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premier outdoor living • solar shading • cladding products

(604) 428 1818
sales@atriadesigns.ca

ALGARVE®

PRODUCT INFORMATION



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DESCRIPTION

Elegant aluminium patio cover with rotating blades and surface-mounted side elements.



- Can be controlled using io, RTS or the Renson® Connect App
- Slender support structure and sleek design
- Surface-mounted side elements and accessories
- Can be expanded up to 6 x 6 m without additional columns
- Available in Classic Line finish with a classic cornice
- Protection from the sun, rain and wind



One roof section

BENEFITS

Design



1 MINIMALIST DESIGN

Sleek profiles and invisible screw connections combined to create an elegant structure. A motor subtly hidden on the top of the Algarve bladed roof frame adds to the overall aesthetic.

2 6 X 6 M WITHOUT INTERMEDIATE COLUMN

A single roof section with intermediate beam is possible up to a maximum of 6 × 6 m without intermediate column. The 2 roof sections can be fitted with a bladed or canvas roof, and a combination of blades and canvas is also possible. There is no need for both roof sections to have the same finish.

3 SURFACE-MOUNTED SIDE ELEMENTS

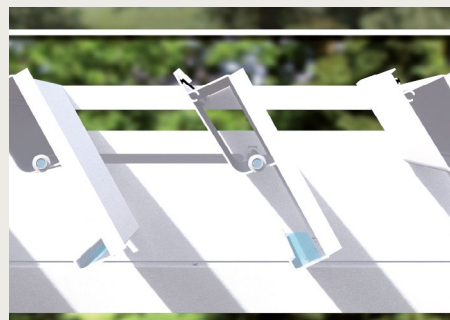
Fixscreens, glass sliding panels, Loggia panels, fixed walls or outdoor curtains can be fitted to the structure as surface-mounted elements.

4 INVISIBLE DRAINAGE VIA DRAINAGE PIPE IN THE COLUMN

5 MINIMAL GAPS BETWEEN THE BLADES

Lend a stunning and sleek finish.

Quality



1 DOUBLE-WALLED BLADES FOR EXTRA STRENGTH

Load-bearing capacity: 100 kg/m²

2 WELDED ALUMINIUM DRIPS, POWDER COATED TO MATCH THE COLOUR OF THE ROOF BLADES

3 UNIQUE END CAPS PROVIDE A SOLID CORNER CONNECTION

4 INTEGRATED WATER DRAINAGE CHANNELS

5 SAFE INSTALLATION OF SLIDING PANELS WITH OPTIONAL TUBE PROFILE

6 F2 TECHNOLOGY

INNOVATION

With a secure fastening system that ensures the rigidity of its support structure, Algarve remains stable even in strong winds.

Customisation



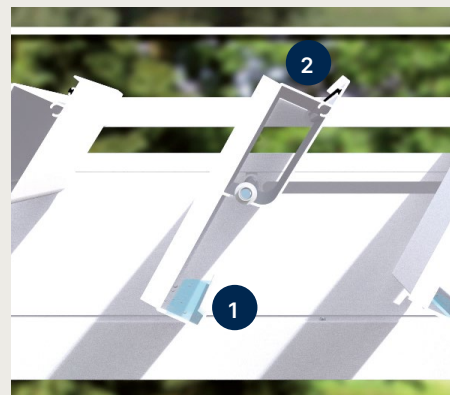
1 WIDE RANGE OF SIDE INSERTS POSSIBLE

2 BACK ORDERS POSSIBLE

3 ACCESSORIES

For more information about the possible accessories, see the 'Accessories' section and/or the product information for the various accessories.

Comfort



1 SPECIALLY DEVELOPED GUTTER BORDER

INNOVATION

Prevents your patio and furniture from getting wet when the blades are opened following a rain shower.

2 SILENT AND SOFT CLOSING MECHANISM BY ADDING A BRUSH TO THE BLADES

3 QUICK INSTALLATION

Thanks to maximum pre-assembly.

4 MAXIMUM NATURAL LIGHT

Blades open through 135°.

TECHNICAL DETAILS



Dimensions	
Span – Single	Min. 1800* mm - max. 4500 mm
Span – Single with additional beam	Min. 1800* mm - max. 6000 mm
Pivot – Single	Min. 2615* mm - max. 7000** mm
Passage height	Min. 375 mm – max. 2800 mm
Total height with blades closed	Passage height + 230 mm
Total height with blades 90° open	Passage height + 325 mm
Total height including motor box	Passage height + 360 mm
Minimum height required when installed under a roof overhang	Passage height + 365 mm
Blade rotation	Max. 150°
Minimum number of water drainage points < 16 m ²	1
Minimum number of water drainage points > 16 m ²	2
Operating methods	
Renson® Connect App	✓
Somfy io	✓
Somfy RTS	✓
Home automation ready	✓

* Smaller dimensions (span up to min. 800 mm and pivot up to min. 1110 mm) possible by special request to pre-sales - drawing office.

** Please note: if only one column is used, the water drainage capacity will be limited to 0.025 l/m2.s (90 l/h).

Electrical bladed roof drive

Parameters	Value
Supply voltage	230 Volt AC, 50 Hz
Transformer current range	0 – 2.5 Ampère
Transformer power	100 W
Motor voltage	24 Volt DC
Motor nominal current (24 Volt DC)	3 Ampère
Protection rating	IP 66 Dynamic
Maximum running time with continuous use	Approx. 2 minutes
Automatic	16 A Curve C

Standard configuration



Construction

- Free-standing or façade mounted (against whole wall or partial connection)
- Standard mounting bases (visible or invisible)
- Custom span, pivot and passage height with mm precision
- Motor drive with choice of motor position and drainage
- Blade orientation (sun protection or maximum sunlight)

Finish

- Seaside Quality A
- Monocolour or dual colour according to Renson standard colours
- Integrated water drainage (incl. PVC drainage pipes and anti-splash diffusers in the gutter)
- Adjustable installation and drainage holes

Algarve > 6055 mm



- Maximum pivot dimension: 7000 mm
- Maximum span dimension: 4000 mm (once pivot length is greater than 6055 mm)
- Number of columns per free-standing pivot side: minimum three.
- Maximum free space between two columns: 5835 mm
- Shifted column: NOT possible
- Minimum number of water drainage points: three, of which two on the lowest side
- Beam Heat & Sound: NOT possible on the pivot
- Maximum number of Led blades: 3
- Maximum number of glass blades: 5
- Maximum number of Lineo Fix blades 3

Algarve weight

Total weight (kg) of entire Algarve																	
Span																	
	Dimensions in mm	# lamellen	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4500
Pivot	2615	11	145	155	164	175	185	194	204	213	223	233	242	252	261	272	277
	2830	12	154	163	174	185	195	205	215	226	236	246	256	266	278	288	293
	3045	13	162	173	184	194	205	216	227	238	249	259	270	282	293	304	309
	3260	14	171	181	193	204	215	227	238	250	261	273	285	297	308	320	325
	3475	15	180	190	202	214	226	238	250	262	274	287	299	311	323	335	342
	3690	16	188	198	211	223	236	249	261	274	288	301	313	326	339	351	358
	3905	17	197	206	220	233	246	260	273	287	301	314	327	341	354	367	374
	4120	18	205	215	229	243	257	271	285	299	313	327	341	355	369	383	390
	4335	19	214	223	238	252	267	282	297	312	326	341	355	370	384	399	406
	4550	20	222	232	247	262	278	293	309	324	339	354	369	384	400	415	423
	4765	21	230	240	256	273	288	304	320	336	352	367	383	399	415	432	440
	4980	22	239	248	266	282	299	315	332	348	364	381	397	414	431	448	456
	5195	23	247	258	275	292	309	326	343	360	377	394	411	429	446	463	472
	5410	24	257	266	284	302	319	337	355	372	390	409	426	444	462	479	488
	5625	25	265	275	293	311	330	348	366	384	404	422	440	459	477	495	504
	5840	26	274	283	302	321	340	359	378	398	416	435	454	473	492	511	520
	6055	27	282	292	311	331	350	370	390	410	429	449	468	488	507	527	537

The table above shows the weight of the Algarve frame; the weight of the columns and mounting bases is not included.
Each column in the configuration results in an extra weight of 4.8 kg/column metre.

Standard mounting base weight:

- invisible mounting base: 1730 g
- visible mounting base: 3370 g
- visible (corner): 2240 g

Reinforced mounting base weight:

- invisible mounting base: 6970 g
- visible mounting base: 10290 g
- visible (corner): 8170 g

Algarve snow load

Single Algarve - maximum snow load (kg/m²)																	
	Span																
	Dimensions in mm	# lamellen	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4500
Pivot	2615	11	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	2830	12	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	3045	13	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	3260	14	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	3475	15	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	3690	16	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	3905	17	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	4120	18	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	4335	19	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	4550	20	300	300	300	300	252	197	156	125	101	82	67	55	45	37	34
	4765	21	300	300	300	276	254	197	156	125	101	82	67	55	45	37	34
	4980	22	300	300	275	251	230	197	156	125	101	82	67	55	45	37	34
	5195	23	300	270	244	223	205	189	156	125	101	82	67	55	45	37	34
	5410	24	264	236	213	194	178	165	153	125	101	82	67	55	45	37	34
	5625	25	232	207	187	170	156	144	133	124	101	82	67	55	45	37	34
	5840	26	204	183	165	150	137	126	117	109	101	82	67	55	45	37	34
	6055	27	181	161	145	132	121	111	103	95	89	82	67	55	45	37	34
	6270	28	222	199	181	166	153	142	133	125	101	82	67	55			
	6485	29	211	190	173	158	146	136	127	119	101	82	67	55			
	6700	30	206	185	168	154	142	132	123	116	101	82	67	55			
	6915	31	200	180	164	150	138	129	120	113	101	82	67	55			
	7000	32	198	178	162	148	137	127	119	111	101	82	67	55			

Tables do not exceed 300 kg/m² as values above this figure are no longer relevant.

Single Algarve with additional beam - maximum snow load (kg/m²)																		
	Span																	
	Dimensi- ons in mm	# lamellen	3200	3400	3600	3800	4000	4200	4400	4500	4600	4800	5000	5200	5400	5600	5800	6000
Pivot	2615	11	584	512	452	402	359	322	290	276	263	239	217	199	182	167	154	142
	2830	12	538	471	416	369	330	296	267	254	241	219	199	182	167	153	141	130
	3045	13	498	437	385	342	305	274	246	234	223	202	184	168	154	141	130	119
	3260	14	464	406	358	318	284	254	229	217	207	188	171	156	142	130	120	110
	3475	15	434	380	335	297	265	237	213	203	193	175	159	145	132	121	111	102
	3690	16	408	357	314	279	248	222	200	190	180	163	148	135	124	113	104	95
	3905	17	384	336	296	262	233	209	188	178	169	153	139	127	116	106	97	89
	4120	18	363	317	279	247	220	197	177	168	160	144	131	119	109	99	91	83
	4335	19	344	300	264	234	208	186	167	159	151	136	124	112	102	93	86	78
	4550	20	326	285	251	222	197	176	158	150	143	129	117	106	97	88	81	74
	4765	21	311	271	239	211	188	168	150	143	135	122	111	100	91	83	76	70
	4980	22	296	259	227	201	179	159	143	136	129	116	105	95	87	79	72	66
	5195	23	283	247	217	192	170	152	136	129	122	110	100	91	82	75	68	62
	5410	24	271	236	208	183	163	145	130	123	117	105	95	86	78	71	65	59
	5625	25	260	227	199	176	156	139	124	118	112	101	91	82	75	68	62	56
	5840	26	249	217	191	168	149	133	119	113	107	96	87	78	71	65	59	53
	6055	27	240	209	183	162	143	128	114	108	102	92	83	75	68	62	56	51

Buigspanning (pivot) kleiner dan maximaal toelaatbare buigspanning rekening houdend met veiligheidsfactor 1.5

Tabellen worden afgetopt op 300 kg/m² omdat waarden hierboven niet meer relevant zijn.

Accessoires



Comfort pack		Back order
Fixscreen + Lineo Led	✓	-
Side infills		
Integrated Fixscreen	-	-
Algarve Fixscreen	✓	✓
Lapure Fixscreen	-	-
Triangle	-	-
Loggia sliding panels*	✓	✓
Loggiascreen Canvas sliding door	-	-
Glass sliding panels**	✓	✓
Linus wall**	✓	✓
Linarte wall	-	-
Outdoor curtains	✓	✓
Comfort		
Lighting		
Lineo Led	✓	-
UpDown Led	✓	✓
Colomno Led	-	-
Lapure Led	-	-
Comfort and design		
Beam Heat & Sound	✓	✓
Lineo Luce	✓	✓
Lineo Fix	✓	-
Lineo Heat	✓	-
Waterproof wall mounting	✓	-
Protecto protective profile	✓	✓
Automation		
Wind sensor	✓	✓
Rain sensor	✓	✓
Sun sensor	-	-

* Up to a free width of 4250 mm

** Subject to use of reinforced mounting bases on adjacent columns



Styling		Back order
Classic Line	✓	-
Wooddesign roof blades	✓	-
Columns		
Extra column	✓	-
Shifted column	✓	-
Adjustable wall column	-	-

CERTIFICATES & TESTING

CE – DoP documents

- CE / UKCA / DoC / DoP / ETA

Certificates

- UL / ETL certificate US – Canada / CCC
- REACH / seaside/coastal powder coating guarantee
- RoHS / AluEco
- VMRG sun protection

Declarations

- Declaration of material codes
- Declaration of testing – overview
- Declaration of powder coating
- Declaration of anodisation layer thickness
- Declaration of glass properties
- Declaration of fire resistance / reaction
- Declaration of endurance cycles
- Declaration of UV resistance / gtot + others
- Declaration of asbestos

Test reports – calculations

- Environmental statement (recycled aluminium)
- Anchoring requirements
- Water test / sand resistance test / IP test
- Wind (load) testing / verification certificate
- Static load test / calculations
- Gravity-wind load deflection & structural test

Wind guarantee of roof with blades closed	up to 120 km/h
Wind guarantee of roof with blades open	/*
Fixscreen wind guarantee when closed	up to 60 km/h
Max. wind speed for roof or Fixscreen operation	up to 50 km/h
Water drainage flow	120 l/m ² /h
Load-bearing capacity	100 kg/m ²

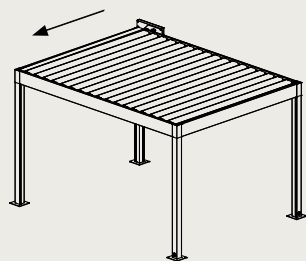
* We recommend against opening the blades in high winds > 50 km/h, as there is a risk that the blades may start vibrating and operating the blades is only permitted up to 50 km/h.



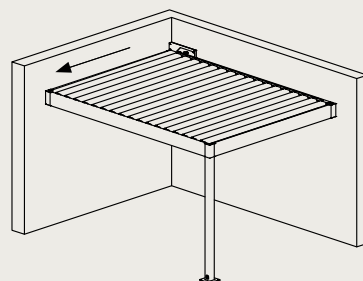
CONFIGURATION

Type

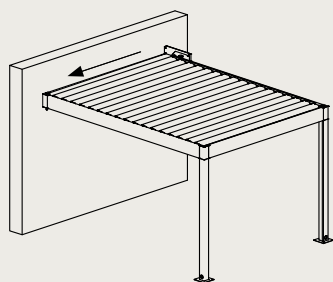
Single



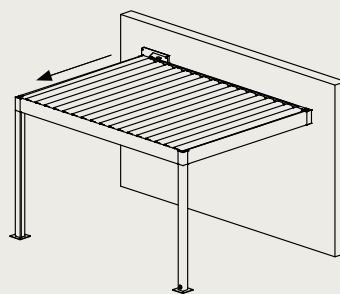
Free-standing



Façade mounted on span and pivot side

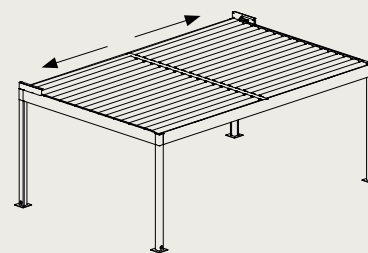


Façade mounted on span side

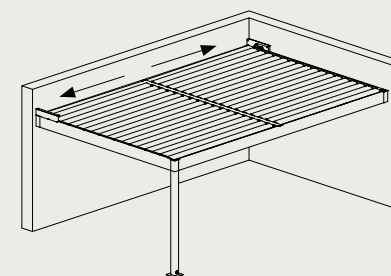


Façade mounted on pivot side

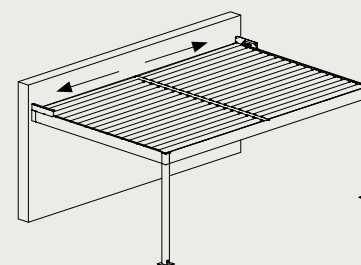
Single unit with additional beam



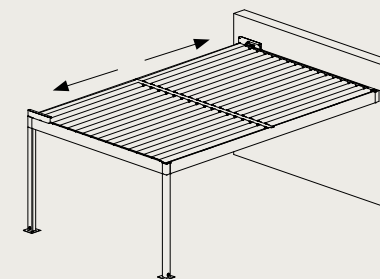
Free-standing



Façade mounted on span and pivot side



Façade mounted on span side

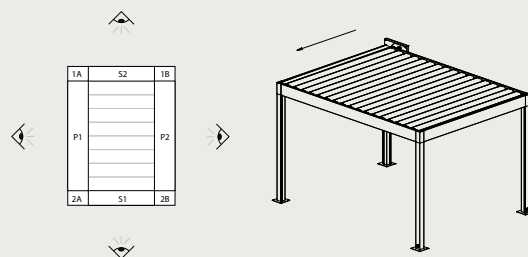


Façade mounted on pivot side

Construction method

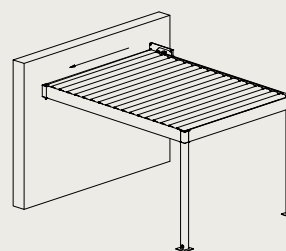
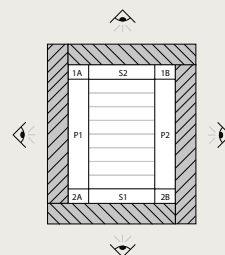
Free-standing

The sides are completely separate from any walls; the cover is not mounted against any walls.

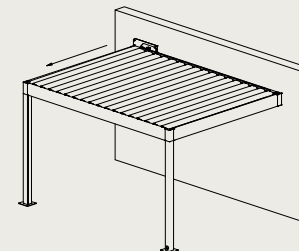


Full-length wall mounted

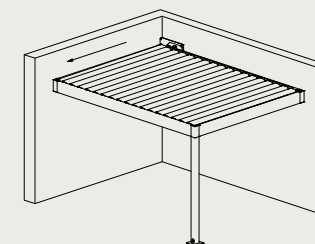
The full length of the side is mounted against a wall.



*full-length wall mounted
(façade mounted)
on span side*



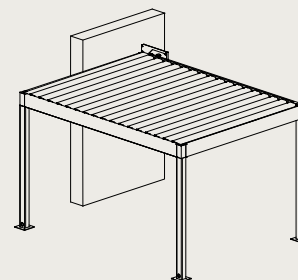
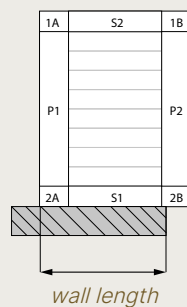
*full-length wall mounted
(façade mounted)
on pivot side*



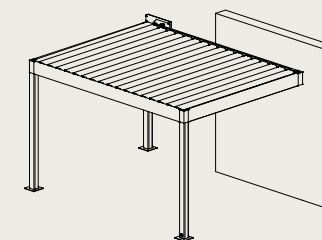
*full-length wall mounted
(façade mounted)
on span and pivot side*

Wall to the left

Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the left side of the beam.



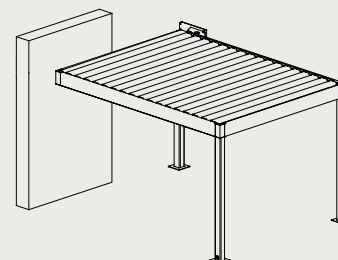
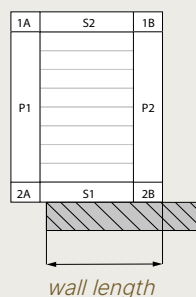
wall to the left (span)



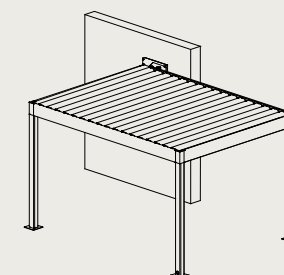
wall to the left (pivot)

Wall to the right

Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the right side of the beam.



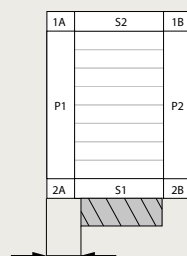
wall to the right (span)



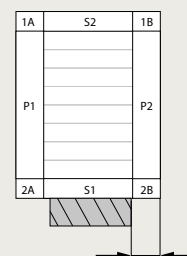
wall to the right (pivot)

Wall in the middle

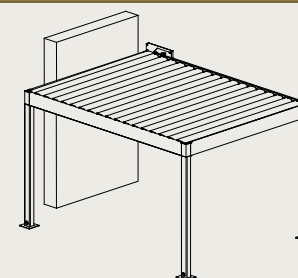
A limited part of the cover is mounted against a wall. There is a free-standing section of the cover both to the left and to the right of the wall.



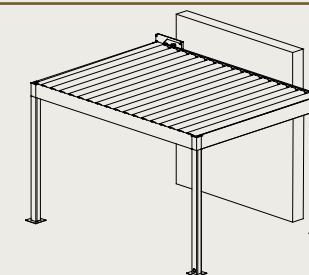
distance on the left to the wall



distance on the right to the wall



wall in the middle (span)



wall in the middle (pivot)

Columns

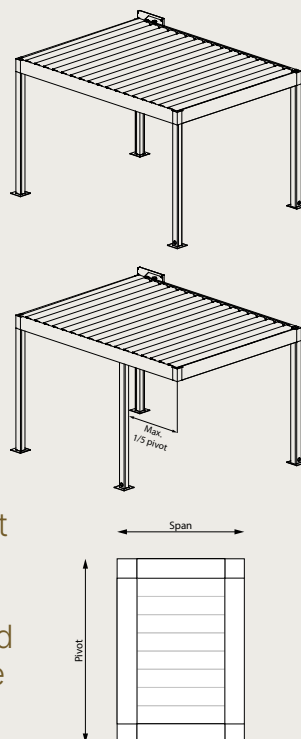
Corner column

A column is provided for each corner as standard. When installing against a wall that guarantees sufficient stability, the column on this side may be omitted.

Shifted column

A column can be shifted in the direction of the pivot to a maximum of 1/5 of the pivot length. This guarantees the stability of the structure at all times.

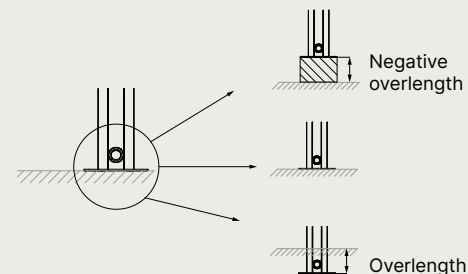
A shifted column for Algarve and Algarve Canvas is entered by entering the required distance from the corner. It is not possible to shift a column in the span direction.



Shorter/longer columns

A column that is longer (positive overlength) or shorter (negative overlength) than the entered passage height may be ordered.

Opting for a positive overlength can be useful to keep a roof perfectly level when your patio slopes downward, for example. Alternatively, if one of the columns is to be installed on a small wall, for example, it can be shortened (negative overlength).



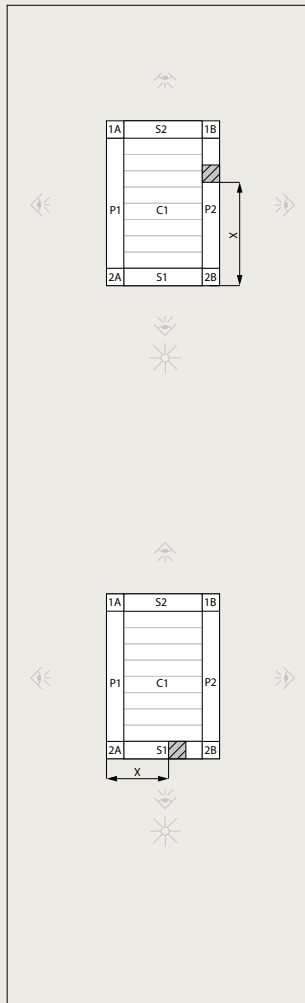
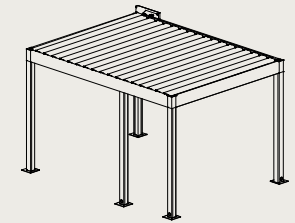
Positive overlength is possible up to the maximum passage height (2800 mm) plus 500 mm (= 3300 mm).

Negative overlength is possible up to the minimum passage height (= 500 mm).

Overlength only affects the price if the column length >3000 mm.

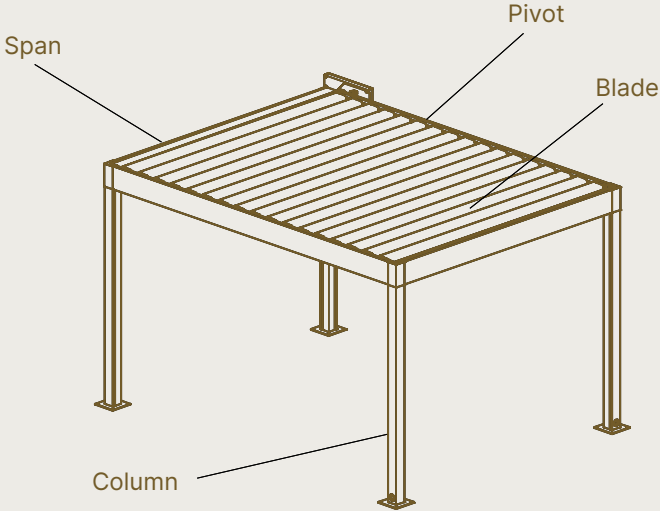
Additional column

One side of the cover can be split into two sections by adding an additional column. The position of the additional column is always viewed from side P1 (additional column on span) or S1 (additional column on pivot).

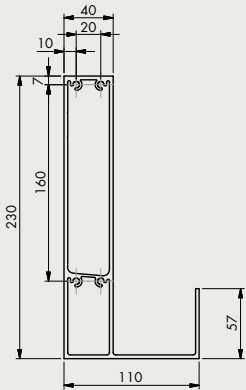


X = position of the intermediate column (mm)

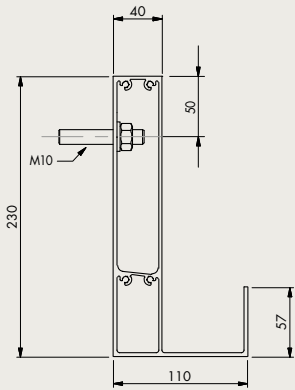
Profiles



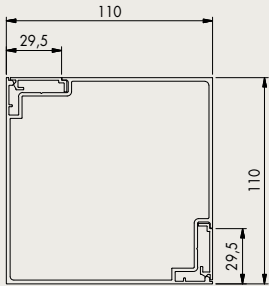
Span and pivot (free-standing)



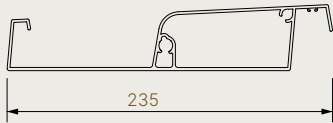
Span and pivot (façade mounted)



Column

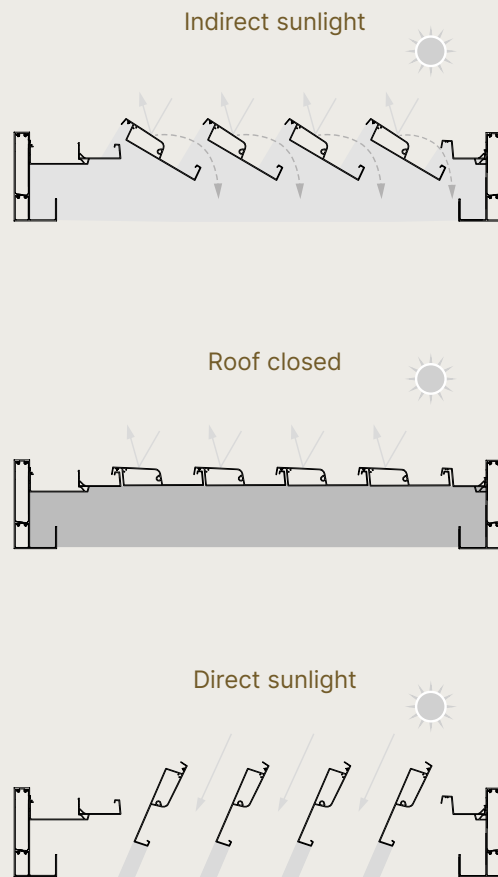


Blade

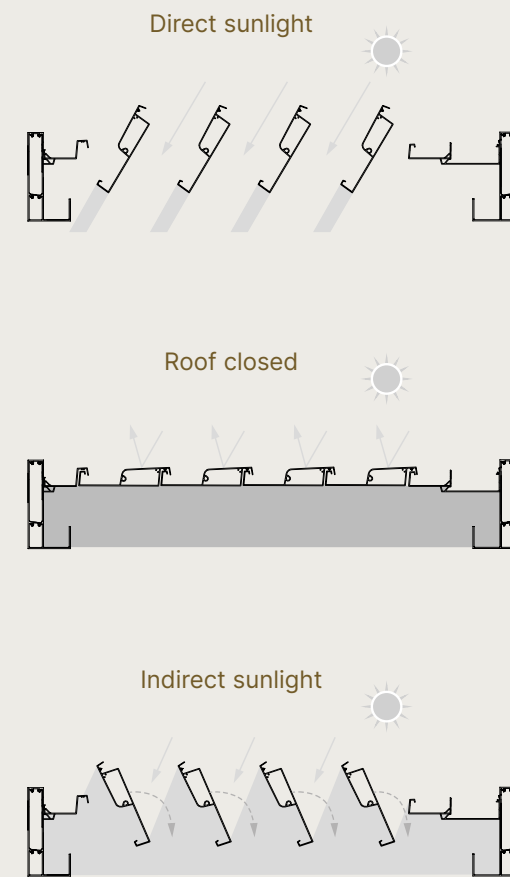


Blade orientation

Sun Protection: light blocked when open



Light allowed to enter when open



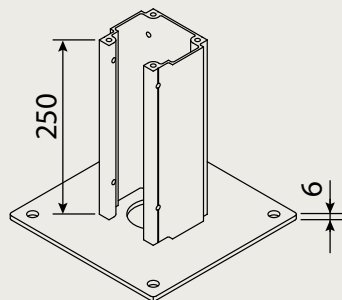
Mounting bases

The strength requirements determine whether or not reinforced mounting bases are needed.

Standard mounting bases

For use in normal circumstances, without increased wind load.

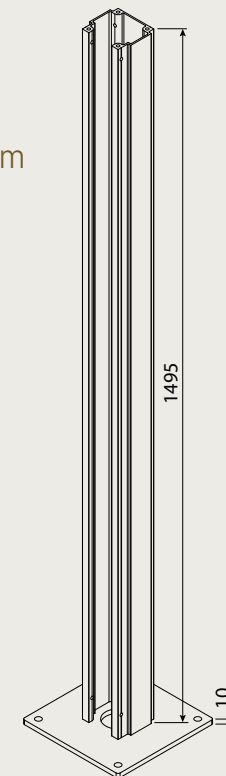
- Base plate thickness: 6 mm
- Core length: 300 mm
- Visible base plate sides: 230 x 230 mm



Reinforced mounting bases

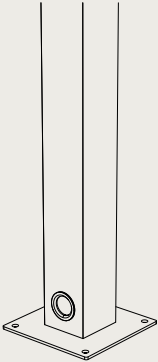
At locations with increased wind loads, the cover must be equipped with reinforced mounting bases to guarantee the stability of the structure. Examples include coastal areas, installation at a height or on a rooftop terrace.

- Base plate thickness: 10 mm
- Core length: 1495 mm
- Visible base plate sides: 230 x 230 mm



Mounting bases

The choice of reinforced or non-reinforced mounting bases will be made automatically based on the strength requirements and/or side insert selection. You can select a finish for your mounting bases from the possible options below.

			
Type	Visible mounting base		Invisible mounting base
Application	Not against a structure	Pivot or span against a structure	All applications
Non-reinforced mounting base	Available at standard price		
Reinforced mounting base	Available at a surcharge		

Water drainage

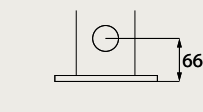
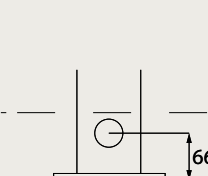
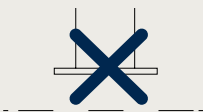
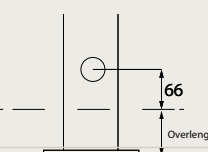
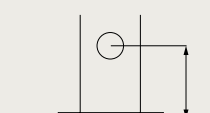
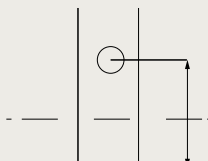
Water will be drained down an integrated drainpipe in the columns of your choice. Starting at 16 m², a minimum of two drainage outlets must be provided for each roof section, of which at least one drain must be on the lowest side of the blades (not on the motor side). For all other dimensions, at least one drain must be arranged on the lowest side of the blades (not on the motor side).

Please note!

If there is only one water-draining column and the surface area is greater than 16 m², the drainage capacity of the roof will only be 90 litres per hour (0.025 L/m².s).

Three options for the height of the drainpipe:

- 66 mm relative to the bottom side of the base regardless of whether or not overlength is applicable(standard).
- 66 mm + overlength relative to the bottom side of the base. In case of overlength, you can choose to have the overlength size included in the standard distance of 66 mm. For example: an overlength of 100 mm means water drainage at 166 mm relative to the bottom side of the mounting base.
- Variable height
Minimum distance above ground level = 66 mm.
Maximum distance = passage height – 415 mm.
The height is always measured from the bottom side of the mounting base to the centre of the drainage hole.

	Passage height	Negative overlength	Positive overlength
66 mm relative to bottom side of base Standard			
66 mm + overlength relative to bottom side of base			
Variable height (mm)			

Technical drawing of a mechanical part, showing a top view and a cross-section A-A.

The top view is a square with a central circular feature. The overall width is 110, and the distance from the center to the right edge is 65. The overall height is 110, and the distance from the center to the bottom edge is 65. There are four small circles in the corners, each with a diameter of 10. The central circular feature has a diameter of 40.

The cross-section A-A shows the internal structure of the central feature, which is a circular hole with a diameter of 40. The cross-section also shows the internal structure of the four corner holes, which are also circular with a diameter of 10.

Technical drawing of a PVC drainage pipe assembly. The main drawing shows a cross-section of the pipe with a central vertical channel and side channels. Dimensions are given: $\text{Ø}43,5$ for the main pipe diameter and 66 for the height of the side channel. A circular inset shows a 90-degree elbow with an outer diameter of $\text{Ø}50$. A separate view shows the pipe connected to a square base plate with four mounting holes.

OTHER TOOLS

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