

IASO®

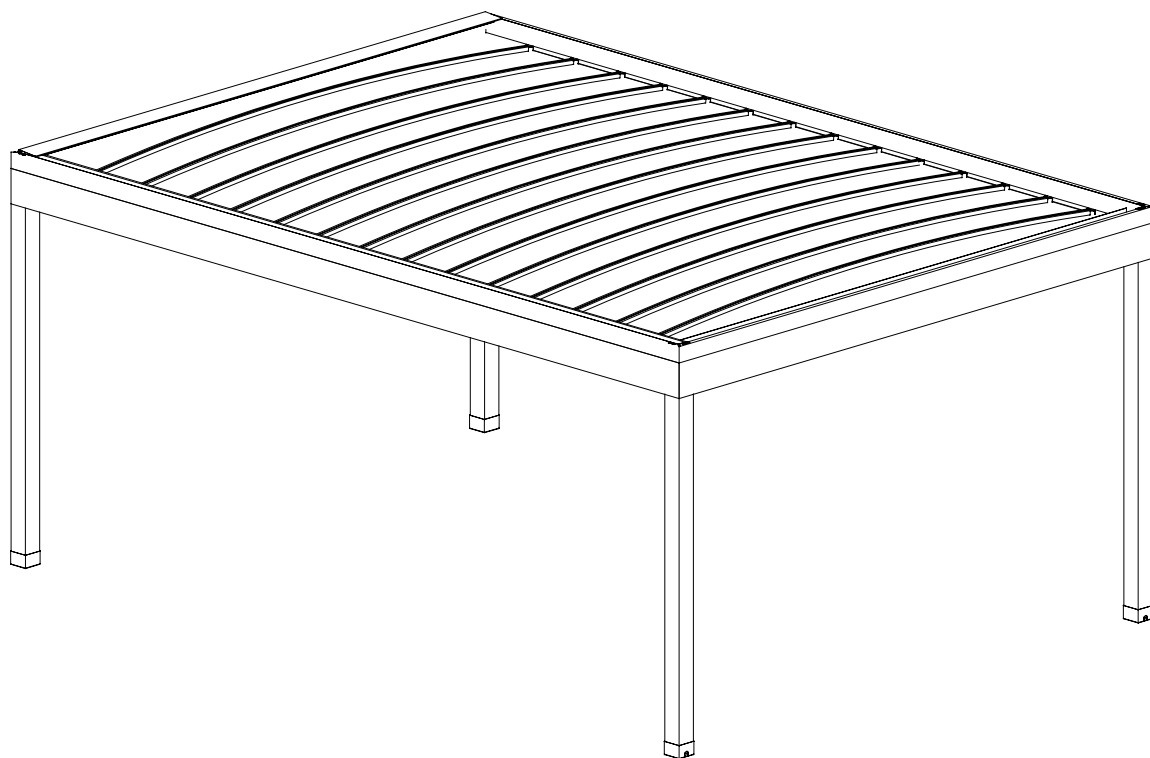
Better Outside

TECHNICAL DATA SHEET

ENGLISH

PERGOLA

PERGOSTAR HORIZONTAL



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DESCRIPTION

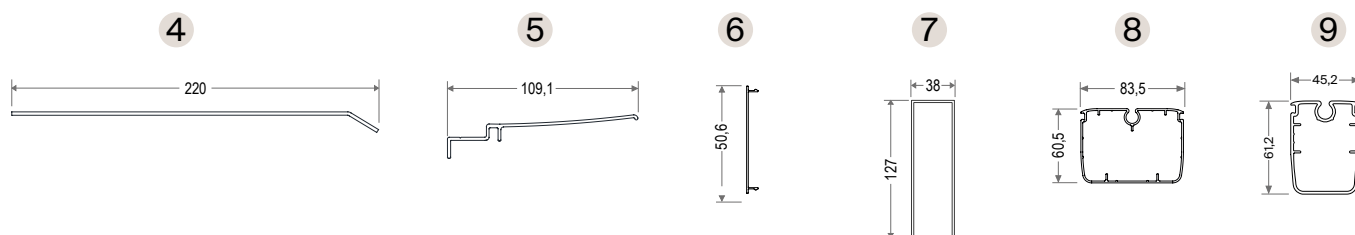
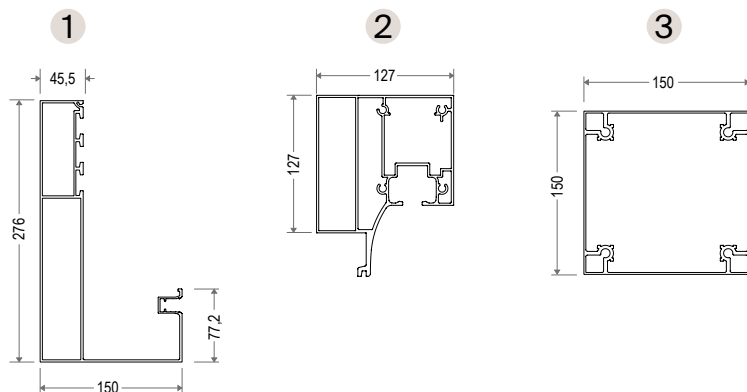
Pergostar Horizontal is a pergola with a sophisticated mobile covering system. The fabric is fixed to a set of curved aluminium crossbars that slide along horizontal guides to open. It consists of an aluminium structure and a fold-closing fabric. It operates with an electric motor specifically designed for this product.

TECHNICAL SPECIFICATIONS

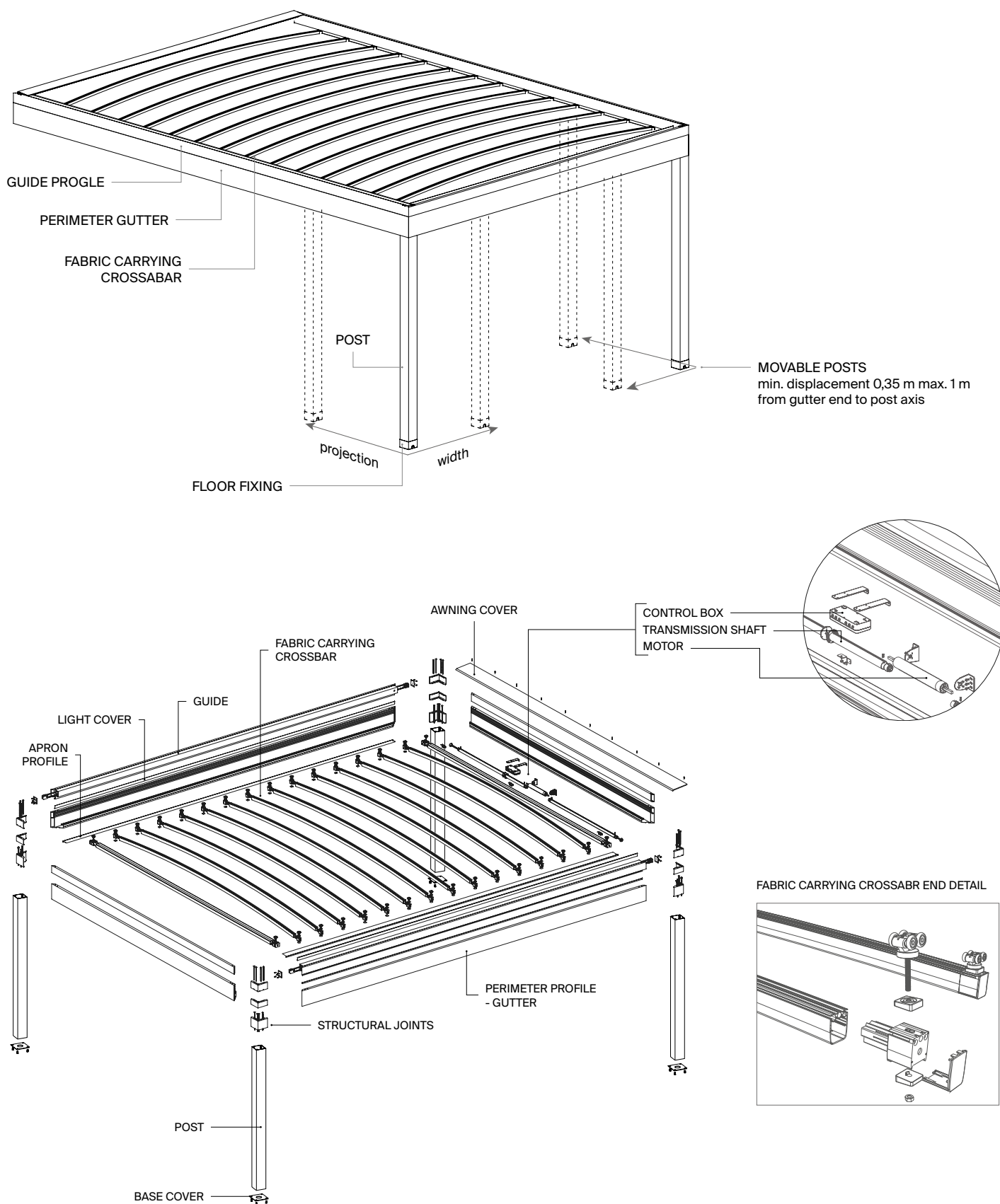
- Structure made of 6063-T5 aluminium profiles.
- Components with an electrostatic powder coating or anodised finish.
- Stainless steel fixings and fasteners.
- Covers up to 42 m².
- Wind resistant up to force 8 on the Beaufort scale.
- Torque motor with double Toscana transmission.
- Optional SPOT lighting system integrated into the fabric carrying crossbar.
- Optional LED perimeter lighting.
- Remote control for motor and lighting.
- "ALL SEASON"

MAIN PROFILES

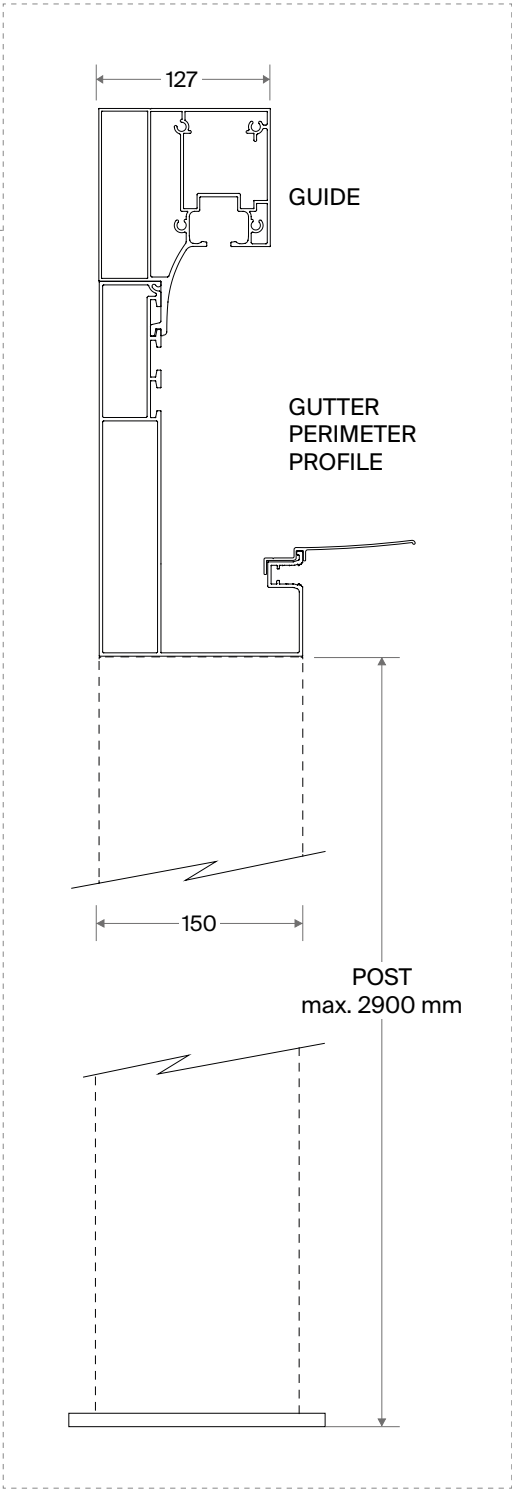
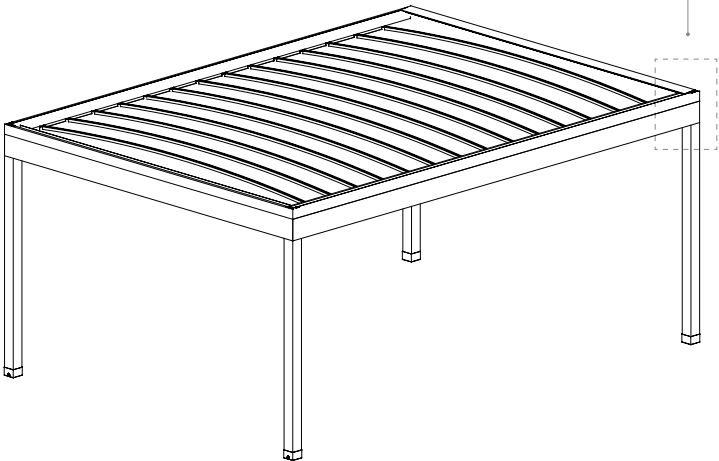
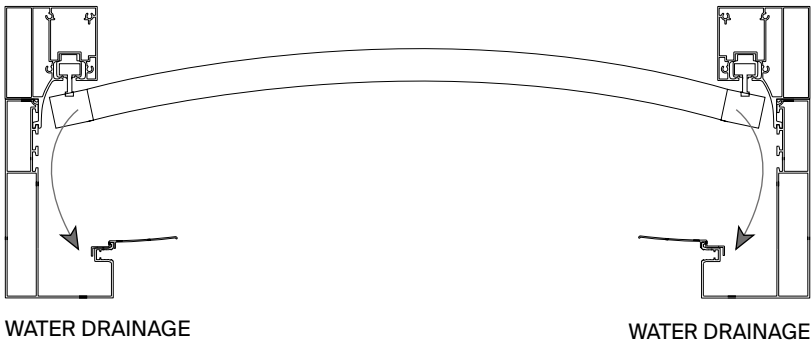
- 1 PERIMETER PROFILE / GUTTER
- 2 GUIDE
- 3 POST
- 4 AWNING COVER
- 5 APRON PROFILE
- 6 PERIMETER LIGHT COVER
- 7 FRONT AND REAR PROFILE
- 8 FINAL FABRIC CARRYING CROSSBAR
- 9 INTERMEDIATE CARRYING CROSSBAR (without light or with spot light)



COMPONENTS

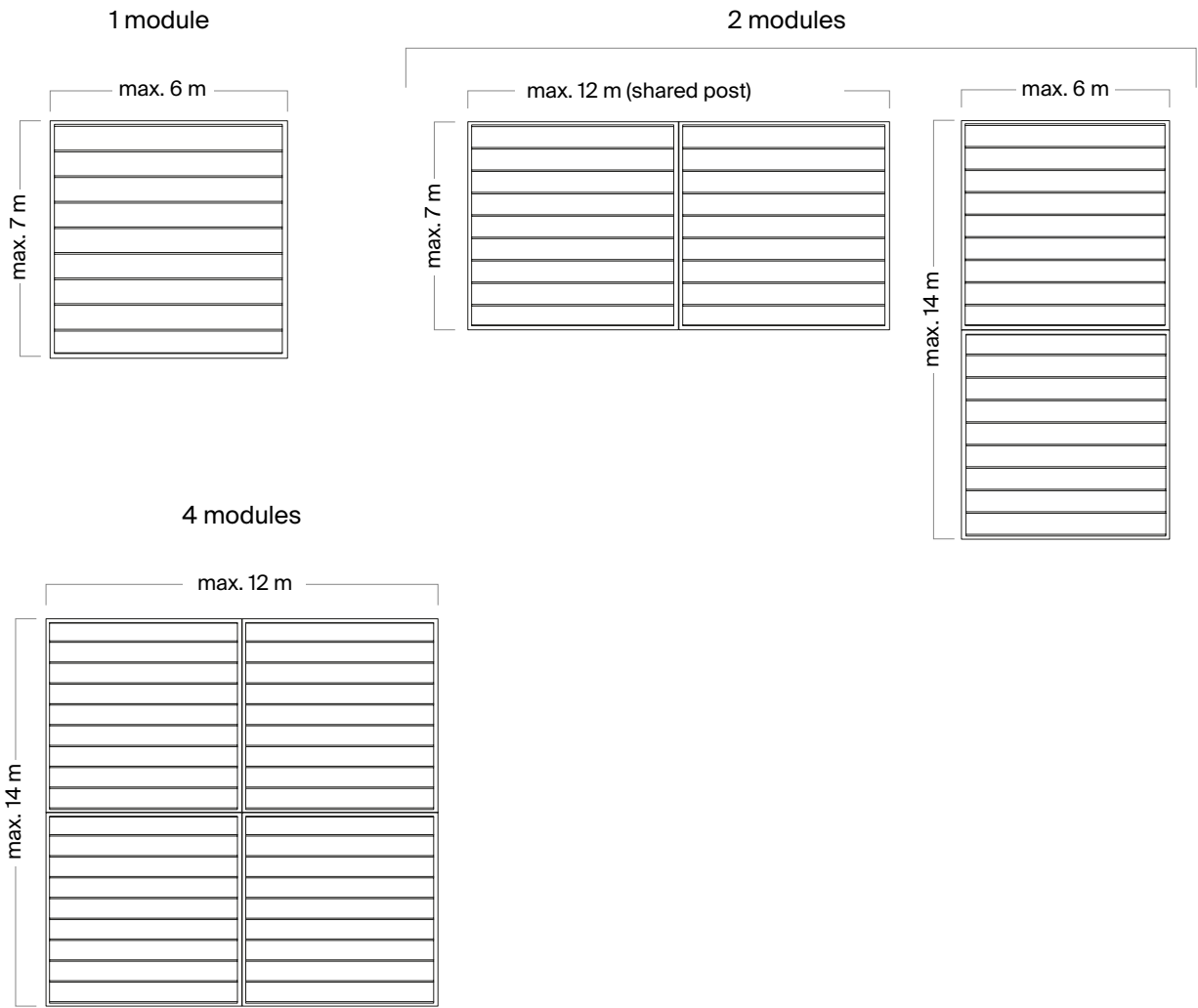


ARCHED FABRIC CARRYING CROSSBAR PROFILES

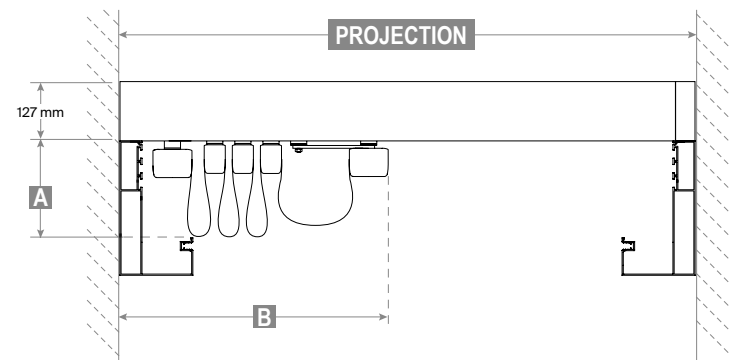


DIMENSIONS

	WIDTH	PROJECTION
min. (m)	2,5	2,5
max. (m)	6	7



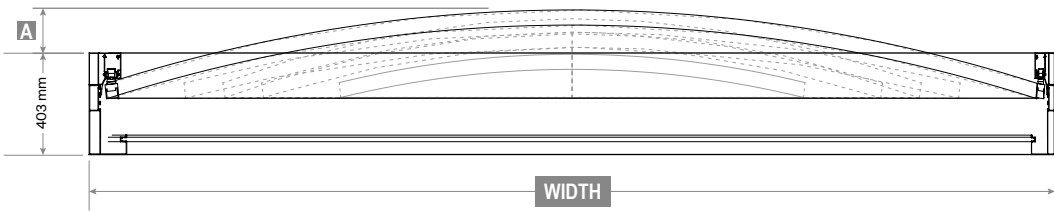
CANOPY STACKING
Assembled canopy up to 5,8 m.



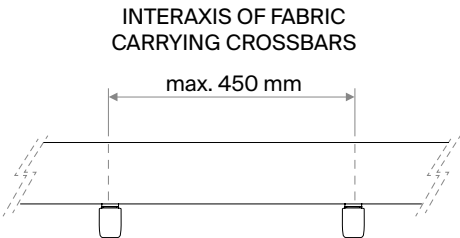
	WIDTH in mm (2 guides)							
WIDTH	2500	3000	3500	4000	4500	5000	5500	6000
ARCHED	100	120	140	160	180	200	220	240
A	300	320	330	340	350	360	380	400

	PROJECTION in mm					
PROJECTION	2500	3000	4000	5000	6000	7000
B	460	510	630	740	840	950

ARCHED FABRIC CARRYING CROSSBAR



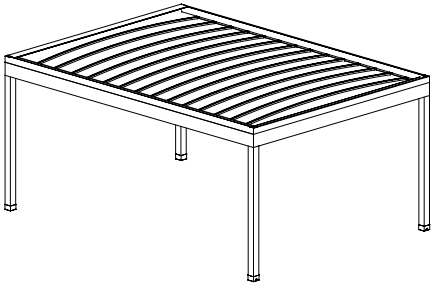
	HEIGHT in mm				
WIDTH	3000	4000	4500	5000	6000
A	-8	81	136	82	170



INSTALLATION OPTIONS

FREESTANDING

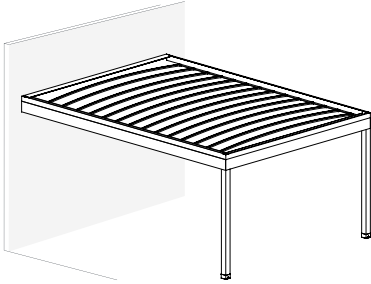
Movable posts



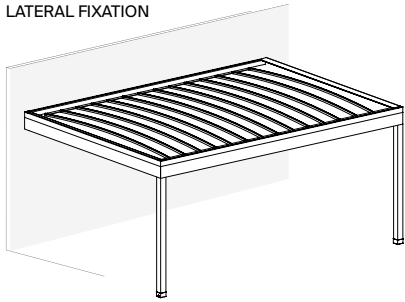
WALL-MOUNTED

Movable posts

FRONT FIXATION

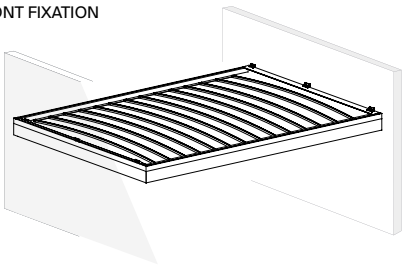


LATERAL FIXATION

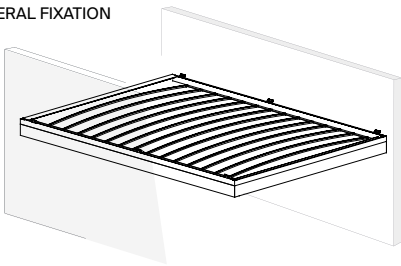


BETWEEN WALLS

FRONT FIXATION

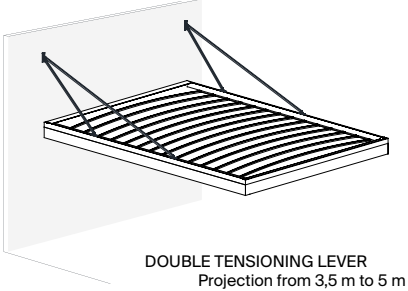
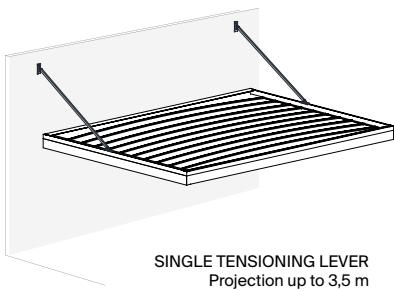


LATERAL FIXATION

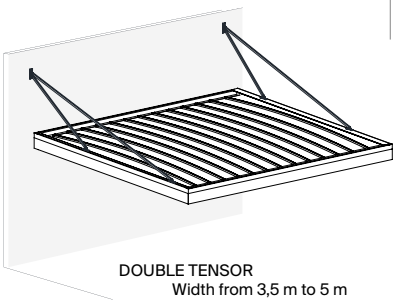
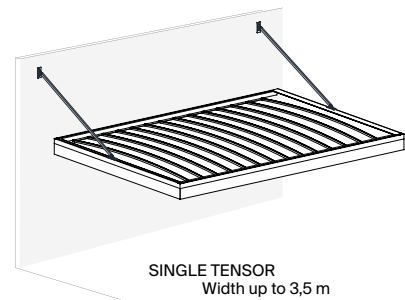


TIE-ROD

FRONT FIXATION

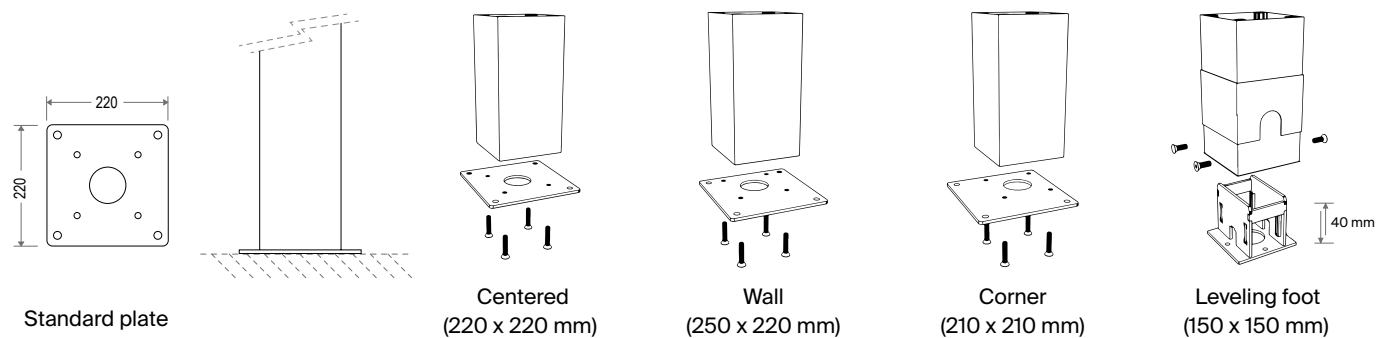


LATERAL FIXATION

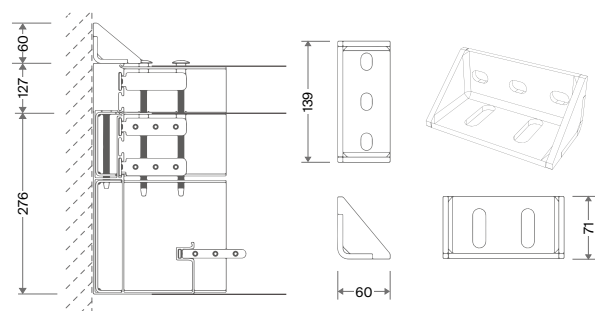


ANCHORAGES & FASTENINGS

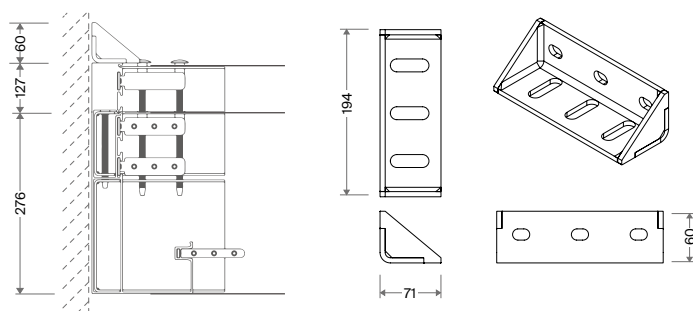
POST ANCHORING TO THE FLOOR



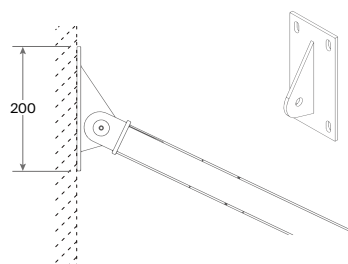
CORNER FASTENING OF THE STRUCTURE TO THE WALL



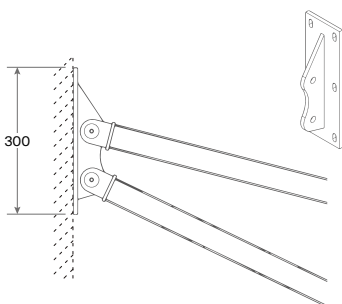
INTERMEDIATE FASTENING OF THE STRUCTURE TO THE WALL



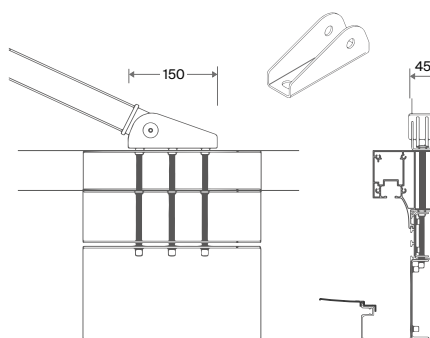
SINGLE TIE-ROD FASTENING TO THE WALL



DOUBLE TIE-ROD FASTENING TO THE WALL



LATERAL TIE-ROD FASTENING TO THE STRUCTURE

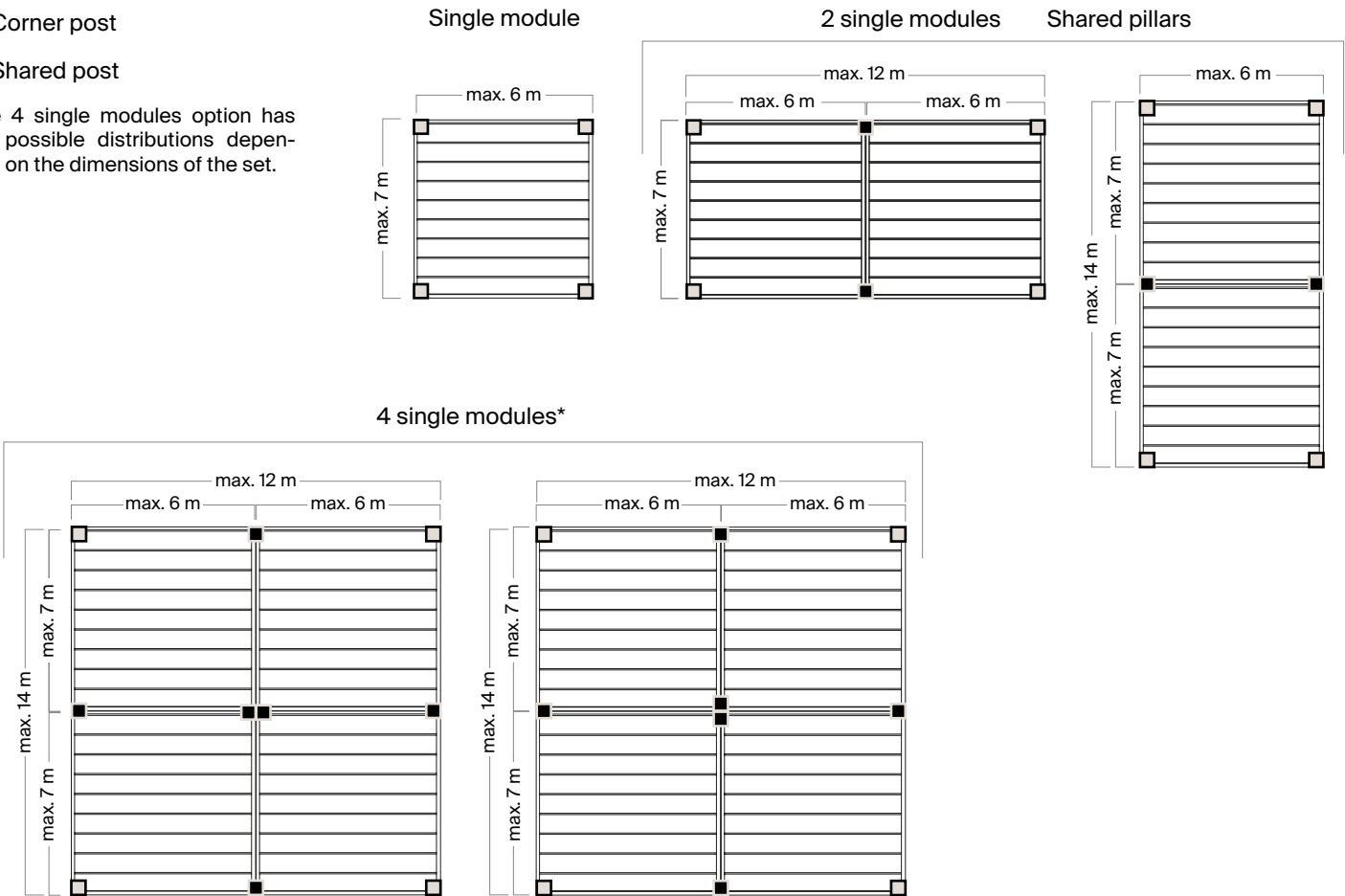


POST CONFIGURATION

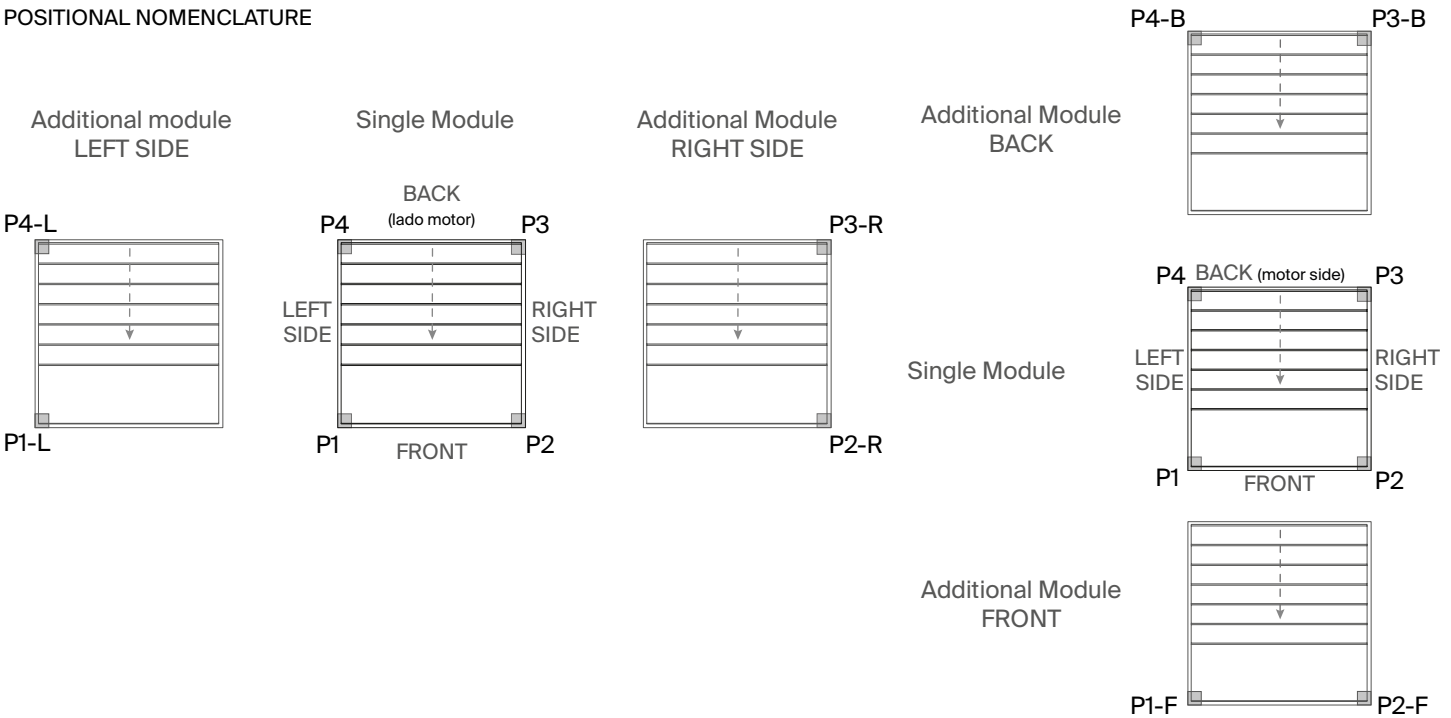
(FREESTANDING)

- Corner post
- Shared post

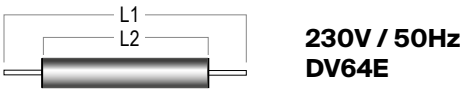
*The 4 single modules option has two possible distributions depending on the dimensions of the set.



POSITIONAL NOMENCLATURE



MOTORISATION

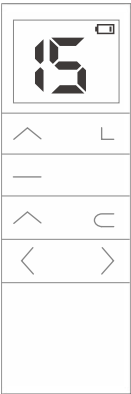


TECHNICAL SPECIFICATIONS	
Rated Torque (Nm)	2 x 25
Rated Speed (Rpm)	26
Rated Current (A)	2.22
Rated Power (W)	490
Degree of Protection (IP)	IP44
Maximum Limit Turn (turn)	∞
Running Time (min)	>4
Working Temperature (°C)	-10°C~50 °C
L1 / L2 (min)	545 / 411

EMITTER

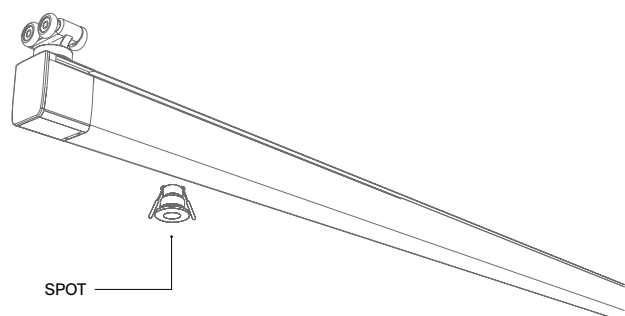
EMITTER DOOYA 15 channels

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

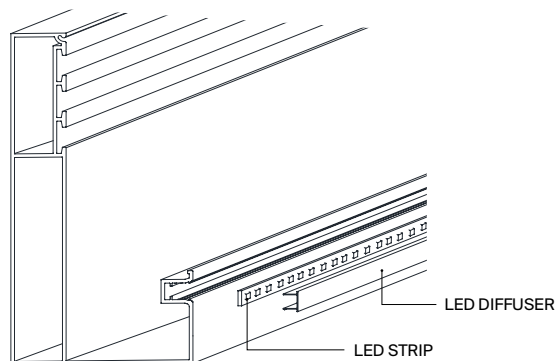


* For dimmable lighting, a second remote control is required: NOON

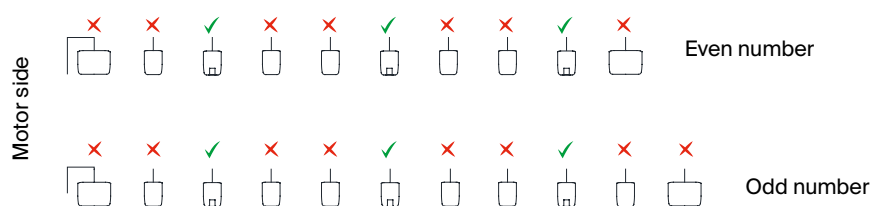
LIGHTING



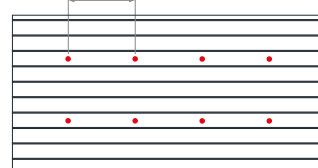
PERIMETER LIGHTING



STANDARD DISTRIBUTION: EVERY 3 FABRIC CARRYING CROSSBAR PROFILES



from 1 to 1,30 m

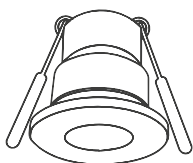


SPOT LIGHT CHARACTERISTICS

Fabric carrying crossbar lighting option (only ON / OFF)

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

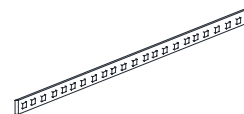


LED STRIP CHARACTERISTICS

Perimeter lighting option

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

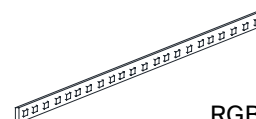


RGB LED STRIP CHARACTERISTICS

Perimeter lighting option

TECHNICAL SPECIFICATIONS

Colour	R + G + B	Protection rating	IP67
Type of diode	SMD5050	No. Leds per metre	30
Beam angle	120°	Luminous flux maintenance	L70 B50
Consumption	7,2 W/m	Service life	25.000 h
Voltage	24V DC		



RGB

WIND CLASSIFICATION

270 N/m²
5
UNE EN 13561

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

WIND RESISTANCE CLASSIFICATION CALCULATED FOR 1 MODULE.

*THE CORRESPONDENCE OF THE CLASS ACCORDING TO UNE EN 13561 WITH THE WIND SPEED OR BEAUFORT SCALE IS INDICATIVE.

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.

FOUNDATION CALCULATION

With our Toscana Structure APP, we can design and calculate the ideal pergola in just minutes, incorporating the wind and snow loads required by the client. It will also automatically indicate the technical specifications of the reinforced concrete base needed to secure the pillars to the ground.

Our technical department is at your disposal to propose the best configuration and achieve the optimal product with the most suitable technical specifications.





We believe in the *elegance* of engineering.