

IASO®

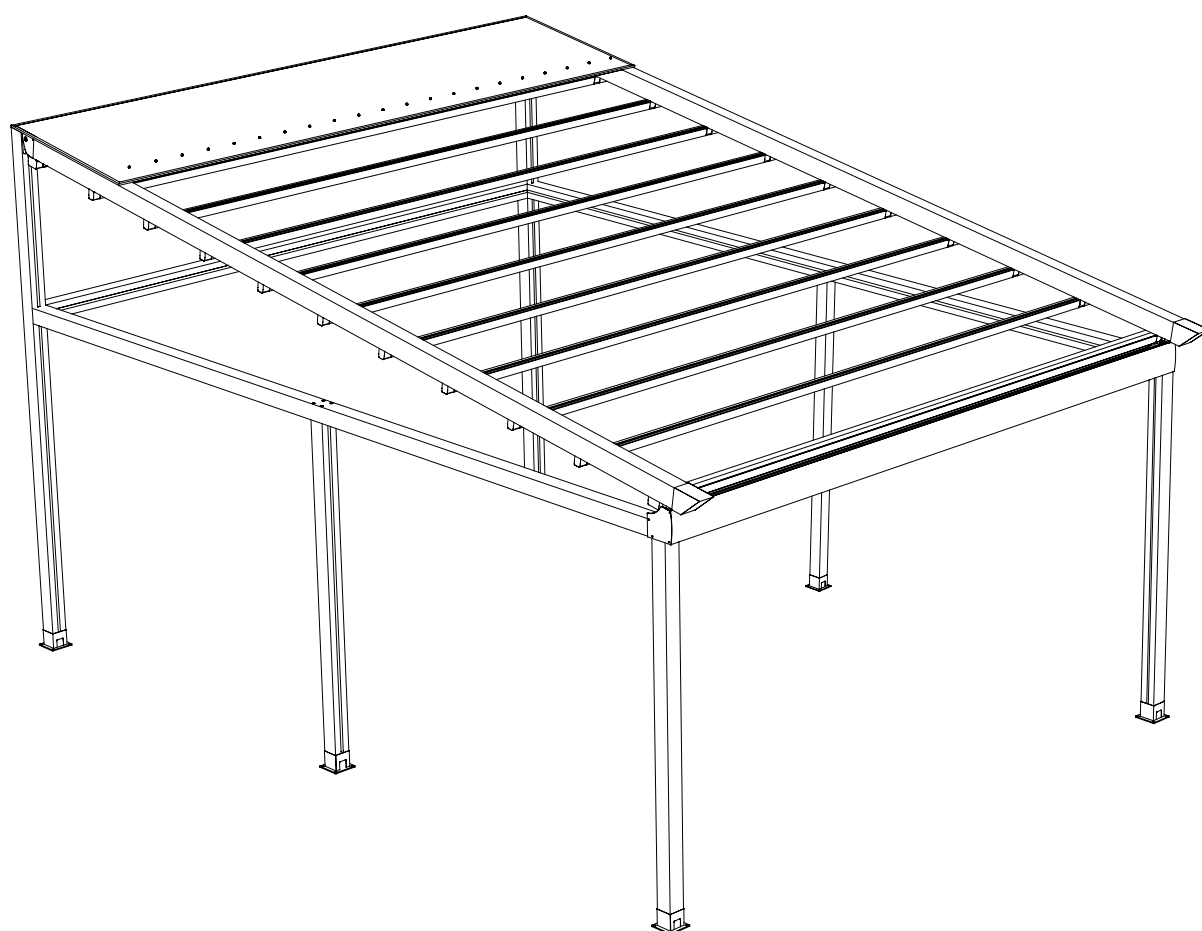
Better Outside

TECHNICAL DATA SHEET

ENGLISH

PERGOLAS

PERGOSTAR PLUS BASIC-MEGA



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DESCRIPTION

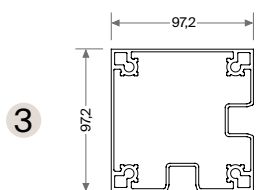
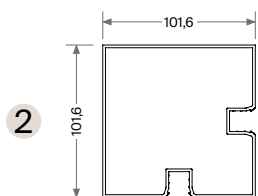
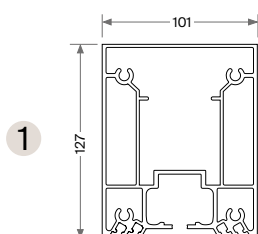
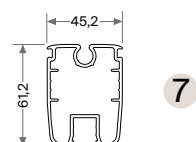
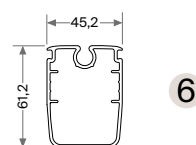
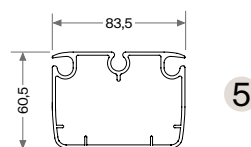
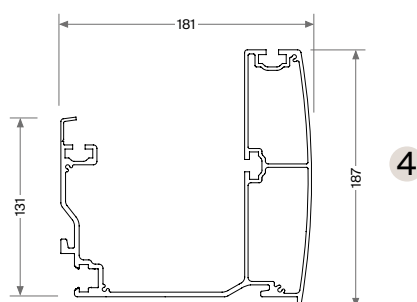
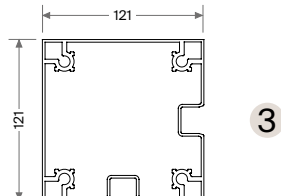
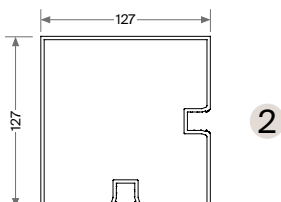
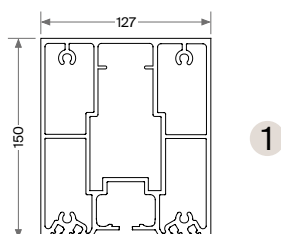
PERGOSTAR PLUS is a straight retractable pergola with a tensioned fabric, composed of an aluminium structure and a fabric that closes by compact folding. The fabric is fixed to a system of transverse aluminium profiles, known as fabric carrying crossbars, which slide along straight guides for opening thanks to specially designed carriages. It features a gutter beam designed for high water-flow capacity, which can also function as a rail to allow the pillars to move along it.

TECHNICAL FEATURES

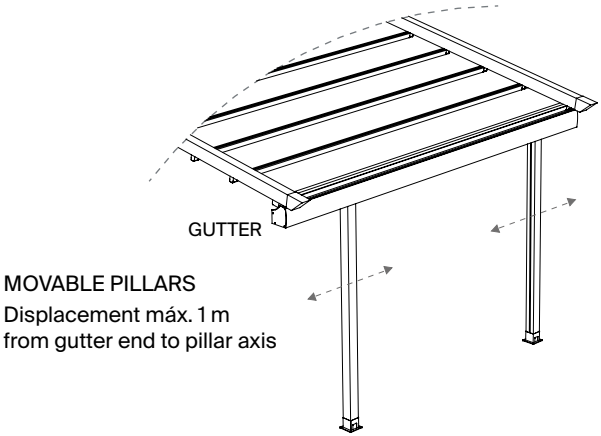
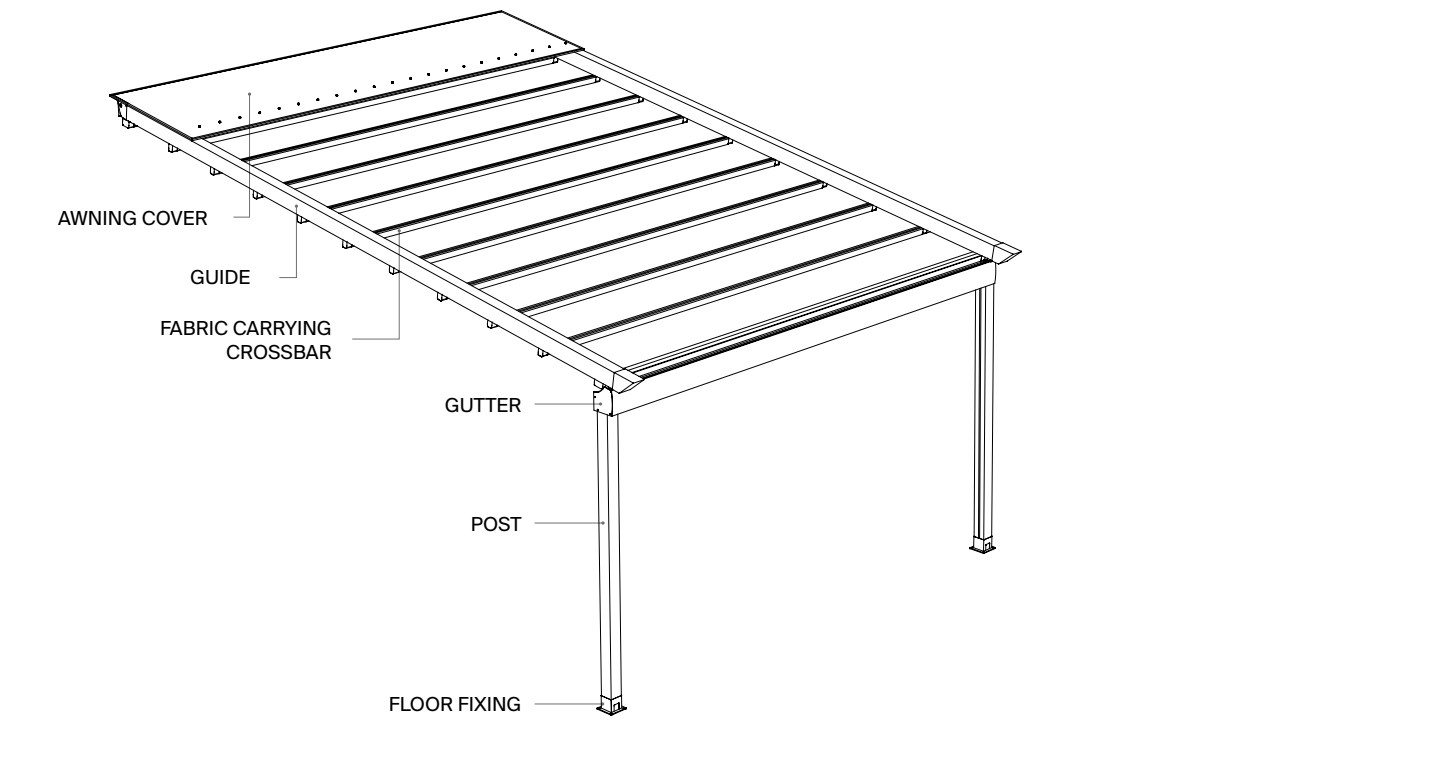
- Structure made of 6063-T5 aluminium profiles.
- Components with an electrostatic powder coating or anodised finish.
- Stainless steel and zinc-coated steel fixings and fasteners.
- Minimum slope: 10% for Basic and 15% for Mega.
- Covers up to 128.25 m² in triple module configuration (Mega).
- Covers up to 94.5 m² in triple module configuration (Basic).
- Wind resistant up to class 5 (force 8 on the Beaufort scale): 80 km/h (fabric extended with Mega).
- Wind resistant up to class 5 (force 8 on the Beaufort scale): 80 km/h (fabric extended with Basic).
- Double transmission motor.
- Optional LED or SPOT lighting system integrated in the fabric carrying crossbars.
- Optional LED lighting in posts, crossbeams and gutter (gutter cannot be lit if equipped with Clausa closures).
- Remote control for motor and lighting.
- "ALL SEASON"

MAIN PROFILES

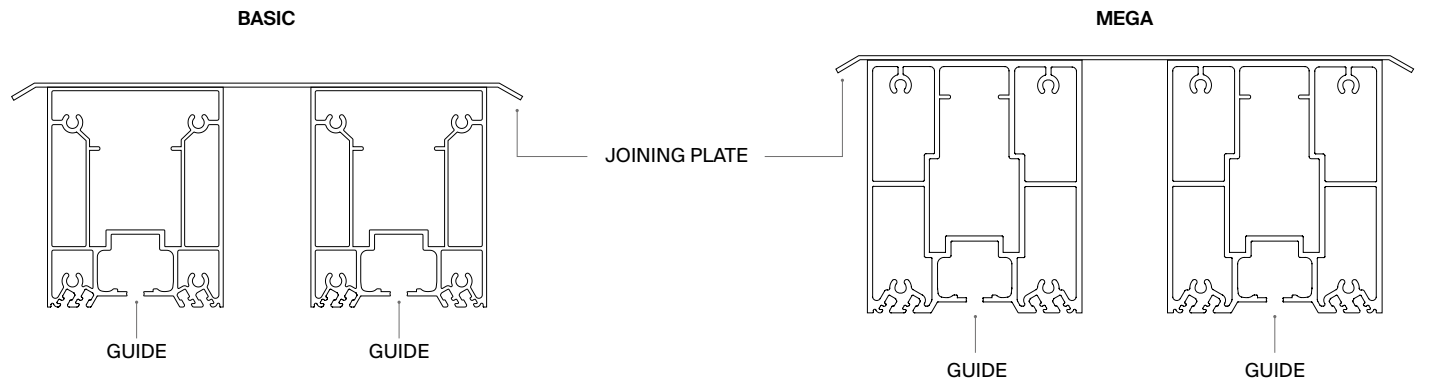
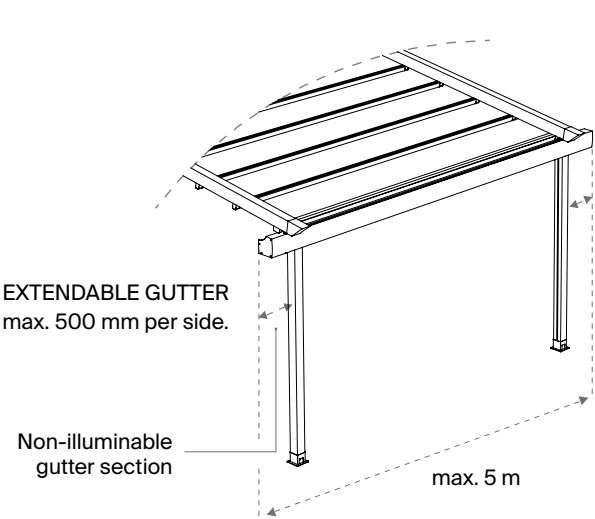
- 1 GUIDE
- 2 POSTS AND CROSSBEAMS
- 3 PLATES
- 4 GUTTER
- 5 FINAL FABRIC CARRYING CROSSBAR
- 6 INTERMEDIATE FABRIC CARRYING CROSSBAR (without light or with spot light)
- 7 INTERMEDIATE FABRIC CARRYING CROSSBAR WITH LED STRIP

BASIC**MEGA**

COMPONENTS

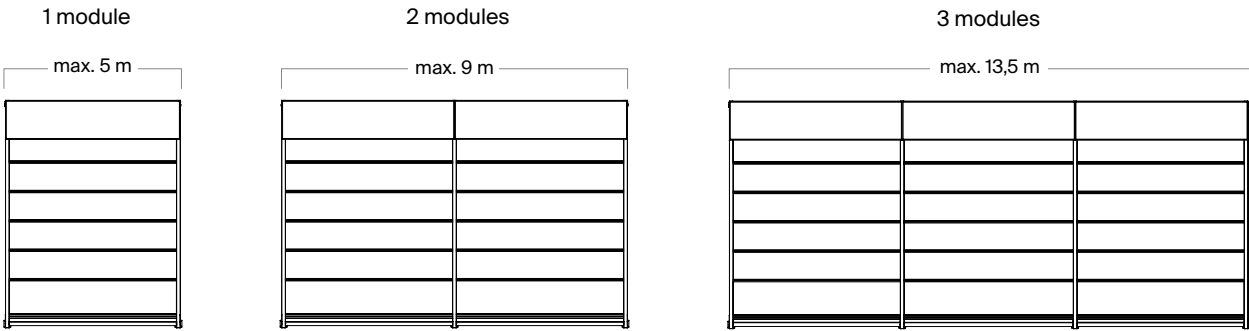


! If the post is **moved**, the post, the gutter and the side crossbar **cannot be fitted with lighting**.



DIMENSIONS

GUIDE	WIDTH			PROJECTION
	1 module	2 modules	3 modules	
BASIC	2,5 a 5	5 a 9	9 a 13,5	2,5 a 7
MEGA	2,5 a 5	5 a 9	9 a 13,5	7 a 9,5



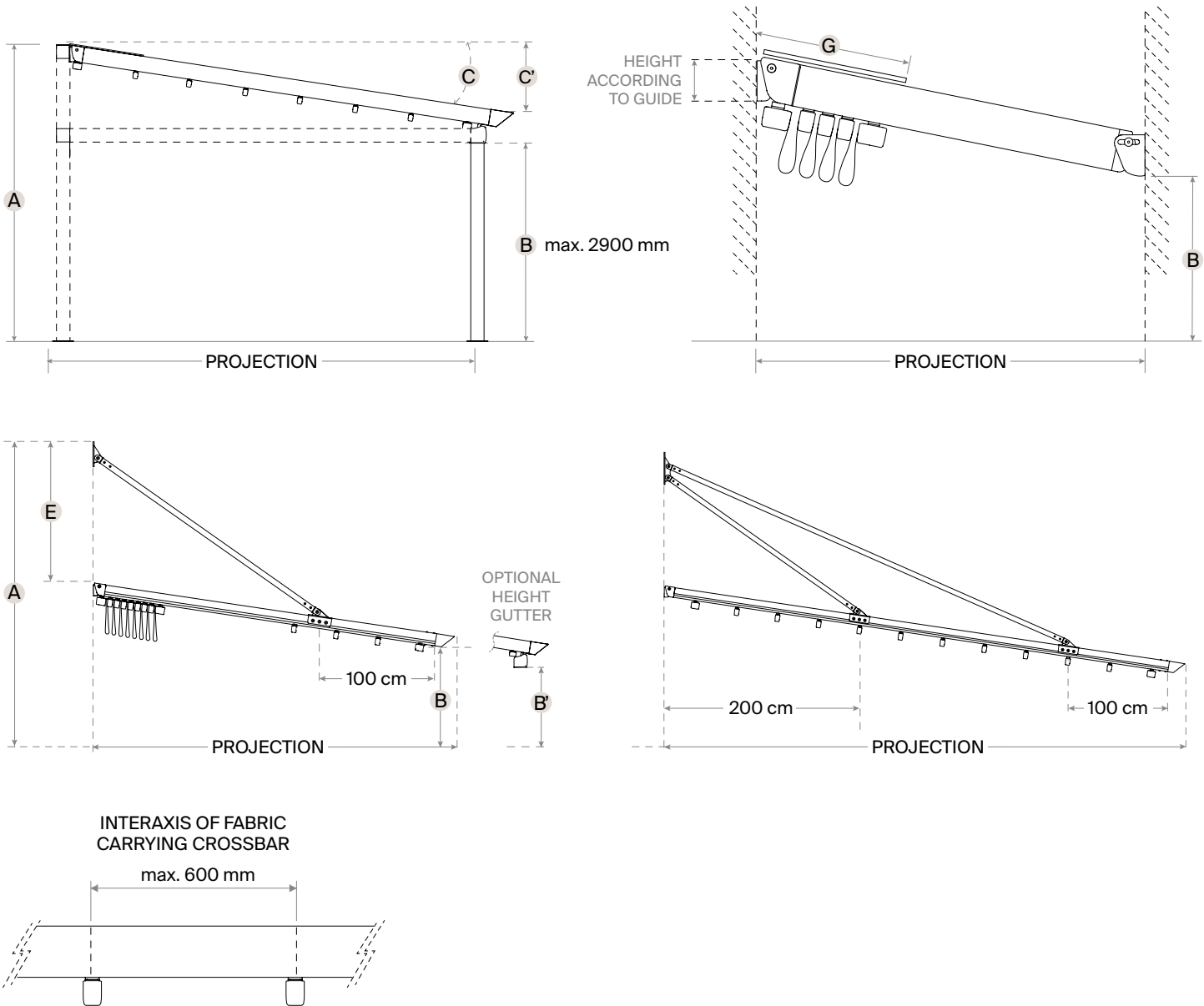
INSTALLATION

DIMENSIONS

- A Maximum height
- B Clearance height
- B' Clearance height under gutter
- C Slope (%)
- C' Height difference of the slope
- D Awning cover projection
- E Height from wall guide support to wall tie rod support

COVER BOARD PROJECTION (mm)

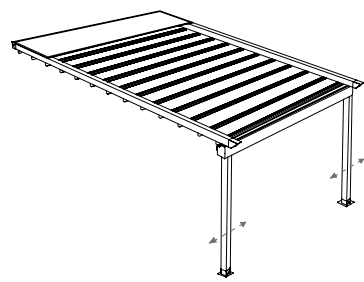
GUIDE	BASIC						MEGA			
PROJECTION	2000	3000	4000	5000	6000	7000	7500	8000	9000	9500
G	463	573	683	738	848	958	1013	1068	1123	1178



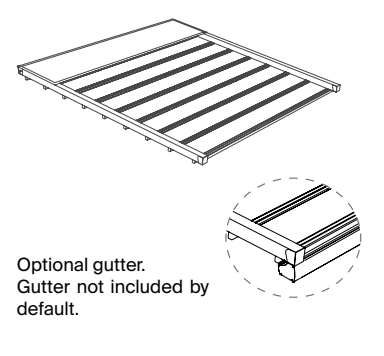
INSTALLATION OPTIONS

WALL-MOUNTED

MOVABLE POSTS

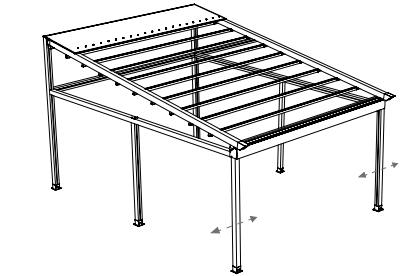


BETWEEN WALLS

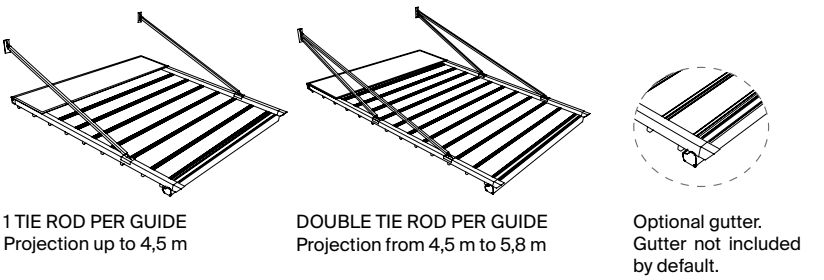


FREESTANDING

MOVABLE FRONT POSTS

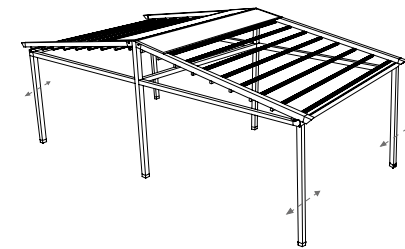


TIE-RODS Option for basic guide



FREESTANDING FLOOR-SUPPORTED

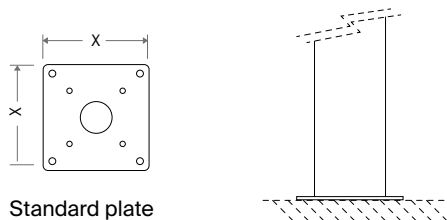
MOVABLE FRONT POSTS



ANCHORS AND FIXINGS

See document
"Wall anchoring
instructions".

POST-TO-GROUND FIXING

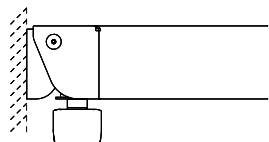


Standard plate

X- The plate size varies according to the profile

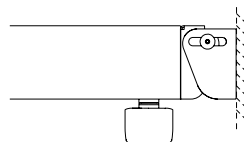
	Corner (150 x 150 mm)	To wall (150 x 200 mm)	Centered (150 x 150 mm)
BASIC			
MEGA	(200 x 200 mm)	(200 x 230 mm)	(200 x 200 mm)

REAR WALL GUIDE FIXING



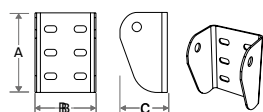
PZAI - 1	BASIC	MEGA
A	121,5	144
B	94	118
C	73	105

FRONT WALL GUIDE FIXING

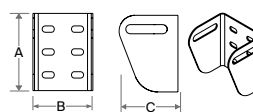


PZAI - 2	BASIC	MEGA
A	121,5	144
B	109	135
C	93	105

PZAI-1

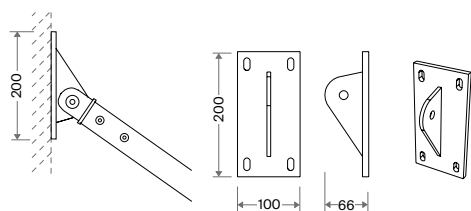


PZAI-2

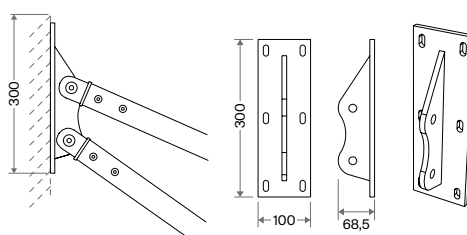


TIE-ROD OPTION: FOR BASIC ONLY

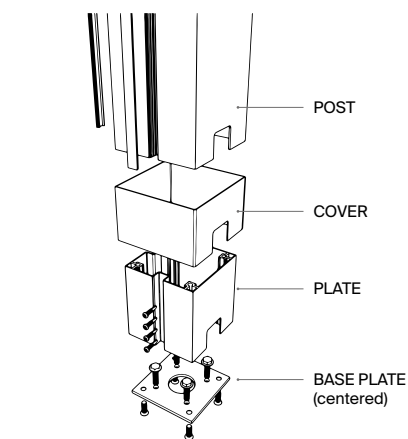
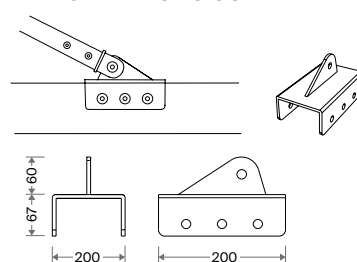
SINGLE TIE ROD FIXING TO WALL



DOUBLE TIE ROD FIXING TO WALL

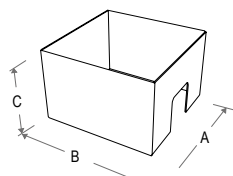


TIE ROD FIXING TO GUIDE



DECORATIVE COVER ON POST

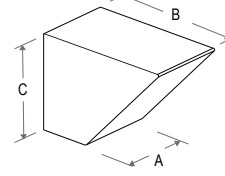
PZAI-4



PZAI - 4	BASIC	MEGA
A	106	132
B	106	132
C	100	100

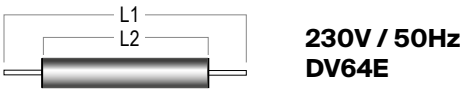
DECORATIVE COVER ON GUIDE

PZAI-5



PZAI - 5	BASIC	MEGA
A	103	132
B	192	220
C	130	155

MOTORISATION

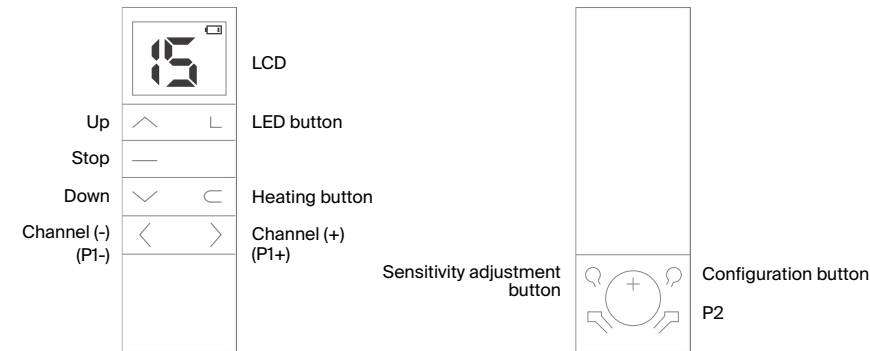


TECHNICAL SPECIFICATIONS	
Rated Torque (Nm)	2 x 25
Rated Speed (Rpm)	26
Rated Current (A)	2.22
Rated Power (W)	490
Degree of Protection (IP)	IP44
Maximum Limit Turn (turn)	∞
Running Time (min)	>4
Working Temperature (°C)	-10°C~50 °C
L1 / L2 (min)	545 / 411

EMITTER

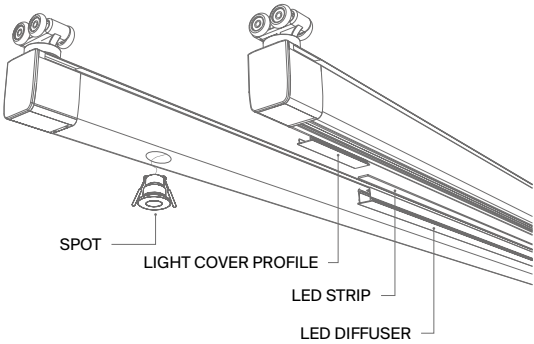
EMITTER DOOYA 15 channels

TECHNICAL SPECIFICATIONS	
Power supply	3V
Lithium battery	CR2430
Battery lifespan	>2 years
Protection rating	IP20
Dimensions	130 x 44 x 10 mm
Operating temperature	-10°C~50 °C
Transmission power	10 mW
Radio frequency	433.92 MHz ± 100KHz
Operating range	35 m

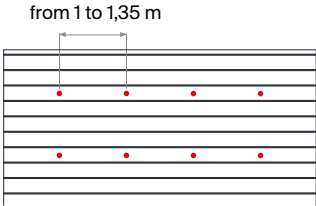
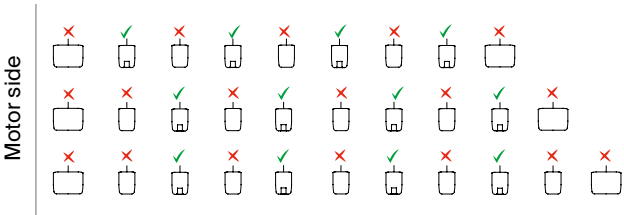


LIGHTING

FABRIC CARRYING CROSSBAR LIGHTING



STANDARD DISTRIBUTION EVERY 2 CROSSBARS



SPOT LIGHT CHARACTERISTICS

Optional for crossbars lighting (ON / OFF only)

TECHNICAL SPECIFICATIONS	
Colour	Warm white
Colour temperature	3000 K
Beam angle	120°
Consumption	4,5 W/spot
Voltage	24V DC
Luminous flux	280-300 Lm
Protection rating	IP65
Dimensions	Ø36 mm
Recessed hole	Ø22 mm
Material	Aluminium

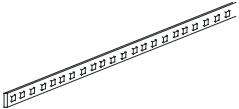


! WARNING:
SWITCH OFF THE LIGHTING WHILE
THE CANOPY IS MOVING

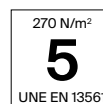
LED STRIP CHARACTERISTICS

Optional for crossbars lighting

TECHNICAL SPECIFICATIONS	
Colour	Warm white
Colour temperature	3200-3300 K
Beam angle	120°
Consumption	4,8 W/m
Voltage	24V DC
Luminous flux	400 Lm/m
Protection rating	IP64
Type of diode	SMD2835
Luminous flux maintenance	L70 B50
Service life	25.000 h
Efficiency	83 Lm/W
No. LEDs per metre	120
Operating temperature	-20°C ~ +45°C



WIND CLASSIFICATION



CLASS*	Grade Beaufort	Wind speed		Pressure	Environmental condition
0	0	0 - 1 km/h	0.0 - 0.3 m/s	0.05 N/m ²	Calm
	1	1 - 5 km/h	0.3 - 1.4 m/s	1.21 N/m ²	Very light breeze
	2	6 - 11 km/h	1.7 - 3.1 m/s	5.84 N/m ²	Light breeze
	3	12 - 19 km/h	3.4 - 5.3 m/s	17.41 N/m ²	Gentle breeze
1	4	20 - 28 km/h	5.6 - 7.8 m/s	37.81 N/m ²	Moderate wind
2	5	29 - 38 km/h	8.1 - 10.6 m/s	69.64 N/m ²	Fresh wind
3	6	39 - 49 km/h	10.9 - 13.6 m/s	115.79 N/m ²	Cool wind
4	7	50 - 61 km/h	13.9 - 17.0 m/s	179.45 N/m ²	Strong wind
5	8	62 - 74 km/h **	17.5 - 20.6 m/s	264.08 N/m²	Gale
6	9	75 - 88 km/h	20.9 - 24.5 m/s	373.46 N/m ²	Strong gale
	10	89 - 102 km/h	24.7 - 28.3 m/s	501.74 N/m ²	Storm
	11	103 - 117 km/h	28.6 - 32.5 m/s	660.16 N/m ²	Violent storm
	12	118 - 133 km/h	32.6 - 36.9 m/s	853.06 N/m ²	Hurricane

CLASS ACCORDING TO STANDARD UNE EN 13561:2015

*The correspondence of the class according to UNE EN 13561 with the wind speed or Beaufort scale is indicative.

** Wind resistance up to class 5 (grade 8 on the Beaufort scale): **80 km/h** (extended canopy with **Mega**)

** Wind resistance up to class 5 (grade 8 on the Beaufort scale): **80 km/h** (extended canopy with **Basic**)

PRECIPITATION CLASSIFICATION

CLASS	Average intensity in one hour (mm/h)	Environmental condition
1	≤ 2	Weak
2	> 2 y ≤ 15	Moderate
3	>15 y ≤ 30	Strong
4	>30 y ≤ 60	Very strong
5	>60	Torrential



Not suitable for snow loads. In the event of snowfall, the pergola must remain retracted.

CLASSIFICATION ACCORDING TO MOTOR DURABILITY

CLASS	NUMBER OF CYCLES DEPLOYMENT / RETRACTION
1	3000

CLASS ACCORDING TO STANDARD UNE EN 13561:2015

RESISTANCE TO WATER POOLING

CLASS	RESISTANCE
1	17 L/m² per hour

CLASS ACCORDING TO STANDARD UNE EN 1933



WARNING: Retract the cover in winds above 49 km/h.



WARNING: Retract the cover in rainfall above 40 l/m²/h.

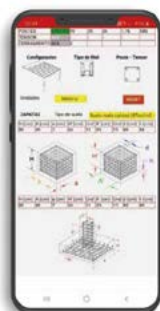


WARNING: Operation in icy conditions may damage the cover.

FOUNDATION CALCULATIONS

With our Toscana Structure APP we can design and calculate in minutes the ideal pergola, including wind and snow loads desired by the customer. It will also automatically indicate the technical specifications of the concrete base to fasten pillars to the ground.

Our technical department will be at your disposal to propose the best configuration in order to obtain the best product, with optimal technical specifications.



We believe in the *elegance* of engineering.