

ALGARVE®

PRODUCT INFORMATION



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DESCRIPTION

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

- Slender support structure and sleek design
- Surface-mounted side elements and accessories
- Can be expanded up to 236" x 236" without additional columns
- Available in Classic Line finish with a classic cornice
- Protection from the sun, rain and wind
- Can be controlled using RTS



One roof section



SUN
PROTECTION

VENTILATION

WATERPROOF

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.

2 236" X 236" WITHOUT INTERMEDIATE COLUMN

A single roof section with intermediate beam is possible up to a maximum of 236" x 236" 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

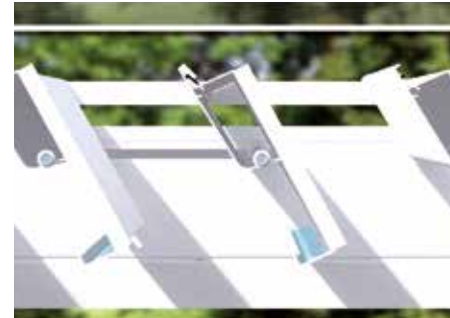
Fixscreens, glass sliding panels, Loggia panels, fixed walls or outdoor curtains can be fitted to the structure as surface-mounted elements.

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: 20.48 psf

2 WELDED ALUMINUM DRIPS, POWDER COATED TO MATCH THE COLOR 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.

Customization



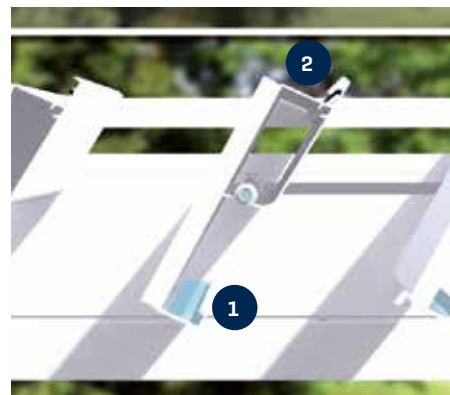
1 WIDE RANGE OF SIDE INSERTS POSSIBLE

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 150°.

TECHNICAL DETAILS



Dimensions	
Span – Single	Min. 71"* - max. 177"
Span – Single with additional beam	Min. 71"* - max. 236"
Pivot – Single	Min. 102"* - max. 238"**
Passage height	Min. 15" – max. 110"
Total height with blades closed	Passage height + 9 1/16"
Total height with blades 90° open	Passage height + 1' - 51/64"
Total height including motor box	Passage height + 1' 2 11/64"
Minimum height required when installed under a roof overhang	Passage height + 1' 2 3/8"
Blade rotation	Max. 150°
Minimum number of water drainage points < 172sqft	1
Minimum number of water drainage points > 172sqft	2
Operating methods	
Somfy RTS	✓
Home automation ready	✓

* Smaller dimensions (span up to min. 32" and pivot up to min. 48") 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 0.40GPM (gallons per minute).

Electrical bladed roof drive

Parameters	Value
Supply voltage	110 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 made to measure
- Motor drive with choice of motor position and drainage
- Blade orientation [sun protection or maximum sunlight]

Finish

- Seaside Quality A
- Monocolour or dual color according to Renson standard colors
- Integrated water drainage [incl. PVC drainage pipes and anti-splash diffusers in the gutter]
- Adjustable installation and drainage holes

Algarve weight

		Total weight (lbs) of entire Algarve															
		Span															
	Dimensions in inches	# blades	70	78	86	94	102	110	118	125	133	141	149	157	165	173	177
Pivot	102	11	320	342	362	386	408	428	450	470	492	514	534	556	576	600	611
	111	12	340	360	384	408	430	452	474	499	521	543	565	587	613	635	646
	119	13	358	382	406	428	452	477	501	525	549	571	596	622	646	671	682
	128	14	377	400	426	450	474	501	525	552	576	602	629	655	680	706	717
	136	15	397	419	446	472	499	525	552	578	605	633	660	686	713	739	754
	145	16	415	437	466	492	521	549	576	605	635	664	691	719	748	774	790
	153	17	435	455	486	514	543	574	602	633	664	693	721	752	781	810	825
	162	18	452	474	505	536	567	598	629	660	691	721	752	783	814	845	860
	170	19	472	492	525	556	589	622	655	688	719	752	783	816	847	880	896
	179	20	490	512	545	578	613	646	682	715	748	781	814	847	882	915	933
	187	21	508	530	565	602	635	671	706	741	777	810	845	880	915	953	971
	196	22	527	547	587	622	660	695	732	768	803	840	876	913	951	988	1006
	204	23	545	569	607	644	682	719	757	794	832	869	907	946	984	1021	1041
	212	24	567	587	627	666	704	743	783	821	860	902	940	979	1019	1057	1076
	221	25	585	607	646	686	728	768	807	847	891	931	971	1012	1052	1092	1112
	229	26	605	624	666	708	750	792	834	878	918	960	1001	1043	1085	1127	1147
238	27	622	644	686	730	772	816	860	904	946	990	1032	1076	1118	1162	1184	

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 3.23lbs per foot.

Standard mounting base weight:

- invisible mounting base: 3.82lbs
- visible mounting base: 7.43lbs
- visible [corner]: 4.94lbs

Reinforced mounting base weight:

- invisible mounting base: 15.37lbs
- visible mounting base: 22.69lbs
- visible [corner]: 18.01lbs

Algarve snow load

		Single Algarve - maximum snow load (psf)														
		Span														
Dimensions in inches	# blades	70	78	86	94	102	110	118	125	133	141	149	157	165	173	177
Pivot	102	173	122	89	67	51	40	31	25	20	16	13	11	9	7	6
	111	173	122	89	67	51	40	31	25	20	16	13	11	9	7	6
	119	173	122	89	67	51	40	31	25	20	16	13	11	9	7	6
	128	171	122	89	67	51	40	31	25	20	16	13	11	9	7	6
	136	149	122	89	67	51	40	31	25	20	16	13	11	9	7	6
	145	132	118	89	67	51	40	31	25	20	16	13	11	9	7	6
	153	117	105	89	67	51	40	31	25	20	16	13	11	9	7	6
	162	104	93	84	67	51	40	31	25	20	16	13	11	9	7	6
	170	93	83	76	67	51	40	31	25	20	16	13	11	9	7	6
	179	84	75	68	62	51	40	31	25	20	16	13	11	9	7	6
	187	76	68	62	56	52	40	31	25	20	16	13	11	9	7	6
	196	69	62	56	51	47	40	31	25	20	16	13	11	9	7	6
	204	61	55	49	45	41	38	31	25	20	16	13	11	9	7	6
	212	54	48	43	39	36	33	31	25	20	16	13	11	9	7	6
	221	47	42	38	34	31	29	27	25	20	16	13	11	9	7	6
	229	41	37	33	30	28	25	23	22	20	16	13	11	9	7	6
	238	37	32	29	27	24	22	21	19	18	16	13	11	9	7	6

- Beam bending [pivot] less than L/200
- Bending stress [pivot] less than maximum permitted bending stress taking into account a safety factor of 1.5
- Steel deck bending less than L/200 - Represents the limiting factor

Tables do not exceed 61.45psf as values above this figure are no longer relevant.

Single Algarve with additional beam - maximum snow load (psf)																		
Span																		
Dimen- sions in inches	# blades	125	133	141	149	157	165	173	177	181	188	196	204	212	220	228	236	
Pivot	102	11	119	104	92	82	73	65	59	56	53	48	44	40	37	34	31	29
	111	12	110	96	85	75	67	60	54	52	49	44	40	37	34	31	28	26
	119	13	101	89	78	70	62	56	50	47	45	41	37	34	31	28	26	24
	128	14	95	83	73	65	58	52	46	44	42	38	35	31	29	26	24	22
	136	15	88	77	68	60	54	48	43	41	39	35	32	29	27	24	22	20
	145	16	83	73	64	57	50	45	40	38	36	33	30	27	25	23	21	19
	153	17	78	68	60	53	47	42	38	36	34	31	28	26	23	21	19	18
	162	18	74	64	57	50	45	40	36	34	32	29	26	24	22	20	18	16
	170	19	70	61	54	47	42	38	34	32	30	27	25	22	20	19	17	15
	179	20	66	58	51	45	40	36	32	30	29	26	23	21	19	18	16	15
	187	21	63	55	48	43	38	34	30	29	27	24	22	20	18	16	15	14
	196	22	60	53	46	41	36	32	29	27	26	23	21	19	17	16	14	13
	204	23	57	50	44	39	34	31	27	26	24	22	20	18	16	15	13	12
	212	24	55	48	42	37	33	29	26	25	23	21	19	17	15	14	13	12
	221	25	53	46	40	36	31	28	25	24	22	20	18	16	15	13	12	11
	229	26	50	44	39	34	30	27	24	23	21	19	17	15	14	13	12	10
	238	27	49	42	37	33	29	26	23	22	20	18	16	15	13	12	11	10

Bending stress [pivot] less than maximum permitted bending stress taking into account a safety factor of 1.5

Tables do not exceed 61.45psf as values above this figure are no longer relevant.

ACCESSORIES



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 167"

** 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 / 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

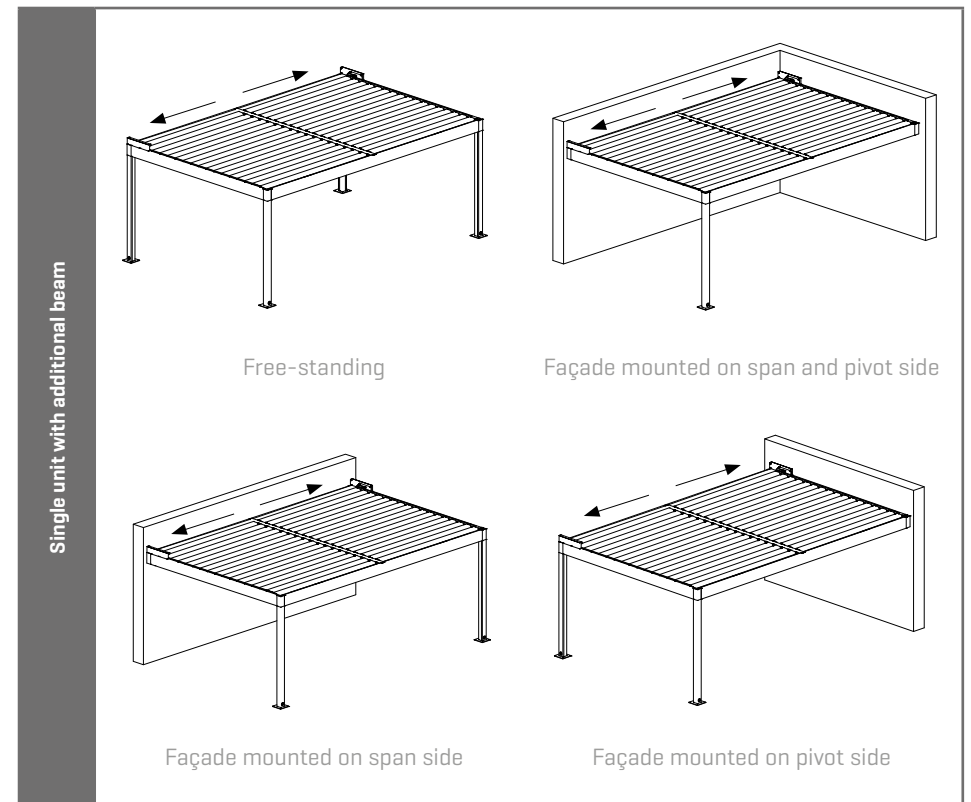
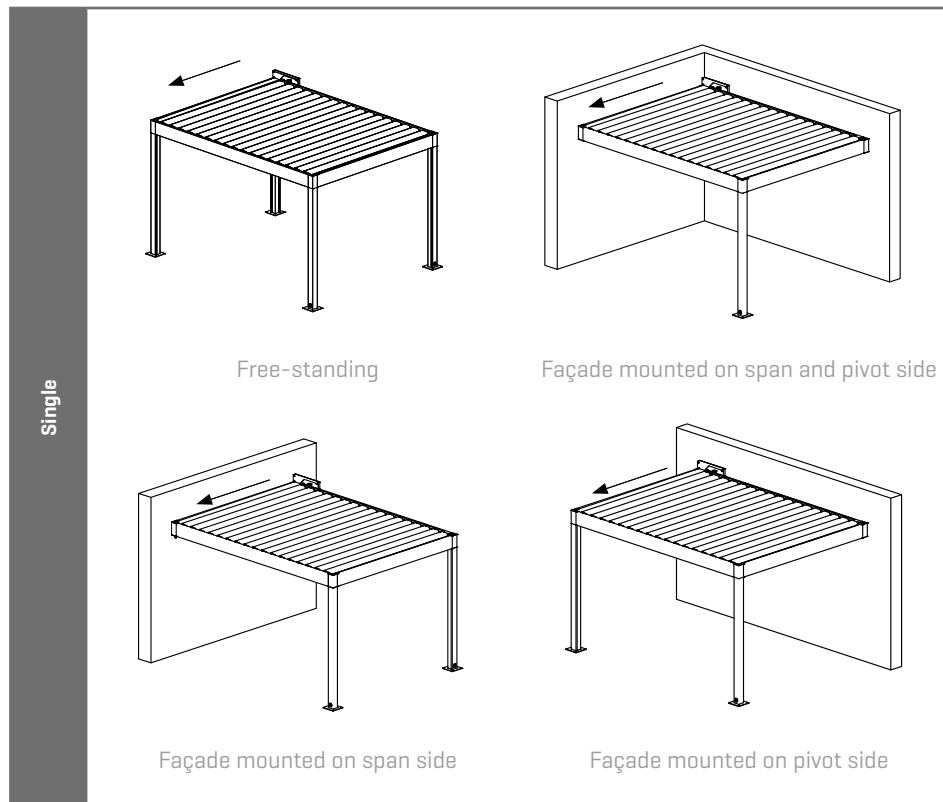
- Environmental statement [recycled aluminum]
- Anchoring requirements
- Water test / sand resistance test / IP test
- Wind [load] testing / verification certificate
- Static load test / calculations
- Gravity-wind load deflection & structural test

Wind guarantee of roof with blades closed	up to 74mph - HC 1
Wind guarantee of roof with blades open	/*
Fixscreen wind guarantee when closed	up to 37mph
Max. wind speed for roof or Fixscreen operation	up to 31mph
Water drainage flow	0.53 GPM [gallons per minute]
Load-bearing capacity	20.48 psf

* We recommend against opening the blades in high winds > 31mph, as there is a risk that the blades may start vibrating and operating the blades is only permitted up to 31mph.

CONFIGURATION

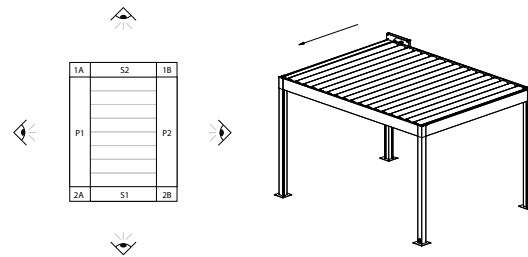
Type



Construction method

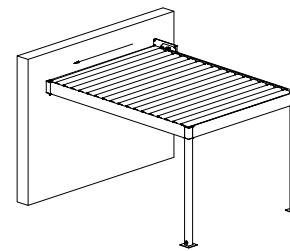
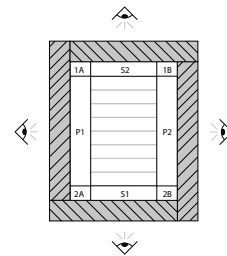
Free-standing

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

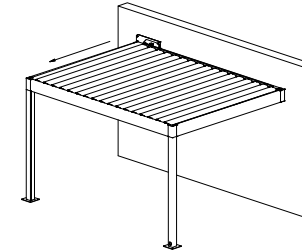


Full-length wall mounted

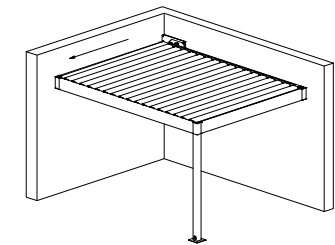
The full length of the side is mounted against a wall.



*full-length wall mounted
[façade mounted]
on span side*



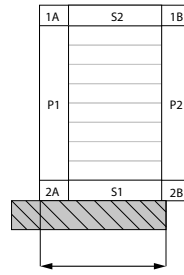
*full-length wall mounted
[façade mounted]
on pivot side*



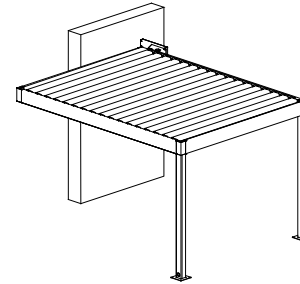
*full-length wall mounted
[façade mounted]
on span and pivot side*

Wall to the left

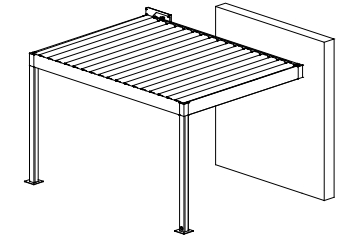
Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the left side of the beam.



wall length



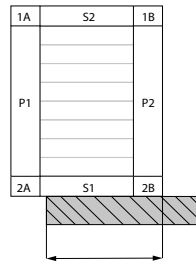
wall to the left [span]



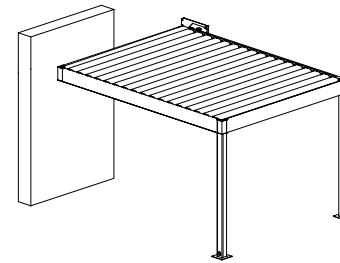
wall to the left [pivot]

Wall to the right

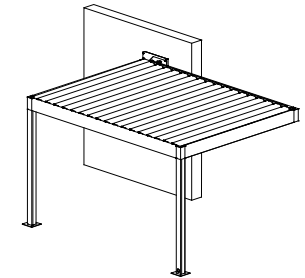
Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the right side of the beam.



wall length



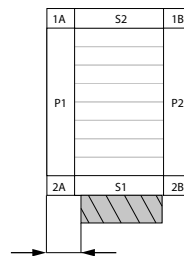
wall to the right [span]



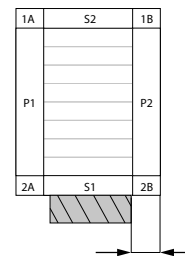
wall to the right [pivot]

Wall in the middle

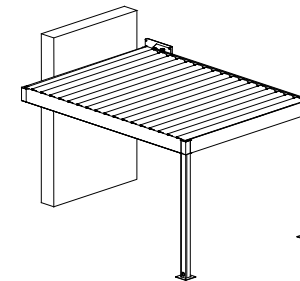
A limited part of the cover is mounted against a wall. There is a free-standing section of the cover both to the left and to the right of the wall.



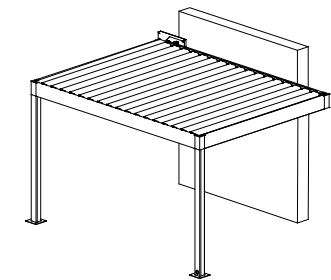
distance on the left to the wall



distance on the right to the wall



wall in the middle [span]



wall in the middle [pivot]

Columns

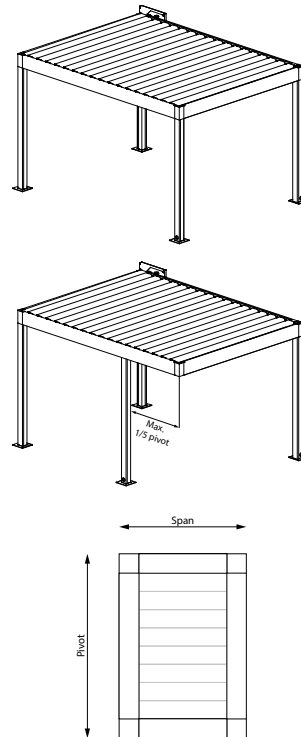
Corner column

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

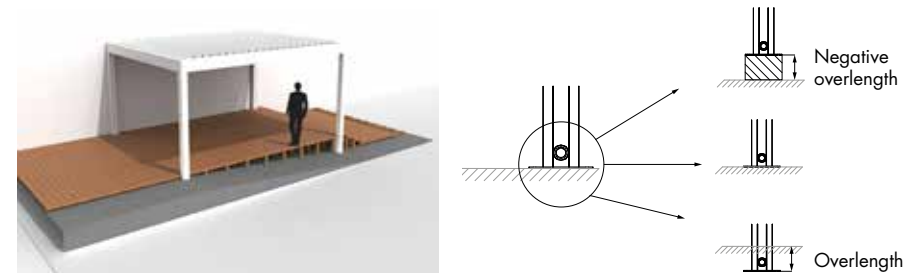
A column can be shifted in the direction of the pivot to a maximum of 1/5 of the pivot length. This guarantees the stability of the structure at all times.

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).



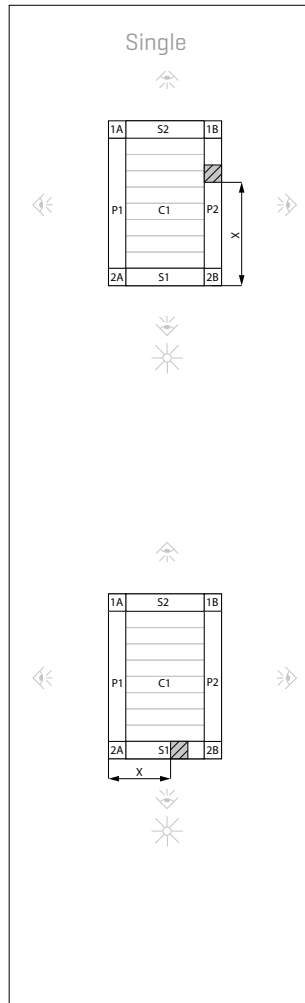
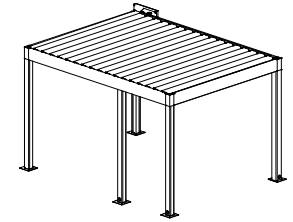
Positive overlength is possible up to the maximum passage height [110"] plus 19" [= 129"].

Negative overlength is possible up to the minimum passage height [= 19"].

Overlength only affects the price if the column length >118".

Additional column

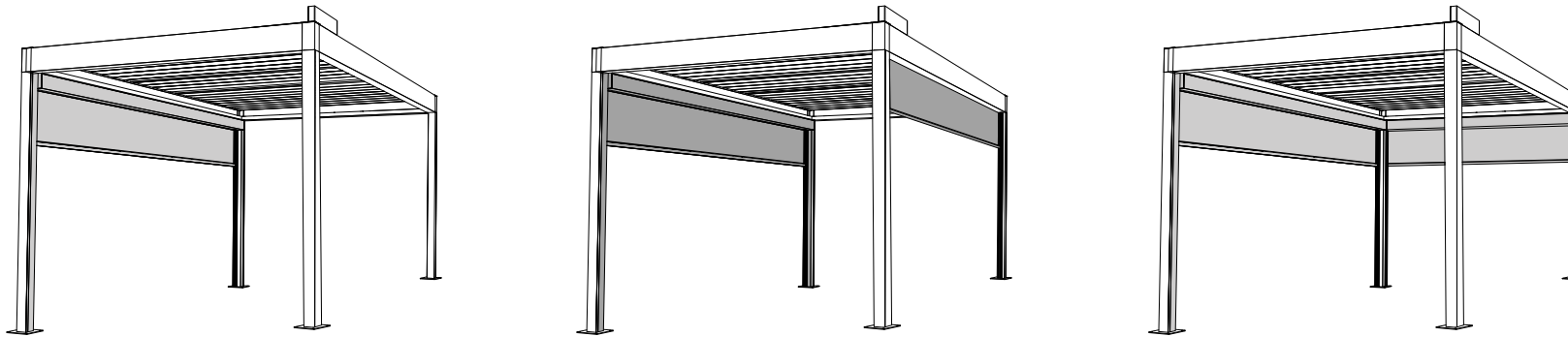
One side of the cover can be split into two sections by adding an additional column. The position of the additional column is always viewed from side P1 [additional column on span] or S1 [additional column on pivot].



X = position of the intermediate column [mm]

Comfort pack

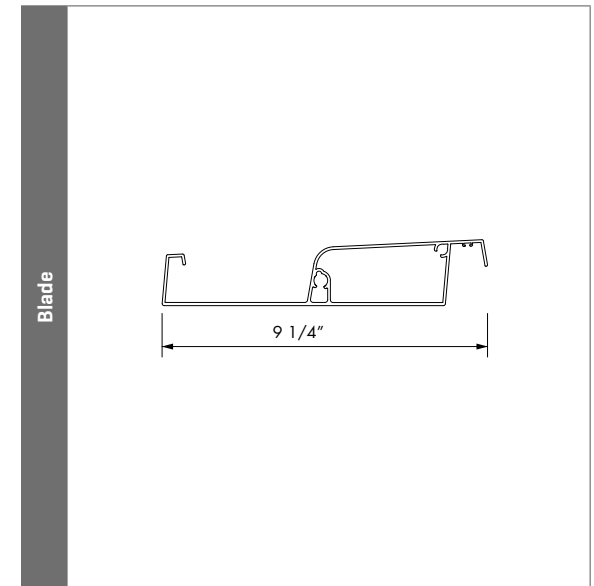
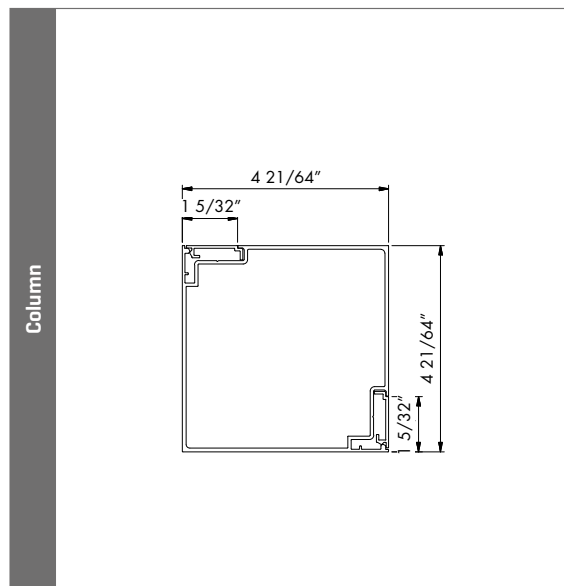
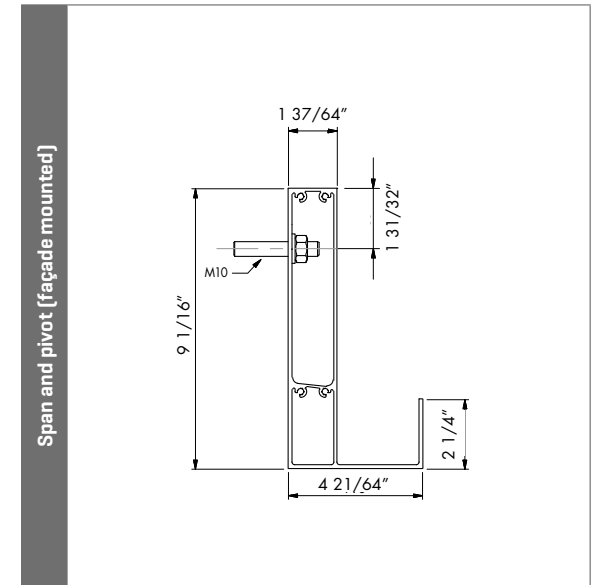
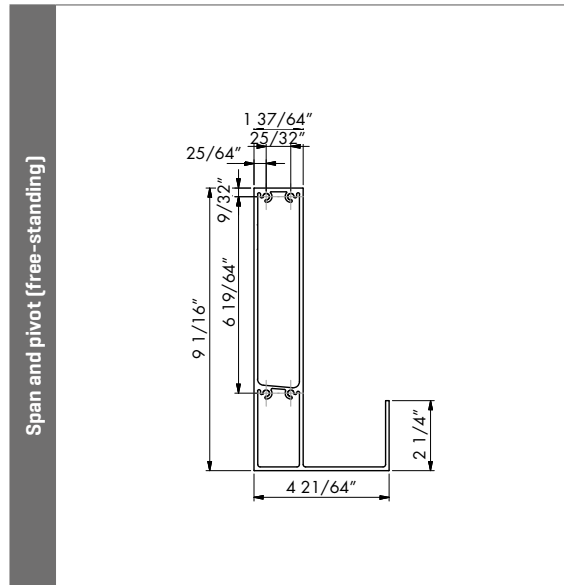
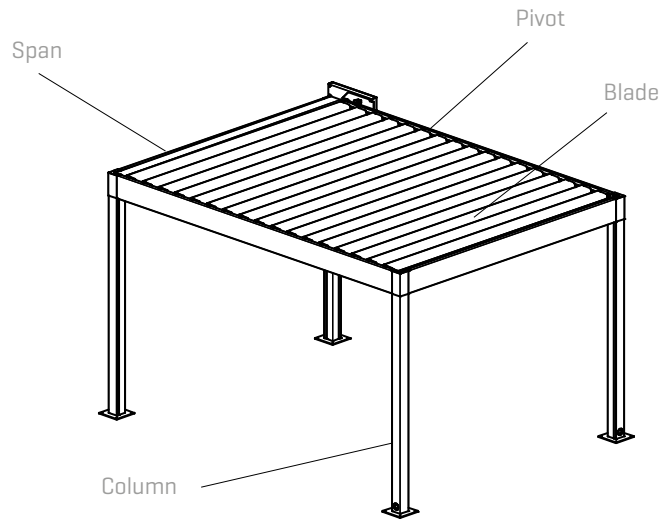
Basic comfort can be obtained by equipping Algarve with **Fixscreens** and **Led lighting** in the blades.
A combination of Fixscreen[s] and two Lineo Led blades is available in a single package with an attractive price.
This comfort pack makes it even easier and more economical to add these commonly requested accessories to Algarve.



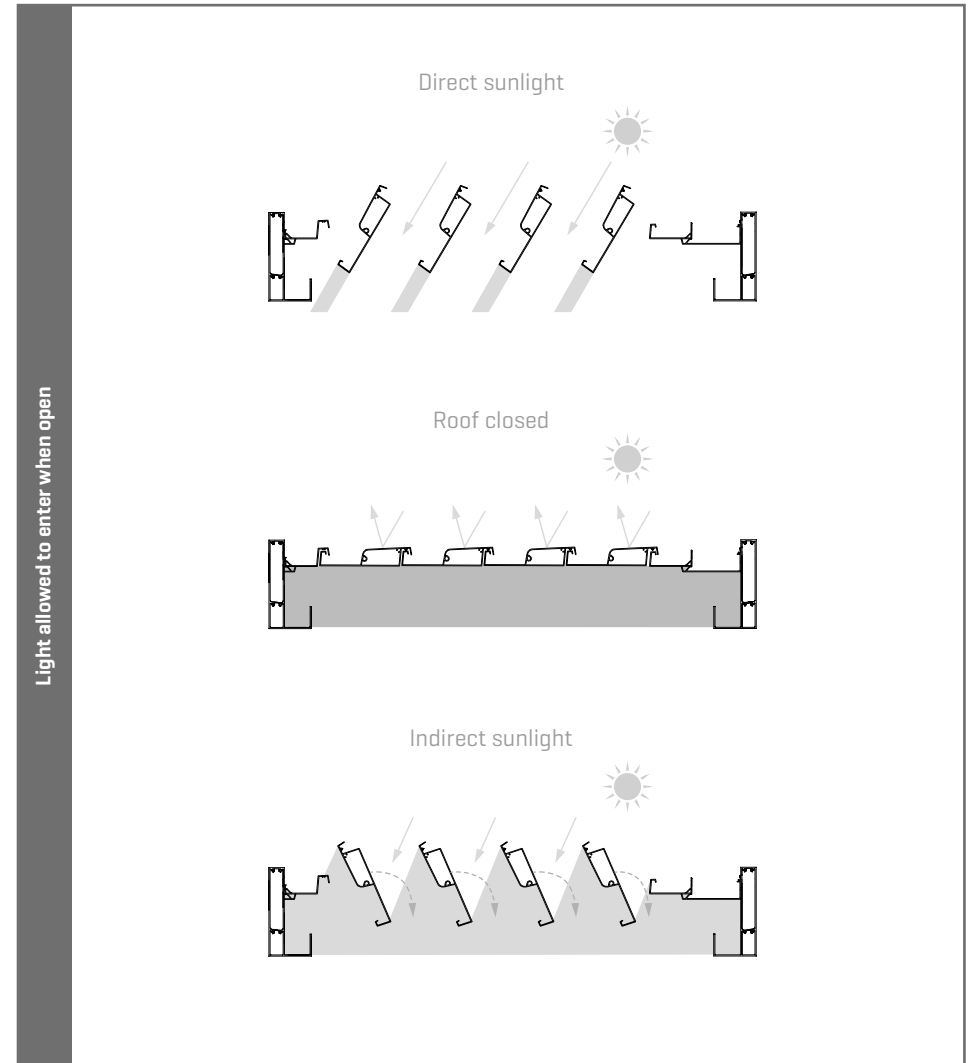
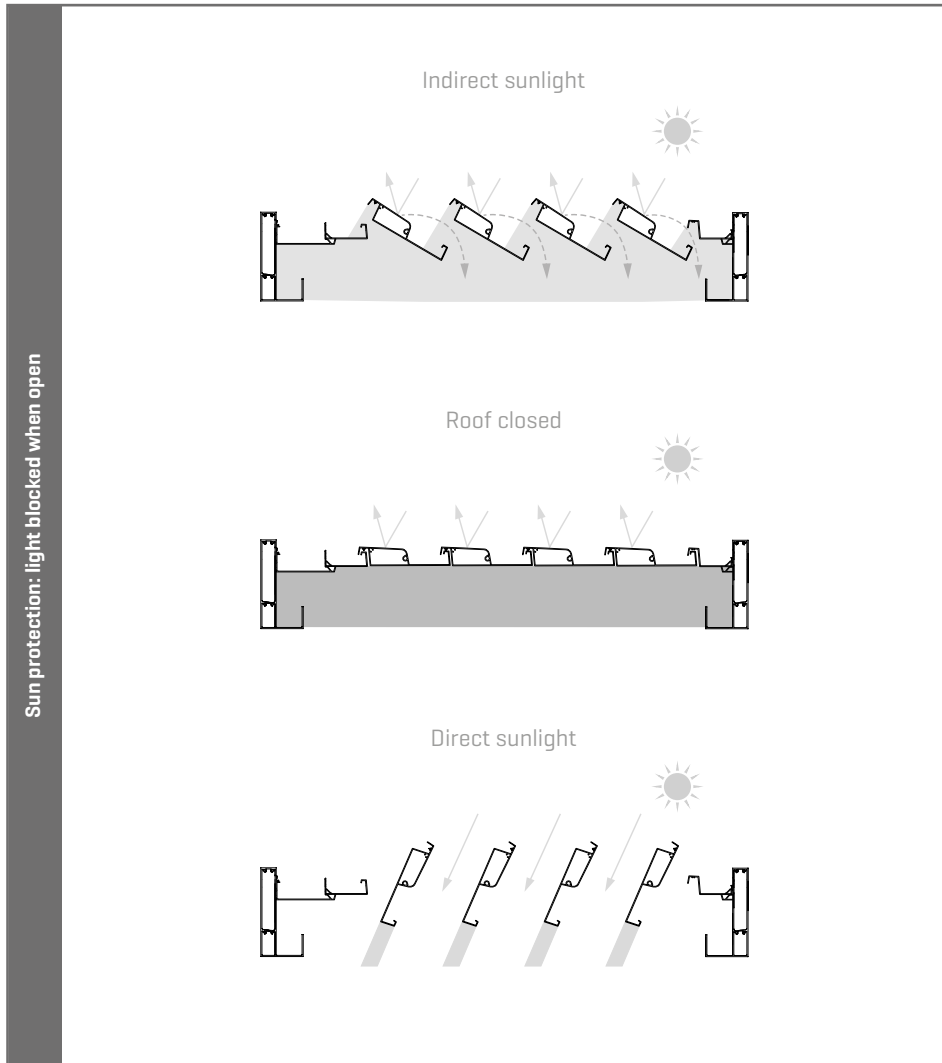
Please note! This comfort pack is only available for:

- Algarve
- Span x pivot dimensions starting from 118" x 118"
- Heights >87"
- Sides without additional columns or shifted columns
- Two Lineo Leds [a third Led cannot be added]
- One or two Fixscreens [extra Fixscreens may be added at the regular price]

Profiles



Blade orientation



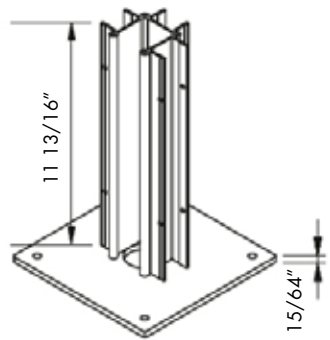
Mounting bases

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: $15/64$ "
- Core length: $11\ 13/16$ "
- Visible base plate sides: $9\ 1/16$ " x $9\ 1/16$ "

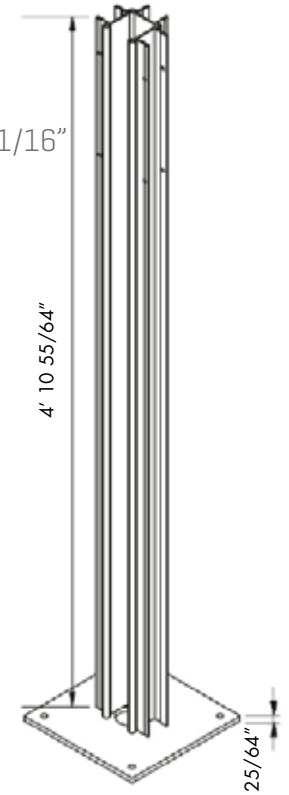


Reinforced mounting bases

At locations with increased wind loads, the cover must be equipped with reinforced mounting bases to guarantee the stability of the structure.

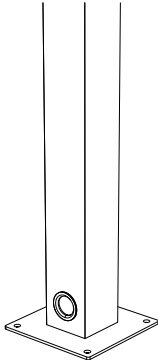
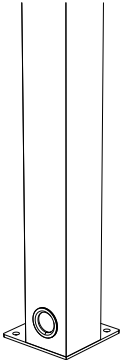

Examples include coastal areas, installation at a height or on a rooftop terrace.

- Base plate thickness: $25/64$ "
- Core length: $4'\ 10\ 55/64$ "
- Visible base plate sides: $9\ 1/16$ " x $9\ 1/16$ "



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 172sqm, 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!

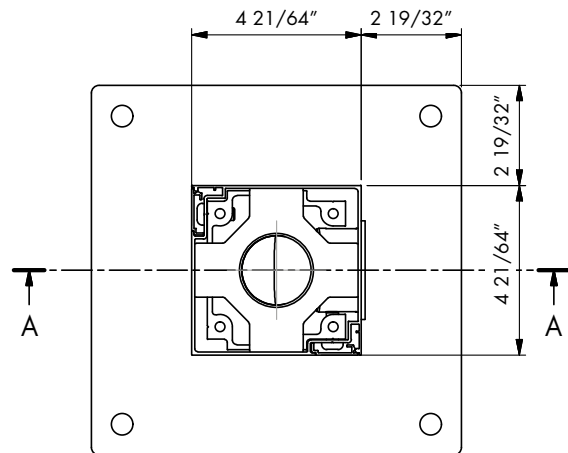
If there is only one water-draining column and the surface area is greater than 172sqm, the drainage capacity of the roof will only be 0.40GPM [gallons per minute].

Three options for the height of the drainpipe:

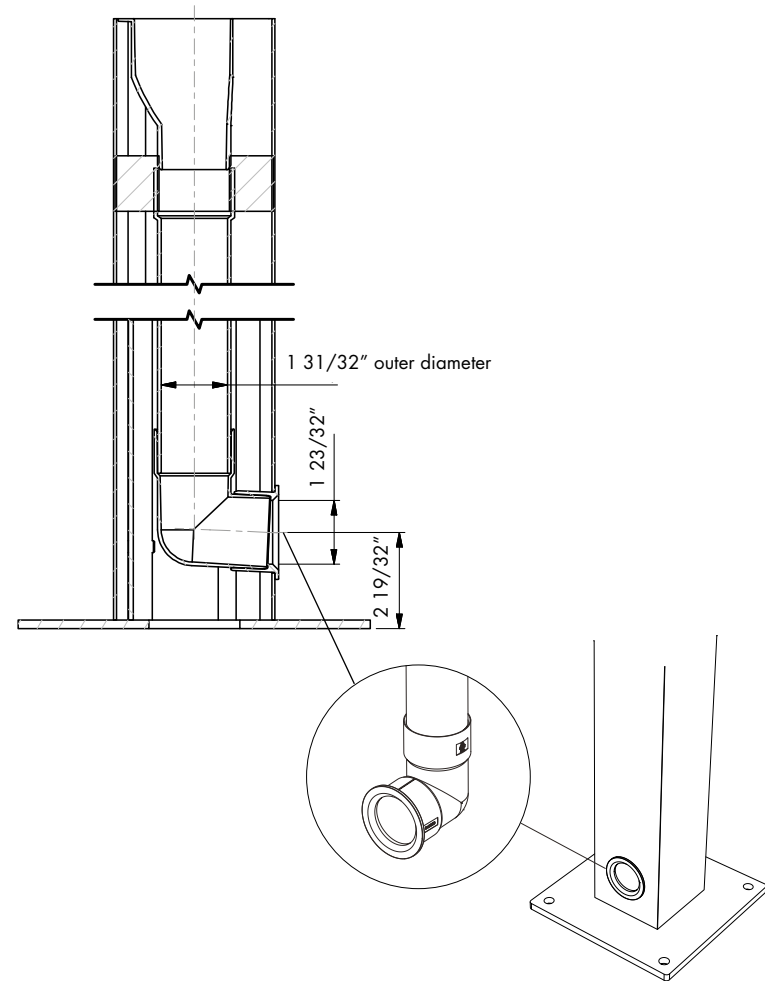
- $2\frac{19}{32}$ " + overlength relative to the bottom side of the base [standard]. In case of overlength, you can choose to have the overlength size included in the standard distance of $2\frac{19}{32}$ ". For example: an overlength of $3\frac{15}{16}$ " means water drainage at $6\frac{17}{32}$ " relative to the bottom side of the mounting base.
- $2\frac{19}{32}$ " relative to the bottom side of the base regardless of whether or not overlength is applicable.
- Variable height
Minimum distance above ground level = $2\frac{19}{32}$ ".
Maximum distance = passage height - $1' 4\frac{11}{32}$ ".
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
$2\frac{19}{32}$ " + overlength relative to bottom side of base [standard]			
$2\frac{19}{32}$ " relative to bottom side of base			
Variable height (mm)			

Drainage - span or pivot side



PVC drainage pipe



OTHER TOOLS

Want to find out more? Visit the Professional Portal on our website (www.renson.eu) to access the following tools.

- Technical drawings
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