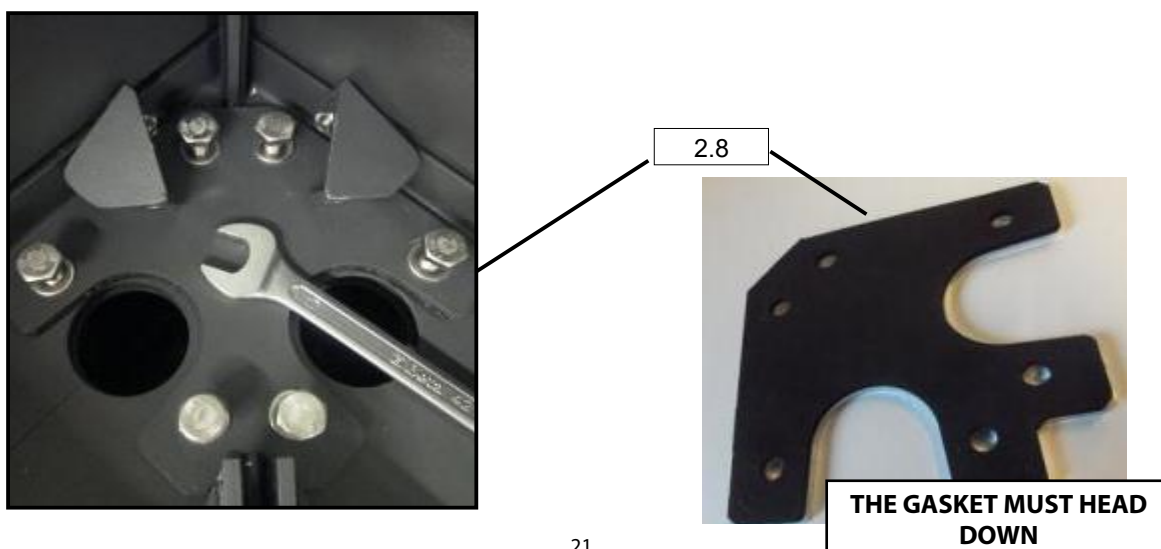
Place the peripheral upper profiles (2.5) to the poles. Pay attention to their matching and placing to the corner gasket (2.6).



Remember that there are two versions of the side upper profiles, one of them with a motor already installed. The back and front profiles can be identified by the installed upper cover – profile (2.7).



Place the connection plate (2.8) to this place and insert six M10×45 hexagonal-head bolts, leaving them loose. Perform this operation in all corners of the structure. The connection plate gasket must be headed down.

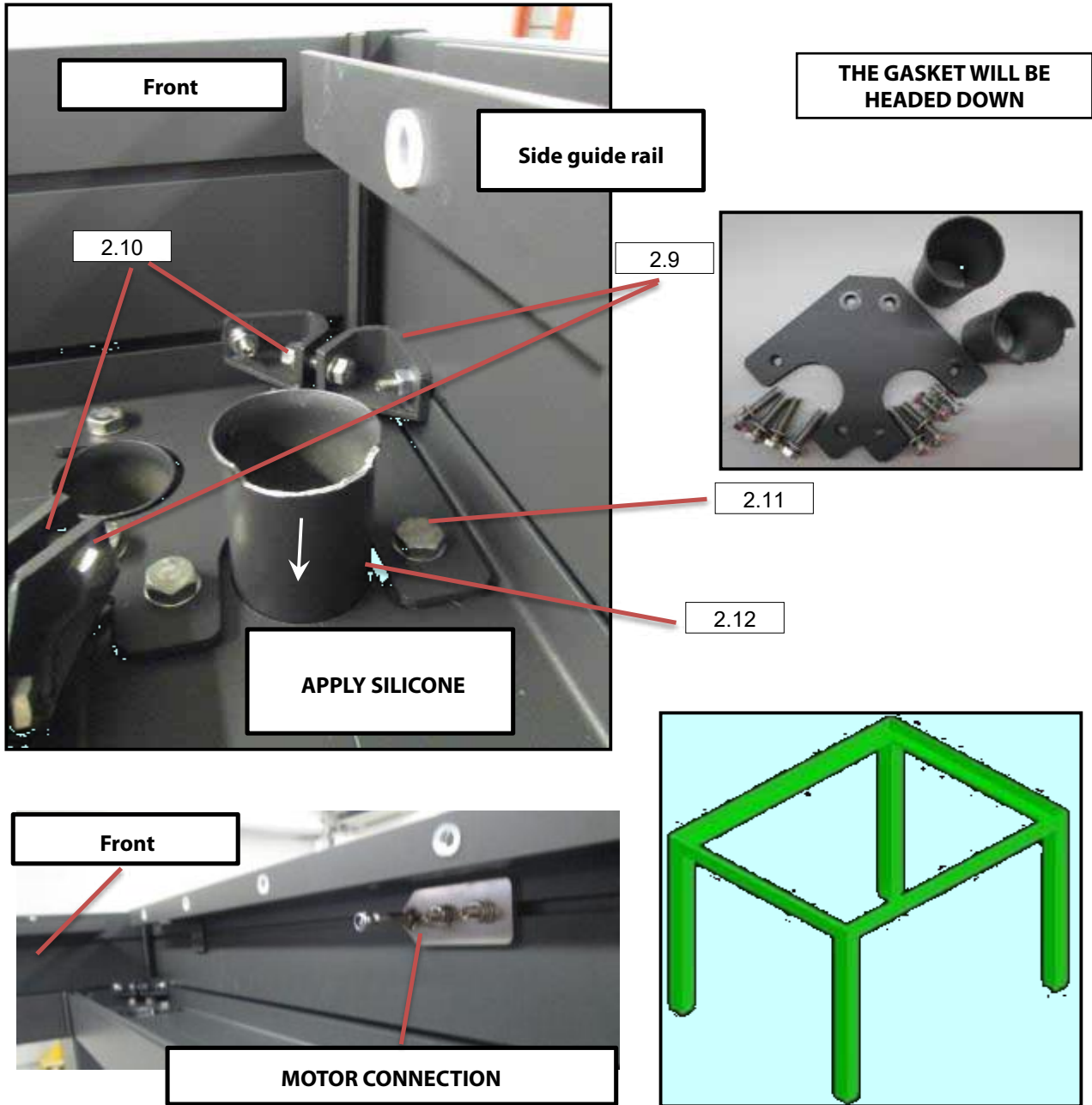


Fasten the structure using the pre-installed corner connection elements (2.9) on the water drain profile using M8×30 hexagonal-head bolts and nuts (2.10).

Tighten each corner using the connection elements, while compressing the corner gaskets.

Then tighten all connection plates by six M10×45 hexagonal-head bolts on each pole (2.11).

Insert the 50 mm drain pipe (2.12) to the openings in the water drain profile, while applying silicone to the collar (adjust the collar direction according to the picture).



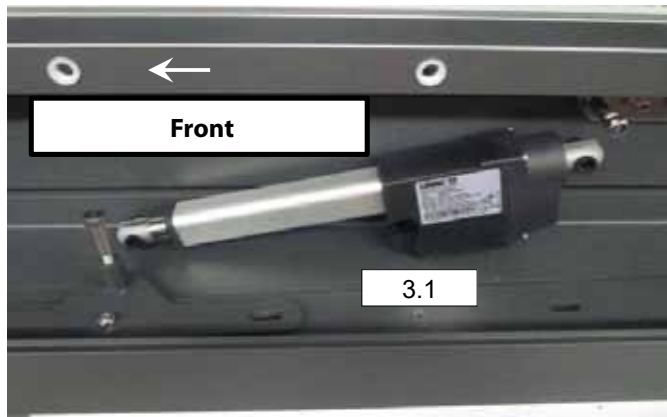
3.3. MOTOR DRIVE

The motor (3.1) is present in all versions and is pre-installed in the correct position, but later on, it may be necessary to adjust its position due to safe louvre closing (see 5.2).

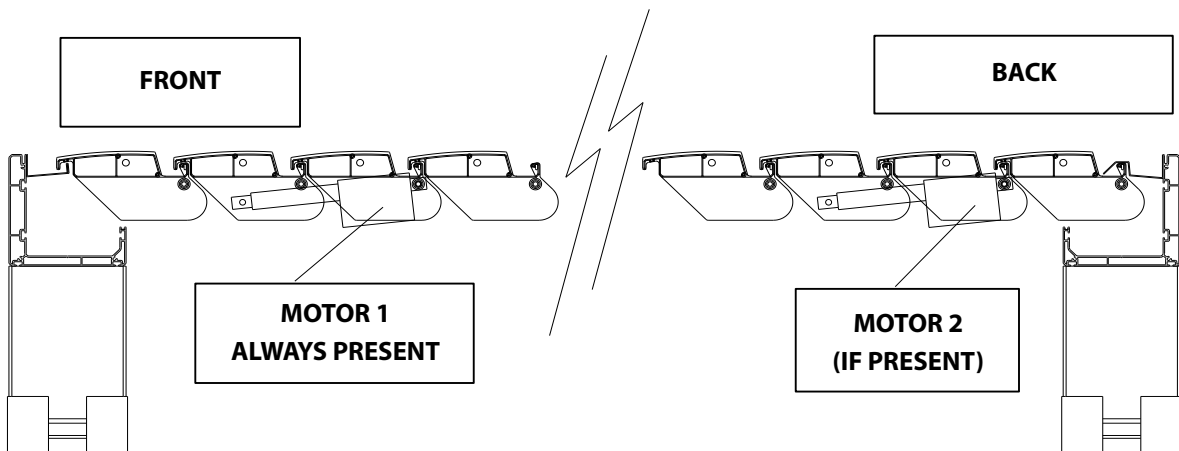
If two motors are used, pay attention to correct connection of the control unit. NEVER START THE DEVICE WITHOUT PREVIOUS WIRING TEST!



CAUTION: IN PERGOLAS WITH TWO MOTORS, PAY ATTENTION TO THE DIRECTION OF MOVEMENT (UP/DOWN). CONNECTING MOTORS IN THE WRONG DIRECTION CAN CAUSE IRREVERSIBLE DAMAGE.



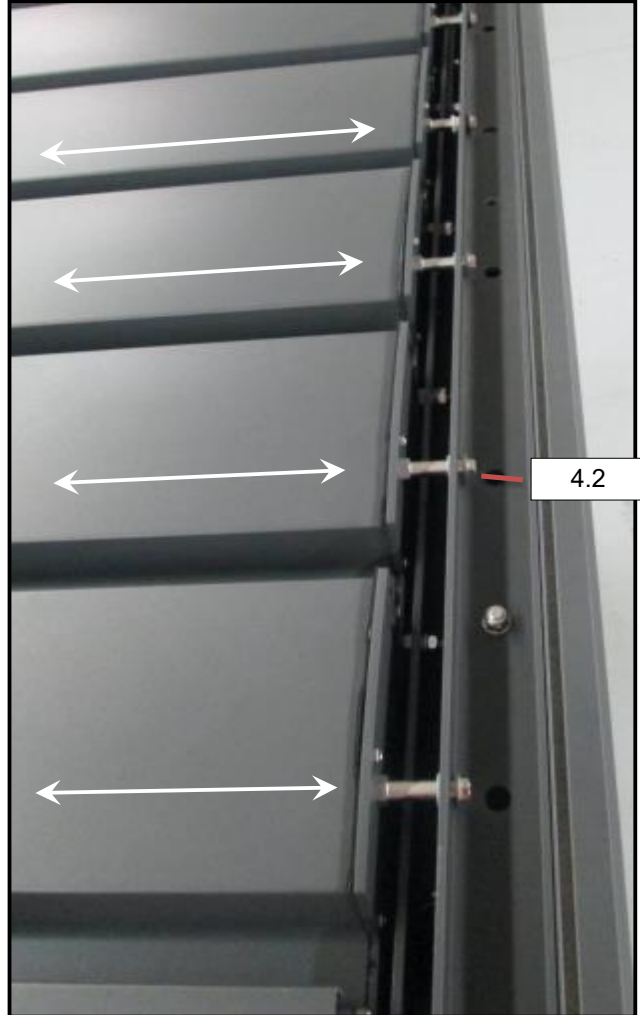
THE PICTURE SHOW LATERAL RIGHT INSTALLATION



3.4. ATTACHING THE SLATS

Insert the individual slats to the corresponding lateral housing (4.1); first on the motor side (there are two pins on the slat side) and then on the opposite side. Each slat overlaps the next one. Then fasten each slat using M6 hexagonal-head bolts with washers and spacers for each side pin (4.2). (Remove one spacer, or the other, depending on the installation tolerances.)

Insert the M8 hexagonal nuts with washers, but leave them loose (4.3) (THEY ARE TO BE TIGHTENED LATER AS PART OF THE ADJUSTMENT).



CAUTION, RISK OF HAND INJURY!

3.5. SLATS CLOSING, AND MOTOR ADJUSTMENT

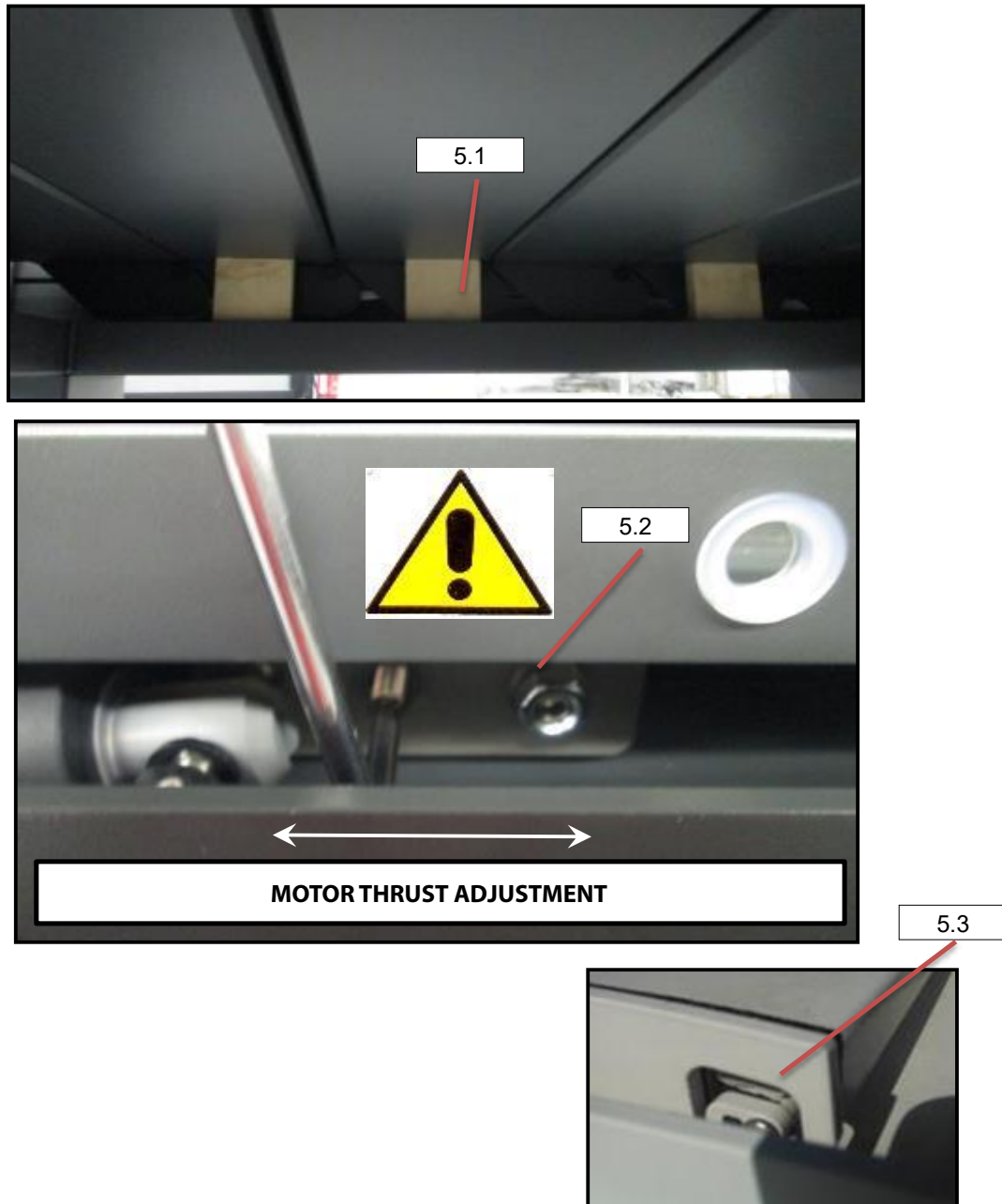
Once all the slats are installed, adjust their closing and the motor thrust and test their opening and closing (see Section 7). Then insert 14 cm wooden spacers (5.1) under the slats in closed position, thus facilitating their adjustment and correct leveling. Tighten the M8 nuts in their correct position in the oval slots of the carrier connecting plate. REMOVE THE SPACERS!

Test the motor at the max. closing and opening end stop (see Section 7). If necessary, adjust the motor thrust using the nuts and M8 motor adjusting screws (5.2) by sliding to the sides.

CAUTION! DO NOT EXCESSIVELY PRELOAD THE SLAT CLOSING.

Once the motor has been positioned, fully tighten the M8 adjusting screws and M8 nuts. If necessary, repeat the adjustment. Correct slat calibration ensures sufficient applied to each gasket (5.3).

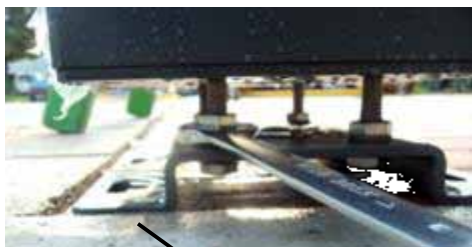
ATTENTION: IN CASE OF TWO MOTORS, BOTH MUST GET THE END STOP IN THE SAME TIME.



3.6. INSTALLATION OF COVERS

Following a re-check of the structure horizontality, fasten the feet to the ground with the corresponding fasteners and set the pole covers 6.1 to the lower position.

Then install the upper covers of the roof profiles and fasten them using self-drilling screw 3.9x19 (6.3).



6.1

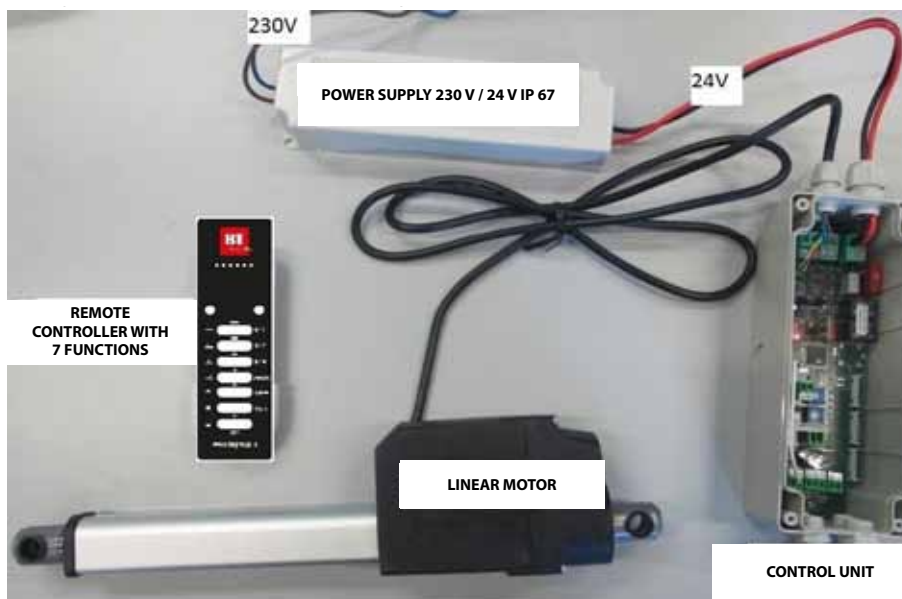


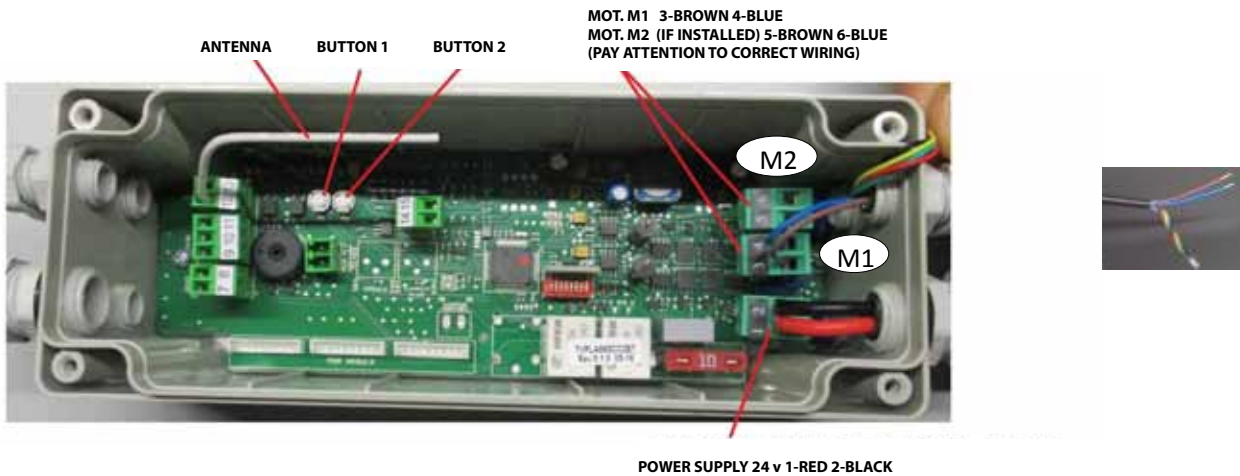
6.2



6.3

3.7. WIRING AND ADJUSTMENT OF THE CONTROL UNIT





3.7.1. CONTROL UNIT ADJUSTMENT

The control unit beeps intermittently upon first start-up.

Press the P1 (close) and P2 (open) buttons to activate the motor. Use the P1 and P2 buttons to move the slats from fully open position to closed position. **BE CAREFUL DURING THE MOVEMENT (RISK OF INJURY).**

3.7.2. END STOP AUTOMATIC SETTING

Press the P1 a P2 buttons simultaneously for a short time (0.5 s), then hold again for 5 seconds.

The system will automatically run two cycles of slat opening closing, searching for the end stops. The remote controller channel has already been programmed and will only work after the end stop automatic setting.

To reset the end stops, press the P1 a P2 buttons simultaneously for 5 seconds.

Install the control unit and the power unit to a place protected from the rain and standing water (for instance, to the front of the structure under the cover) or to a water-tight box.

3.7.3. REMOTE CONTROL MEMORY

(ONLY FOR SLATS, NOT FOR LED)

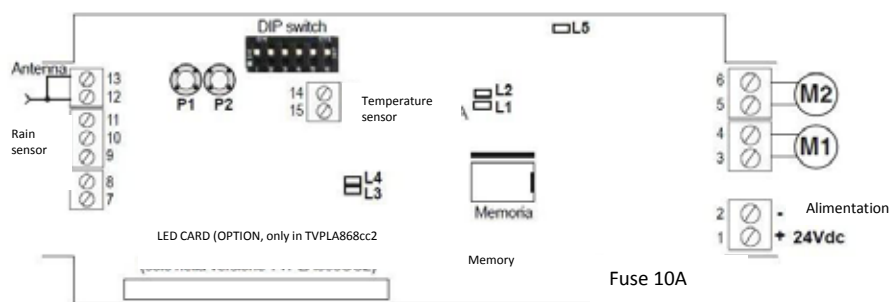
Press the P1 button shortly (0.5 s) and then again, holding it pressed.

3.7.4. DELETING THE REMOTE CONTROL

(ONLY FOR SLATS, NOT FOR LED)

You can delete the remote control by pressing the P1 button five times (0.5 s), holding it the sixth time longer (the control unit starts beeping). Then the control unit emits a long beep that signals successful deletion.

3.8. ACCESSORIES AND SENSORS



1	POWER SUPPLY (+24 VDC)
2	POWER SUPPLY (GROUND)
3	MOTOR (OPEN)
4	MOTOR (CLOSE)
5	MOTOR (CLOSE)
6	MOTOR (OPEN)
9	RAIN SENSOR (WHITE, +12 VDC)
10	RAIN SENSOR (BLUE, SIGNAL)
11	RAIN SENSOR (YELLOW, GROUND)
12	RF ANTENNA
13	ANTENNA GROUND
14	TEMPERATURE SENSOR (BLACK)
15	TEMPERATURE SENSOR (WHITE)

CAUTION! The electronic card is protected by a 10 A fuse. The max. allowed power input incl. the LED card is 240 W. POWERINPUT 150 W, INPUT 100–240 VAC, 1.7 A, 50/60 Hz A 277 VAC, 0.7 A

OUTPUT +24 V, 6.3 A
POWER INPUT 240 W, INPUT 100–240 VAC, 4 A, 50/60 Hz A 277 VAC, 1.2 A

DIP	MEANING
1-2-3	Wind sensor threshold setting (Section 4.1, page 11)
4-5	Motor control mode (page 4/7)
6	Setting of the motor max. current during configuration (Section 2.4, page 7)

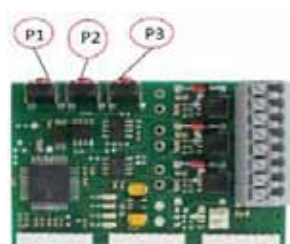
LED	COLOUR	STATUS	MEANING
L1	RED	ON until next passage	M1: excessive current or end stop was reached
L2	RED	ON until next passage	M2: excessive current or end stop was reached
L3	BLUE	ON	Command mode is synchronised
		One flash every second	Command mode is synchronised (during configuration)
		One flash every 2 seconds	Command mode is independent (during configuration)
L4	RED	One flash every 10 seconds	Alarm – rain draining (Section 4.4, page 12)
		Two fast flashes every 10 seconds	Alarm – rain (Section 4.4, page 12)
		Three fast flashes every 10 seconds	Alarm –ice/snow (Section 4.2–4.3, page 11–12)
		Six fast flashes	Activation of the end stop contained in the motor
		Seven fast flashes	Activation of the end stop due to excessive motor consumption
		Eight fast flashes	Safety end stop
		Ten fast flashes	One motor is short-circuited
		One flash every 2 seconds	Rain sensor is deactivated
		One flash every 3 seconds	Temperature sensor is deactivated
L5	RED	ON	Power input is still ON

LED LIGHTS BUILT INTO SLATS

To assemble slats with LED lights, install the structure as indicated above, carefully setting the lit slats in the correct position. Insert the main cable with plug and play connectors inside the lateral frame and connect each slat carrying a row of lights in correspondence of each bushing. Lock each slat's pivot pin with a lock ring. The main cable should be connected directly to the additional light board (placed in the control unit) by means of the supplied red and black cable. The remote control channel for light modulation is pre-programmed.

In order to store another 7-channel remote controller, proceed as follows:

- Press the P2 button and keep it pressed until you hear a beep and then, a continuous sound.
- During the continuous sound, press any button on the indicated channel.
- Successful saving is indicated by quick beeps.
- To delete all remote controls, press the P3 button with one single pulse (0.5 sec) and then keep it pressed until cancellation indicated by a continuous sound.



LED CONNECTION: RED -> BROWN



Rain sensor

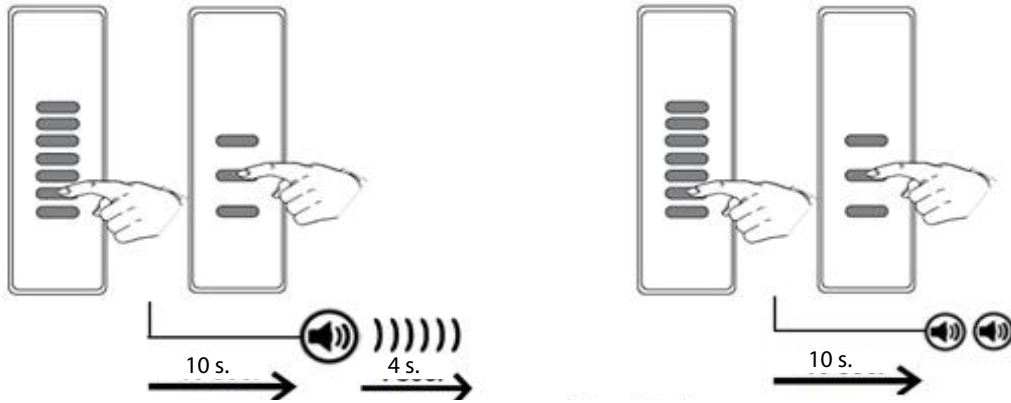
The alarm activates when the sensor detects rain. The device moves the slats of the pergola to a closed position. The device will not perform any controls as long as the alarm conditions last. The alarm will deactivate after the sensor has not detected any rain for 20 seconds. The sensor is activated as default.

System activity after the rain alarm (rain water draining)

Once the rain alarm has ended, the control unit will open the slats of the pergola to 33% to allow for the draining of the accumulated rain water and hold for the 6 hours after receiving the automatic movement command from the transmitter. The control unit will only perform manual command for 4 minutes, thus ending the alarm conditions.

Rain sensor activation/deactivation from the transmitter

This process requires the use of an already stored transmitter (Art. 3) and must be performed when the device is in the stop position. The sensor is activated as default.



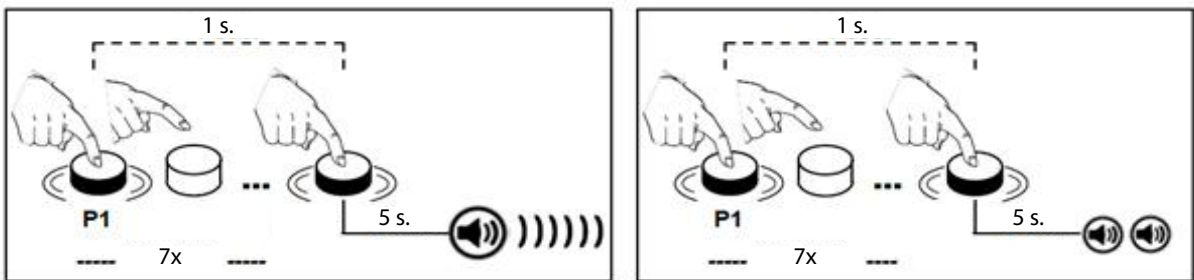
<p>Activation Press the STOP button on the transmitter for 10 seconds. The buzzer will emit a continuous sound for 4 seconds.</p>	<p>Deactivation Press the STOP button on the transmitter for 10 seconds. The buzzer will emit 2 beeps.</p>
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Temperature sensor

The temperature sensor (NTC 10K/3435K) activates whenever there is risk of ice formation. If the temperature drops below 2 °C, alarm is activated and the control unit opens the slats of the pergola to 66%. The alarm deactivates once the temperature exceeds 3 °C.

The control unit will only perform manual commands during the alarm and will return to normal operation once the alarm is deactivated. The sensor is deactivated as default.

Temperature sensor activation/deactivation



<p>Activation (only possible when the sensor is connected)</p> <ul style="list-style-type: none"> • Press the P1 button 7 times, holding is pressed for 5 seconds on the seventh press. • The buzzer will emit a continuous sound for 4 seconds. 	<p>Deactivation</p> <ul style="list-style-type: none"> • Press the P1 button 7 times, holding is pressed for 5 seconds on the seventh press. • The buzzer will emit two beeps.
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ATTENTION

PLEASE NOTE THAT ANY AND ALL COMPLAINTS REGARDING THE COMPONENTS MUST BE FILED IMMEDIATELY AFTER UNPACKING, AND NOT AFTER INSTALLATION.

MIRA 4, MIRA 2

Accessories

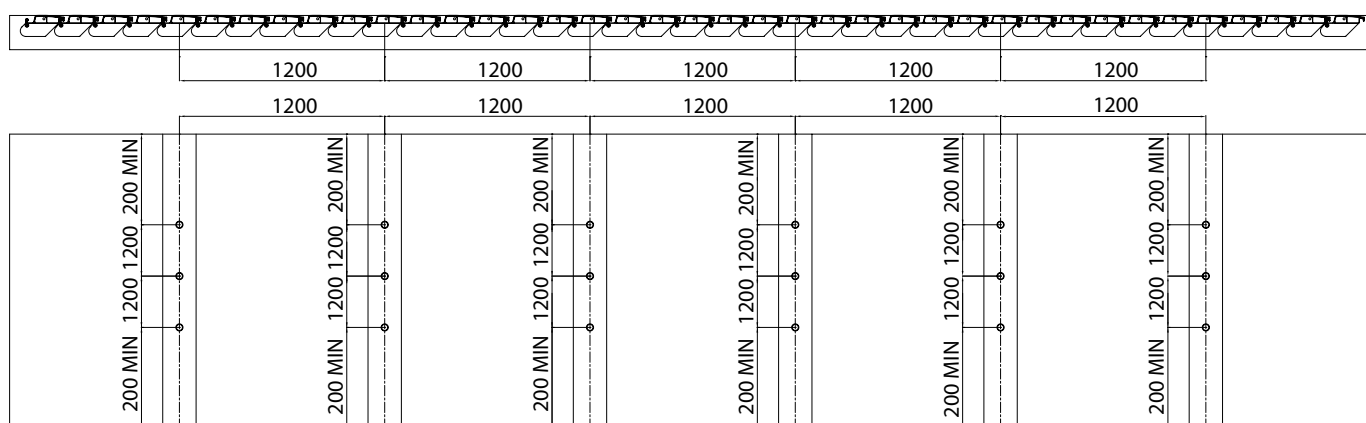
LED lights

Warm light led (3000 K) spotlights system integrated in the blade profiles.

Each spotlight is positioned at a fixed distance of 1200 mm for width and projection (illuminated row each 6 blades), for a consumption of 4.5 watts / spotlight. Electrical wiring placed inside the profile structure.

Example of illumination with 3 Spotlights on each blade, placed in 6 rows:

Side view



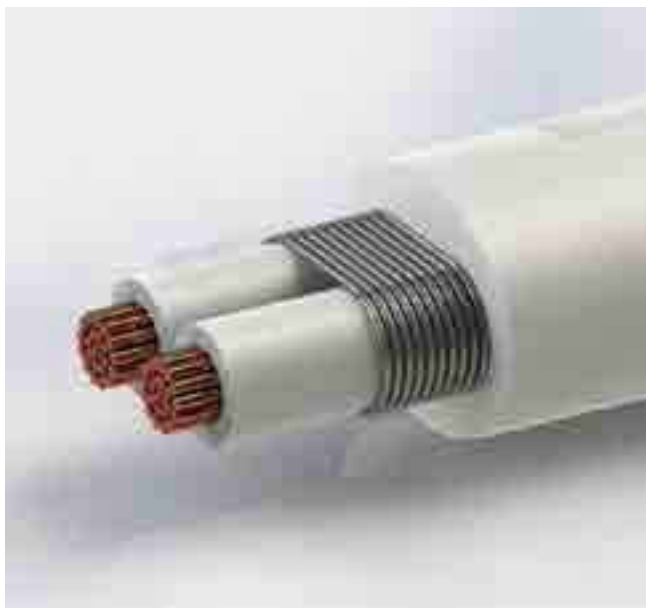
Below view

Total number LED spotlights:

Projection (mm)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800	6000	6200	6400	6600	6800	7000		
Slats (pcs)	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Illuminated slats (pcs)	2				3				4				5				6											
Total number LED spotlights																												
Width <3200 mm	4				6				8				10				12											
Width >3200 mm	6				9				12				15				18											

Anti-snow system for slats

This anti-snow system is installed in all blades, and it heats the upper surface the one in contact with the snow, avoiding the accumulation.

**HEATING CABLE CONSTANT POWER 30 WATT / MT (230V)**

This type of cable, thanks to its particular construction, provides a constant power at any temperature use and so it is not affected by typical power variations of the heating cables of self-regulating type. Used to prevent the accumulation of snow and ice formation.





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