

CAMARGUE®

PRODUCT INFORMATION



TABLE OF CONTENTS

Description	3
Benefits	4
Design	4
Quality	5
Customisation	6
Comfort	6
Technical details	7
Standard configuration	8
Camargue > 244"	9
Camargue weight	10
Wind and snow load	11
Accessoires	13
Certificates & testing	15
Configuration	16
Type	16
Construction method	20
Columns	22
Comfort Pack	24
Profiles	25
Waterproof wall mounting	26
Blade orientation	27
Mounting bases	28
Water drainage	30
Other tools	31
Camargue®	

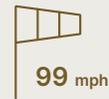


DESCRIPTION



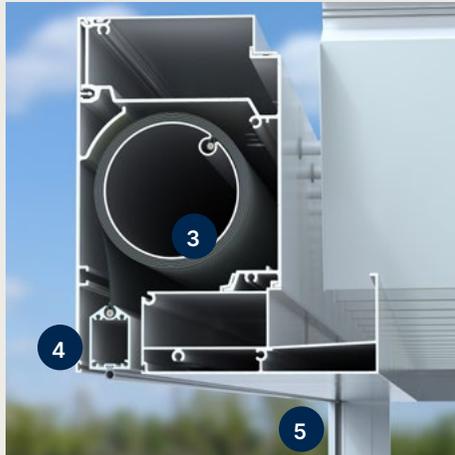
Modular aluminum patio cover with motorized rotating louvers and integrated side elements.

- Can be controlled using RTS
- Fully integrated side elements and accessories within the frame structure
- Modular design allows joining on both span and pivot sides, even post-installation



BENEFITS

Design



1 MODULAR DESIGN

Expandable to include multiple roof sections, even after initial installation. The structure can be endlessly expanded on both the span and pivot side to cover large surface areas.

2 INVISIBLE SCREWS

Create an elegant and sleek structure

3 THE FABRIC ROLLER TUBE IS FULLY INTEGRATED INTO THE STRUCTURE

INNOVATION

No visible screen head box disrupting the aesthetic

4 THE BOTTOM BAR DISAPPEARS INTO THE HEAD BOX

5 FIXSCREEN SIDE GUIDING CHANNELS ARE INTEGRATED INTO THE COLUMNS

INNOVATION

Full aesthetic integration with the Camargue structure



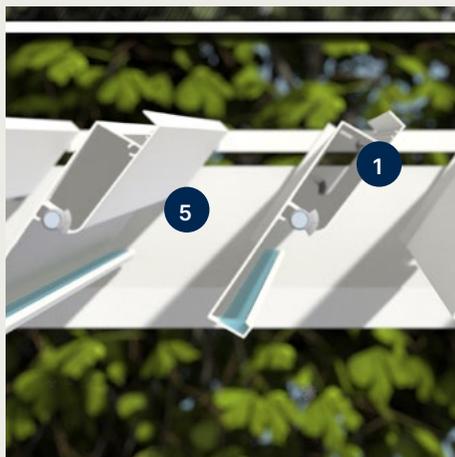
6 MINIMAL GAPS BETWEEN THE BLADES

Lend a stunning and sleek finish

7 INTEGRATED MOTOR

Forms a stunning minimalist design, without a motor disrupting the aesthetic.

Quality



1 DOUBLE-WALLED BLADES FOR EXTRA STRENGTH

Load-bearing capacity: 200 kg/m²

2 F2 TECHNOLOGY

INNOVATION

With a span system that ensures the rigidity of its support structure, Camargue remains stable even in strong winds (pivot $\geq 177^\circ$)

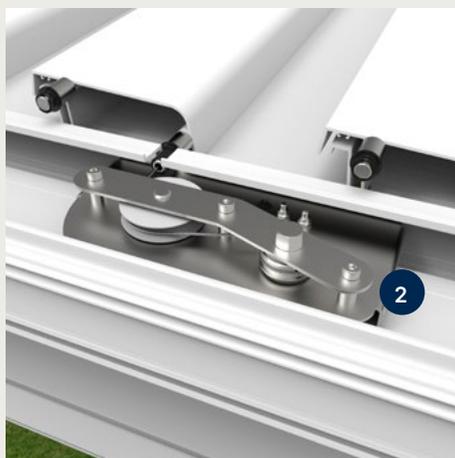
3 UNIQUE END CAPS

Provide a solid corner connection and perfect water drainage

4 NO HOLES IN THE WATER CHANNEL

An additional chamber means no holes need to be drilled in the water channel when affixing side infills

5 WELDED ALUMINIUM DRIPS, POWDER-COATED TO MATCH THE BLADE COLOUR



6 INTEGRATED WATER DRAINAGE WITH LARGE FLOW

Through the wide blade gutters, water flows towards gutters with diffusers to prevent splashing before being drained via PVC drainpipes integrated into the columns.

7 RIGID STRUCTURE

Span system lends rigidity to the support structure

Customisation



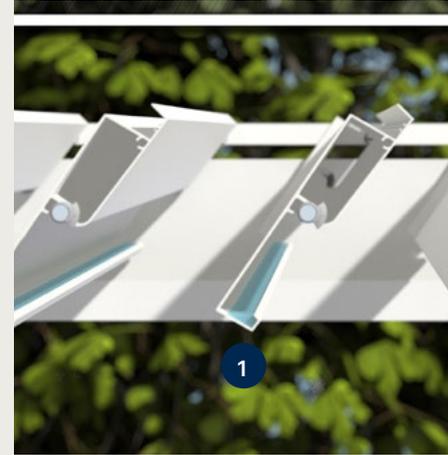
1 WIDEST RANGE OF SIDE INFILLS

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 the patio and furniture from getting wet when the blades are opened after a rain shower

2 SILENT AND SOFT CLOSING MECHANISM

By adding a brush to the blades

3 QUICK INSTALLATION

Thanks to maximum pre-assembly and the modular structure of the various junctions

4 MAXIMUM NATURAL LIGHT

Blades open up to 150°

TECHNICAL DETAILS



Dimensions	
Span	Min. 71" * - max. 177"
Pivot	Min. 71" * - max. 244"/277" **
Passage height	Min. 17" - max. 110"
Total height with blades closed	Passage height + 10 15/64"
Total height with blades 90° open	Passage height + 1' 1 31/32"
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 < 16 m ²	1
Minimum number of water drainage points > 16 m ²	2***
Operating methods	
Somfy RTS	✓
Home automation ready	✓

* Smaller dimensions (span min. 500 mm and pivot min. 1256 mm) possible by special request to pre-sales - drawing office

** Pivot > 6200 mm possible subject to a number of conditions. See the "Camargue > 6200 mm".

*** 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	3 Ampère
Protection rating	IP 66 Dynamic
Maximum running time with continuous use	Approx. 2 minutes
Automatic	16 A curve C



Standard configuration

Structure

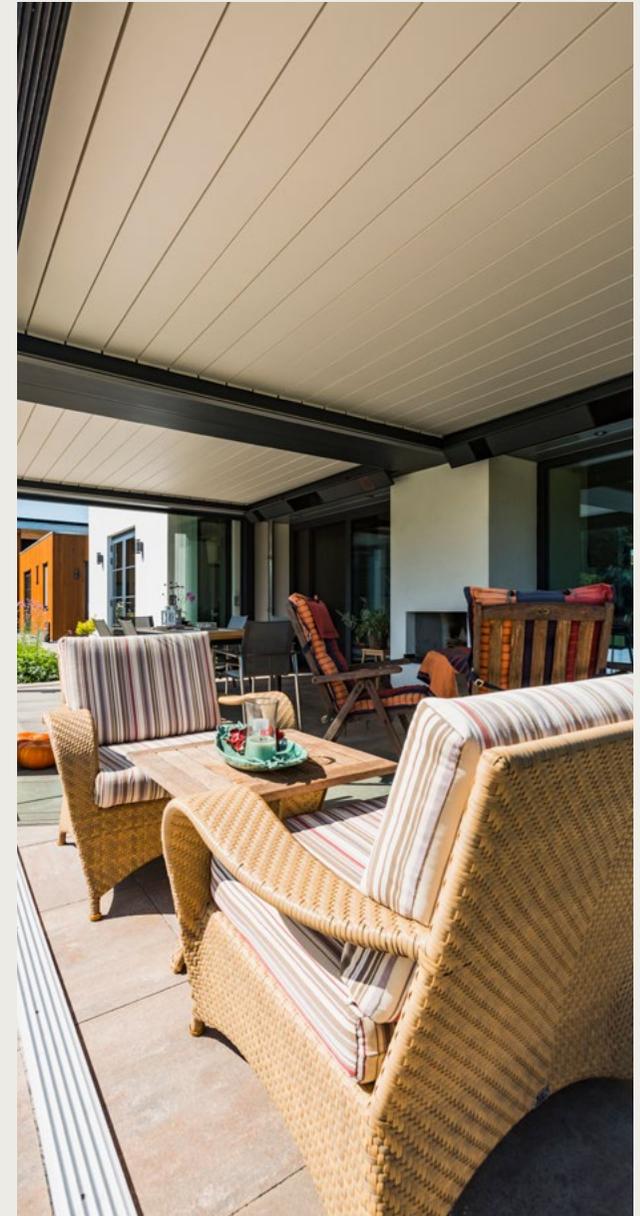
- Free-standing or façade mounted (against whole wall or partial connection)
- Standard mounting bases (visible, invisible or cast)
- Custom span, pivot and passage height with mm precision
- Motor drive with choice of motor position
- Blade orientation (sun protection or maximum sunlight)

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

Camargue > 244"

- Maximum pivot dimension: 277"
- Maximum span dimension: 157" (once pivot length is greater than 244")
- Number of columns per free-standing pivot side: minimum three.
- Maximum free space between two columns: 232"
- Shifted column: NOT possible
- Join on the pivot side to obtain a longer span: NOT possible
- Join on the span side to obtain a longer pivot: IS possible
- Minimum number of water drainage points: three, of which two on the lowest side
- Heat & Sound Beam: NOT possible on the pivot side
- Maximum number of Led blades: 3
- Maximum number of glass blades: 5
- Maximum number of Lineo Fix / Heat blades: 4



Camargue weight

		Total weight (kg) of entire Camargue															
		Span															
Pivot	dimen- sions in inches	# blades	78	86	94	102	110	118	125	133	141	149	157	165	173	177	
		108	10	541	565	587	611	635	660	684	706	730	754	779	803	825	838
		117	11	563	587	613	638	662	688	713	739	763	788	814	838	865	876
		125	12	585	611	638	664	691	717	743	770	796	823	849	876	902	915
		134	13	605	633	662	688	717	746	772	801	829	856	885	913	940	955
		142	14	627	657	686	715	743	774	803	832	863	891	920	948	979	993
		150	15	649	680	710	741	772	803	834	865	893	924	955	986	1017	1032
		159	16	671	704	735	768	799	832	863	896	926	960	990	1023	1054	1072
		167	17	693	726	759	792	827	860	893	926	960	993	1026	1059	1094	1109
		176	18	715	750	783	818	854	889	922	957	993	1028	1061	1096	1131	1149
		184	19	737	772	810	845	880	918	953	988	1026	1061	1098	1134	1169	1187
		193	20	759	796	834	871	909	946	984	1021	1059	1096	1134	1171	1209	1226
		201	21	781	818	858	896	935	975	1012	1052	1090	1129	1169	1206	1246	1266
		210	22	801	843	882	922	962	1004	1043	1083	1123	1165	1204	1244	1284	1303
		218	23	823	865	907	948	990	1032	1072	1114	1156	1198	1239	1281	1323	1343
		227	24	845	889	931	975	1017	1061	1103	1145	1189	1231	1275	1317	1361	1383
		235	25	867	911	955	999	1043	1090	1134	1178	1222	1266	1310	1354	1398	1420
	244	26	889	935	979	1026	1072	1116	1162	1209	1255	1299	1345	1392	1438	1460	
	252	27	911	957	1004	1052	1098	1145	1193	1239	1286	1334	1381				
	261	28	933	982	1030	1079	1127	1173	1222	1270	1319	1367	1416				
	269	29	955	1004	1054	1103	1154	1202	1253	1303	1352	1403	1451				
	277	30	975	1028	1079	1129	1180	1231	1284	1334	1385	1436	1486				

The table above shows the weight of the frame; the weight of the columns and mounting bases is not included. Each column in the configuration adds an extra weight of 5.7 kg/column metre.

Standard mounting base weight

- invisible mounting base: 4.52lbs
- cast mounting base: 7.92lbs
- visible mounting base: 9.81lbs
- visible (corner): 6.80lbs

Reinforced mounting base weight

- invisible mounting base: 15.97lbs
- visible mounting base: 24.88lbs
- visible (corner): 19.87lbs

Extra reinforced mounting base weight

- invisible mounting base: 14.34 lbs
- visible mounting base: 21.90 lbs
- visible (corner): 17.62 lbs

What is the max. wind and snow load for a Camargue?

Each location has specific requirements in terms of wind and snow load. These can be calculated using the steps below. The output will immediately show the maximum permitted Camargue dimensions for that specific location.

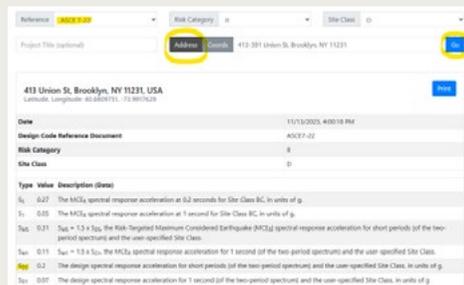
This calculation is only valid for a ground-level installation of a four-column freestanding Renson Camargue. Single roof version with only Fixscreen infills. For installations on a building roof or on other elevated locations it is recommend that a site specific, engineering analysis be performed by a Licensed Structural Engineer.

1. Design spectral Response Acceleration (SDS)

Check first the Design spectral Response Acceleration (SDS) of the specific location of the Camargue. Go to: seismicMaps.org
Choose "ASCE 7-22" as Reference. You can ignore the Risk Category and Site Class.

Enter the address and click "GO".

The SDS value will be reported in the table that pop up.



If SDS < 1.6: Invisible and visible mounting base is possible

If SDS > 1.6 and ≤ 2.5: only visible mounting base is possible

Sites where an active fault could cause the ground to rupture at the surface are excluded.

Sites defined as Site Class F in ASCE 7-22, chapter 20 (poor or liquefiable soil) require a site response analysis to be performed by a Geotechnical Engineer to determine the SDS value.

2. Max allowable Passage height

If passage height is less than 2,8 m (110 inches), both visible and invisible mounting bases are possible.
If passage height is more than 2,8m (110 inches) and less than 3m (118 inches), only visible mounting bases are possible. Passage height more than 3m (118 inches) is not possible

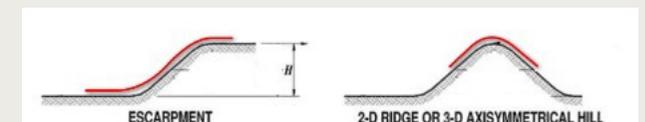
3. Define the terrain type

Look up the design wind speed based and consider whether the site is urban, rural or coastal. Also consider whether the site is flat, or whether the Camargue is being installed near the top/crest of a hill, ridge, or escarpment:

- **Urban (Exposure category B)**
Any site surrounded by houses, buildings, or forest on all sides, with no open spaces (fields) within 1,500 ft in any direction
- **Coastal (Exposure category D)**
Any site within 600 feet of the coastline of the ocean or large lakes (at least 1 mile wide)
- **Rural (Exposure category C)**
Everything else not mentioned above

A hill or escarpment would be any nearby terrain feature taller than the pergola itself. For Escarpments this affects structures at the base, on the slope, and at the top. For hill and ridges this only affects structures at the top half. See below in red the affected zones

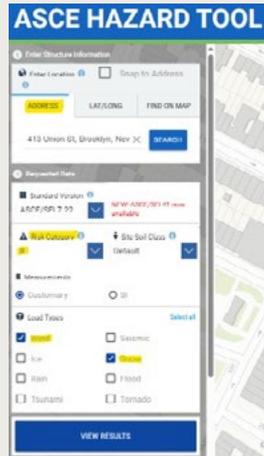
Sites with abrupt changes in topology such as isolated hills, ridges, escarpments are excluded.



4. Define the Wind pressure based on Wind Speed and Terrain Type

Go to: ascehazardtool.org
Enter your location. Set the version to be 7-22 and the Risk Category to be II as shown below.

Select Wind + Snow



In our example the 3 Second Gust Wind Speed = 116 mph
Terrain type in this case is Flat Terrain – Urban (Exposure B)
We always take the higher value. 116 mph is not in the table, so we select 130 mph. This results in a Wind Pressure of 25 psf

This table is based on ASCE 7-22		3 Second Gust Wind Speed (mph)				
Wind Exposure		101	130	154	175	193
Flat Terrain	Urban (Exposure B)					
	Rural (Exposure C)					
	Coastal (Exposure D)					
Hills/Ridges/ Escarpments	Urban (Exposure B)				101	112
	Rural (Exposure C)					92
	Coastal (Exposure D)					
Wind Pressure (psf)		15	25	35	45	55

5. Define the allowable Snow loads

Using the wind pressure determined above (25 psf), look up an allowable ground snow load from the table below. Look up the ground snow load and ensure that it does not exceed the allowable value below for the desired Camargue size.

The snow loads for our example is 46 lb/ft² = 46 psf (see results ASCE Hazard tool above)

In the table below we check the Wind Pressure column of 25 psf.

The maximum permitted Camargue size in this case is 6 m Pivot x 4 m Span, because bigger dimensions have snow load values which are lower than 46 psf.

Allowable Ground Snow Load (psf)						
Camargue Dimensions (m)		Wind Pressure (psf)				
Pivot	Span	15	25	35	45	55
4	4	102	99	94	89	83
5	3	111	106	101	96	Not Allowed
5	3.5	93	88	83	79	
5	4	80	75	70	65	
5	5	61	56	51	46	
6	4	63	55	45	Not Allowed	
6.2	4.5	50	42	33		
7	4	40	32	24		

Sites where ground snow load exceeds 22 psf and where the Camargue is surrounded by structures (tall conifer trees) that can prevent snow from blowing off the roof are excluded

6. Anchorage

For visible mounting bases:

Use for each mounting base 4x 5/8" stainless steel threaded rod anchors using Hilti HIT-RE 500 v3 epoxy
The concrete slab must be at least 9" thick. The center of the column may not be closer than 16" from any concrete edge. The anchors must have a minimum 7,5" embedment

For invisible mounting bases:

Use for each mounting base 4x 5/8" stainless steel threaded rod anchors using Hilti HIT-RE 500 v3 epoxy
The concrete slab must be at least 12" thick. The center of the column may not be closer than 18" from any concrete edge. The anchors must have a minimum 10,5" embedment

ACCESSOIRES



Camargue® - 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	-	-

* 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
- EUROCODE CALCULATIONS / abZ*

Certificates

- Miami Dade – NOA
- 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 safety resistance water pocket
- Declaration of electrical safety
- Declaration of UV resistance / gtot + others
- Declaration of asbestos

Test reports – calculations

- Water testing / sand resistance test / IP test
- Cycle testing
- Wind (load) testing / verification certificate
- Static load test / calculation
- Environmental statement (recycled aluminium)
- Anchoring requirements
- Gravity-wind load deflection & structural test
- Wind resistance, air flow of the blades

Wind guarantee of roof with blades closed	up to 99mph - HC 2 (Hurricane Category 2)
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	0.66GPM (gallons per minute)
Load-bearing capacity	40.96psf

* abZ: for Linarte infill

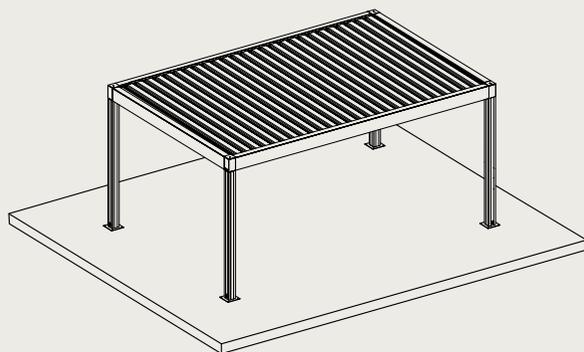
** We recommend against opening the blades in high winds > 31mph, as there is a risk that the blades may start vibrating and operating the blades is only permitted up to 31mph.



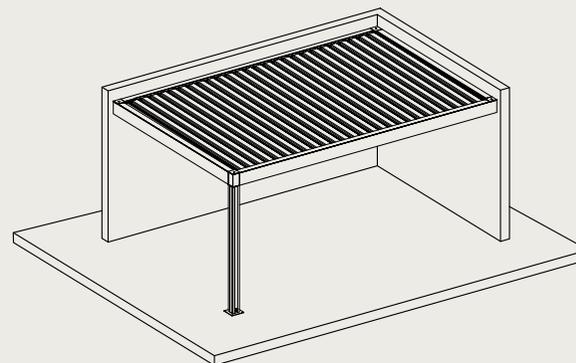
CONFIGURATION

Type

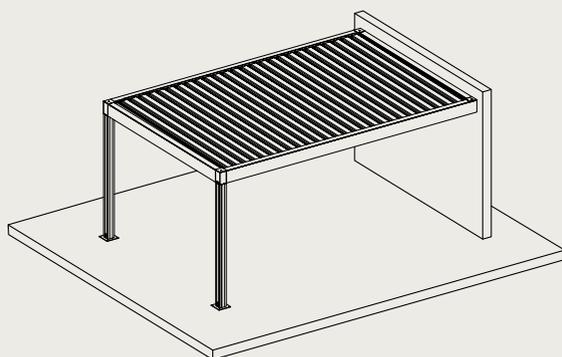
Single



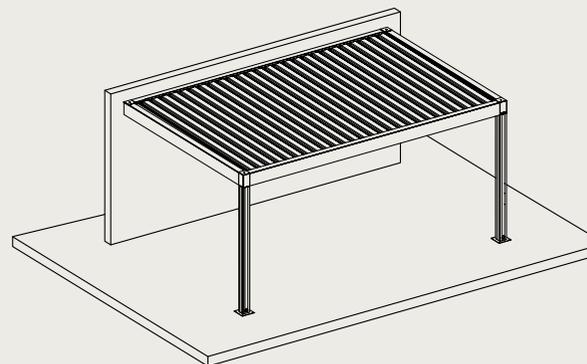
Free-standing



Façade-mounted on span and pivot side



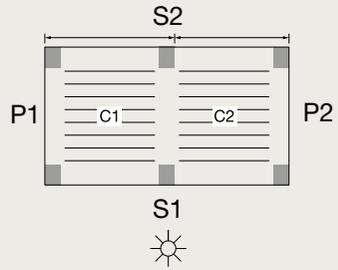
Façade-mounted on span side



Façade-mounted on pivot side

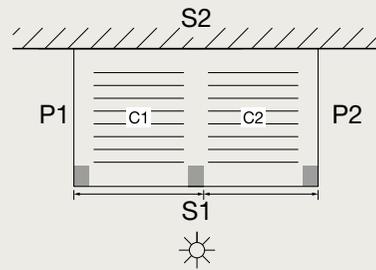
Two sections joined on pivot side

Free-standing



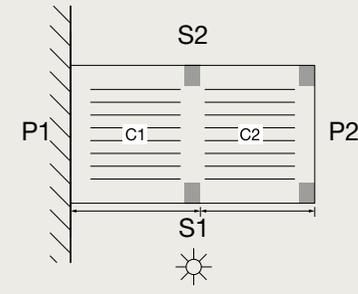
Two roof sections + six columns

Façade-mounted span



Two roof sections + three columns

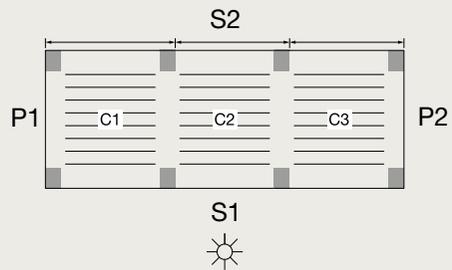
Façade-mounted pivot



Two roof sections + four columns

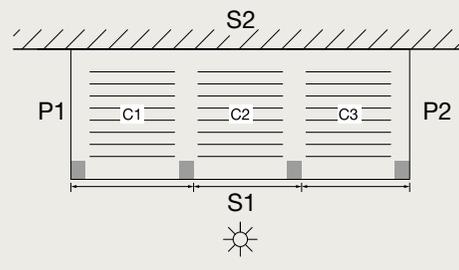
Three sections joined on pivot side

Free-standing



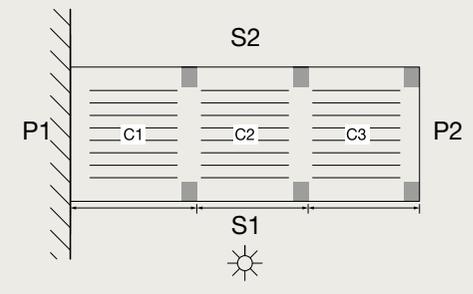
Three roof sections + eight columns

Façade-mounted span



Three roof sections + four columns

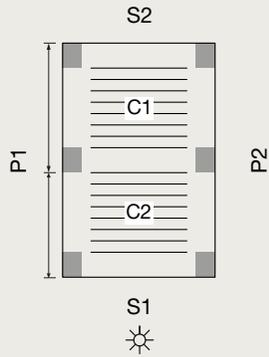
Façade-mounted pivot



Three roof sections + six columns

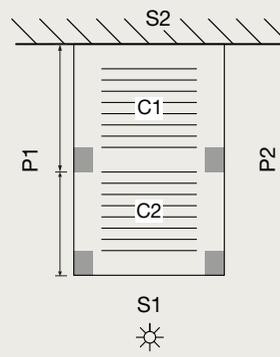
Two sections joined on span side

Free-standing



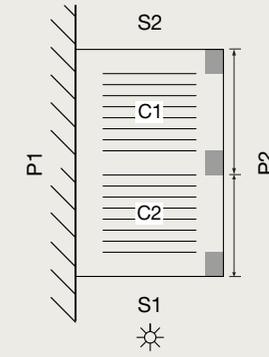
Two roof sections + six columns

Façade-mounted span



Two roof sections + four columns

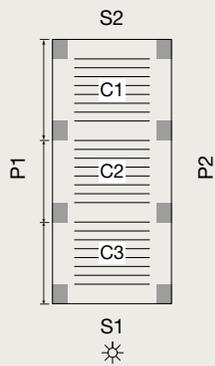
Façade-mounted pivot



Two roof sections + three columns

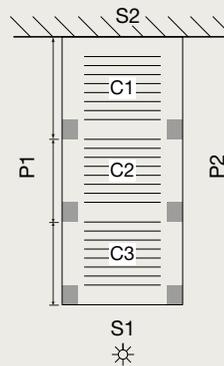
Three sections joined on span side

Free-standing



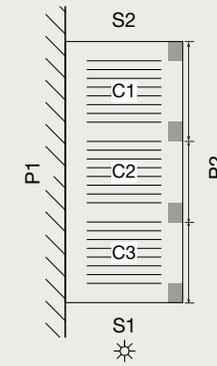
Three roof sections + eight columns

Façade-mounted span



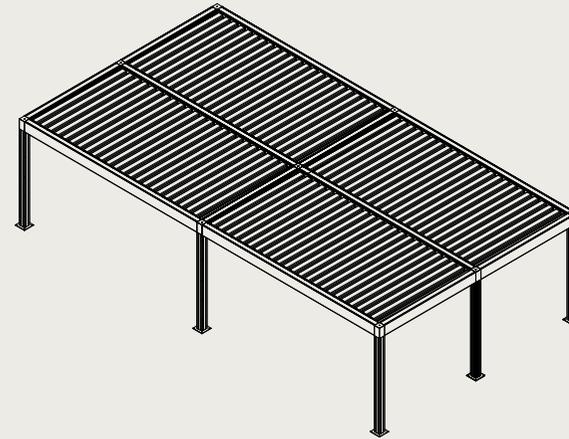
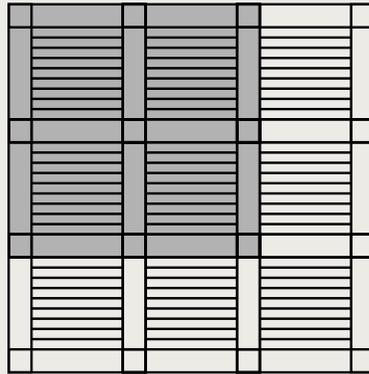
Three roof sections + six columns

Façade-mounted pivot



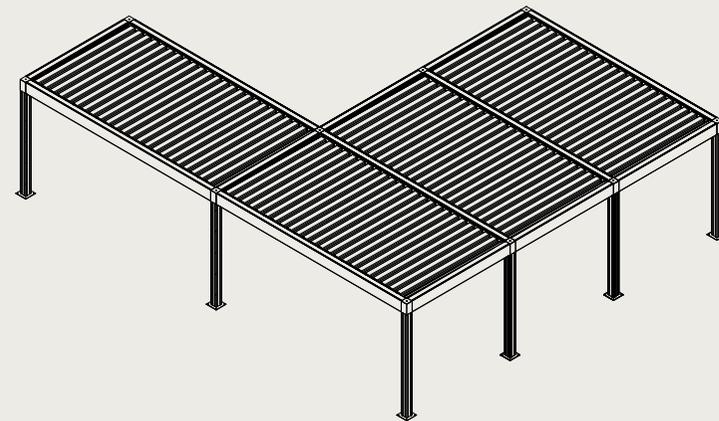
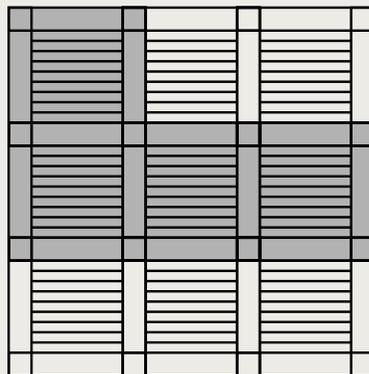
Three roof sections + four columns

Matrix shape



only possible via presales

L shape

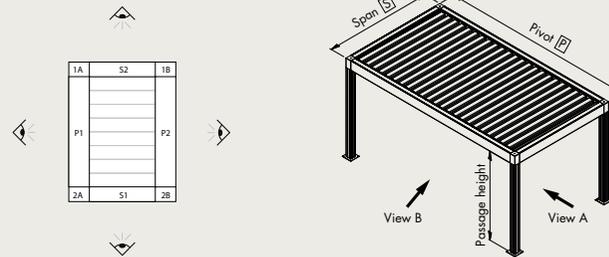


only possible via presales

Construction method

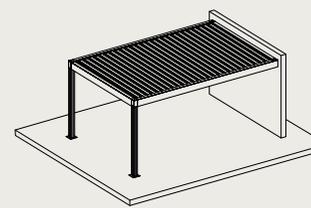
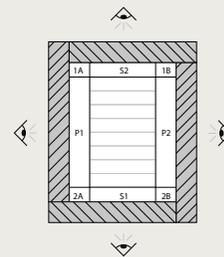
Free-standing

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

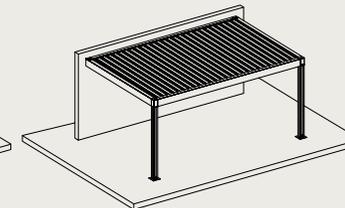


Full-length wall

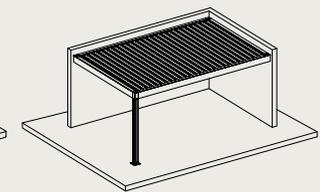
The full length of the side is mounted against a wall.



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



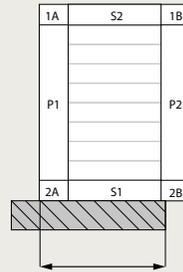
*full-length wall mounted
(façade mounted) on pivot side*



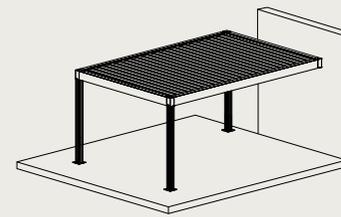
*full-length wall mounted
(façade mounted) on span and
pivot side*

Wall left

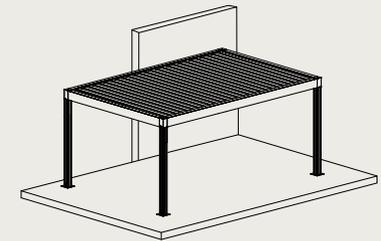
Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the left side of the beam.



wall length



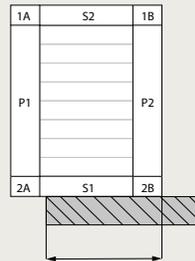
wall to the left (span)



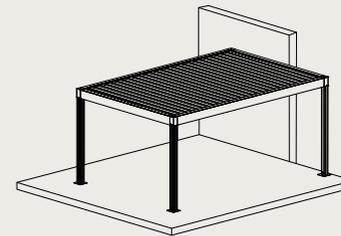
wall to the left (pivot)

Wall right

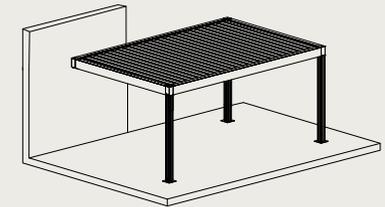
Only part of the side is mounted against a wall. Viewed from outside of the cover, the wall is located on the right side of the beam.



wall length



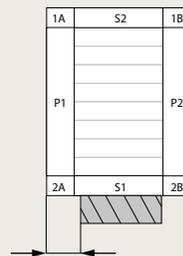
wall to the right (span)



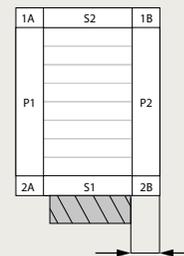
wall to the right (pivot)

Wall in the middle

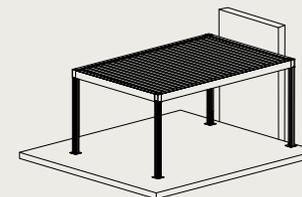
A limited part of the cover is mounted against a wall. There is a free-standing section of the cover both to the left and to the right of the wall.



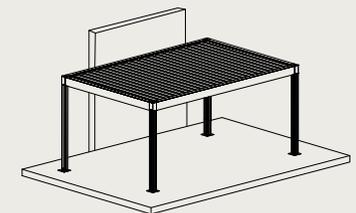
distance on the left to the wall



distance on the right to the wall



wall in the middle (span)



wall in the middle (pivot)

Columns

Corner column

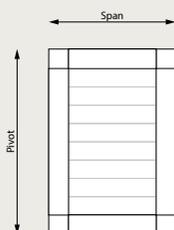
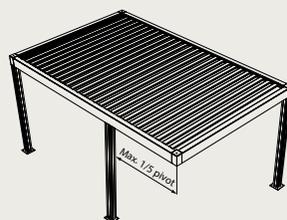
A column is provided for each corner as standard. When installing against a wall that guarantees sufficient stability, the column on this side may be omitted.



Shifted column

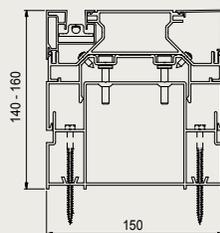
A column may be shifted in the direction of the pivot to a maximum of 1/5 of the pivot length. This guarantees the stability of the construction at all times.

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



Adjustable wall column

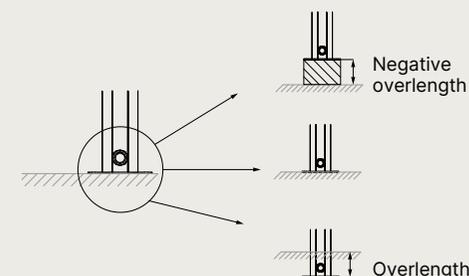
When installing Fixscreens at a right angle to a façade, a column must be fitted. Given the fact that outside walls are not always built perfectly plumb, a visually disruptive opening may form between the wall and the column. An adjustable wall column guarantees a flush connection and compensates for an angle of 25/64" to the front or 25/64" to the rear.



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).



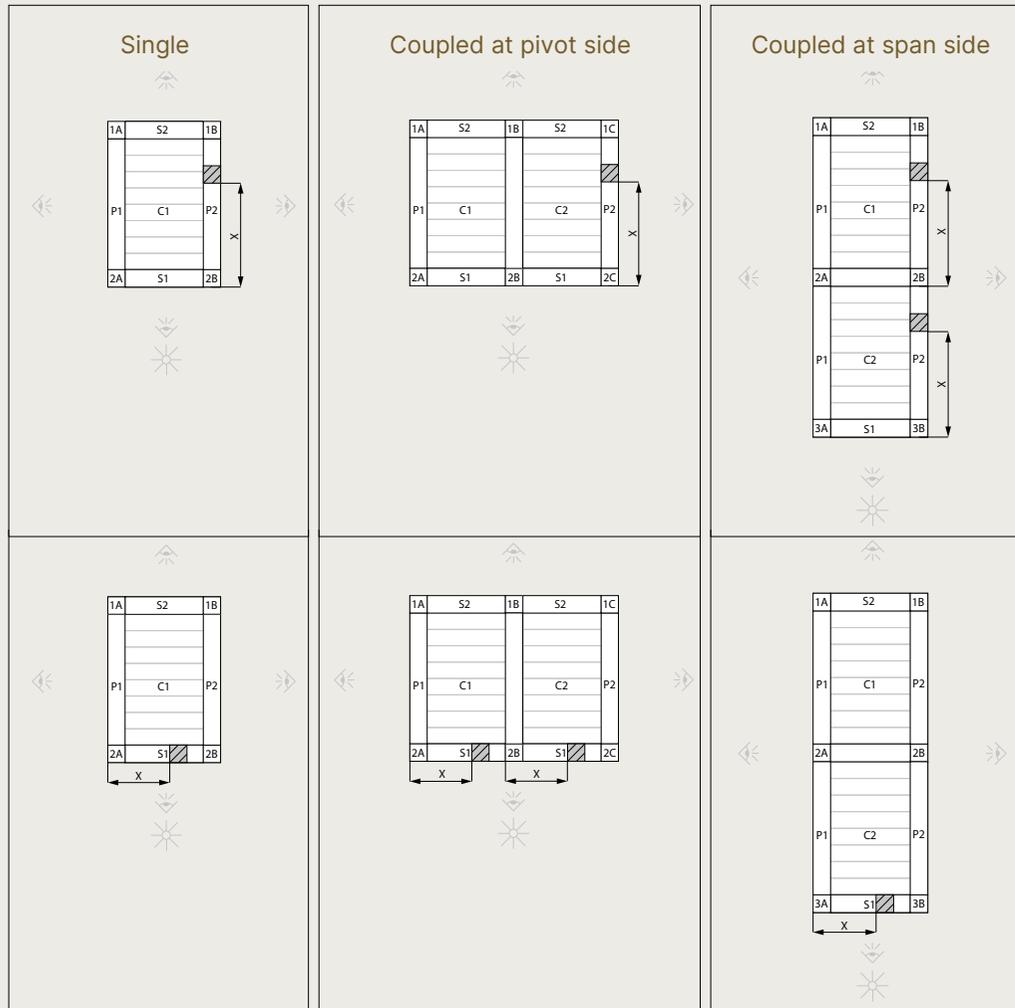
Positive overlength is possible up to the maximum passage height (110") plus 19" (129").

Negative overlength is possible up to the minimum passage height (= 19").

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

Additional column

By adding an additional column, one side of the covering is divided into two parts. 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 is obtained by equipping Camargue with Fix-screens and Led lighting in the blades.

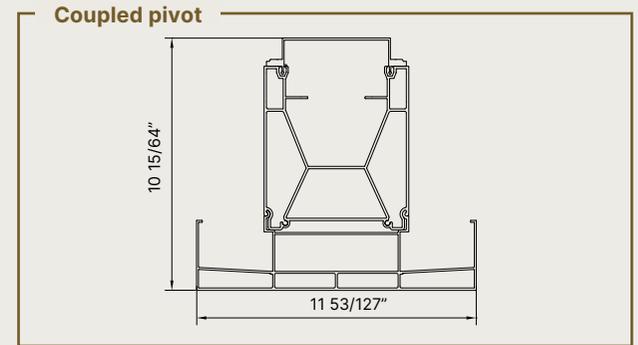
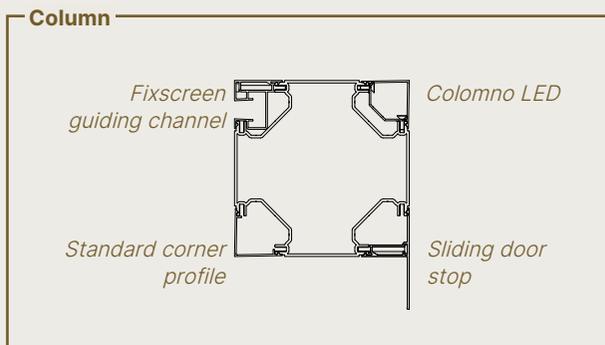
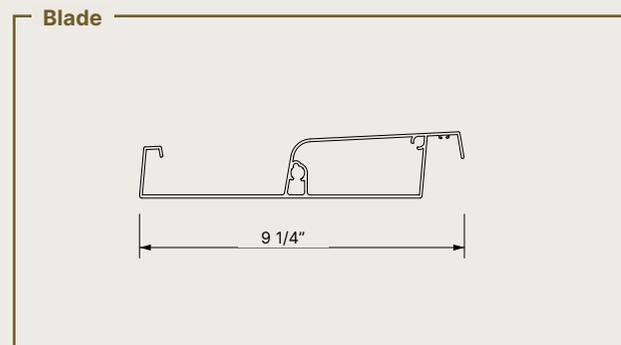
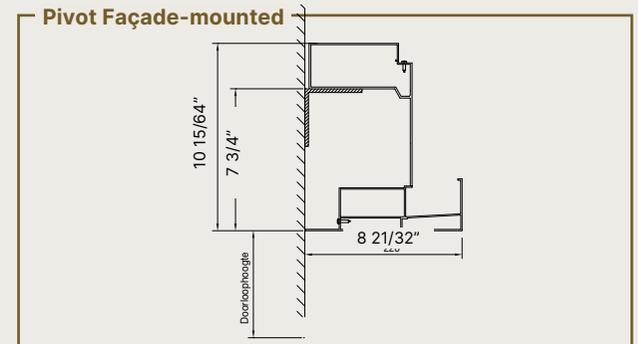
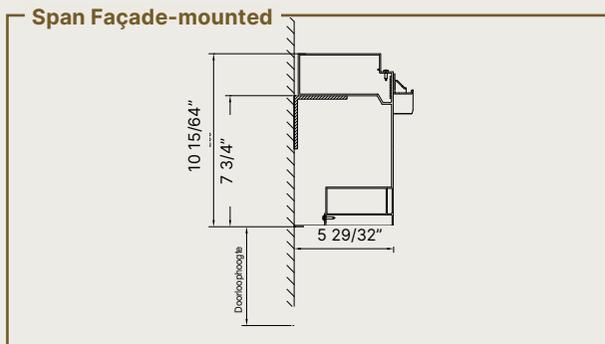
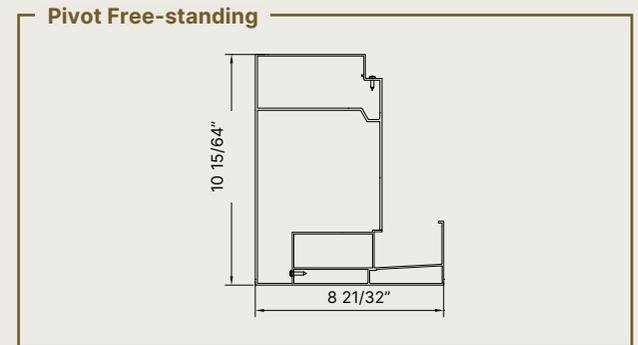
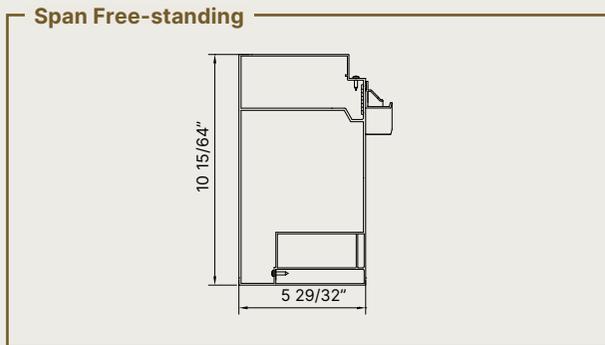
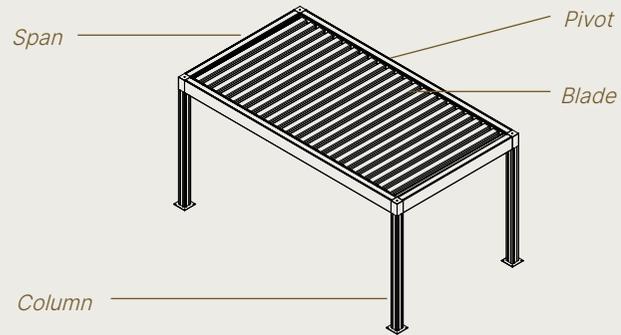
The combination of Fixscreen(s) and 2 Lineo Led blades are bundled in a package at an interesting price. This comfort pack makes it more economical to add these frequently requested accessories to Camargue.

Please note!

That this comfort pack is only available for:

- Camargue
- All dimensions
- Calculated per roof section
- Minimum 2 Lineo Leds
- Minimum 1 Fixscreen, also possible left and right of an in-between column

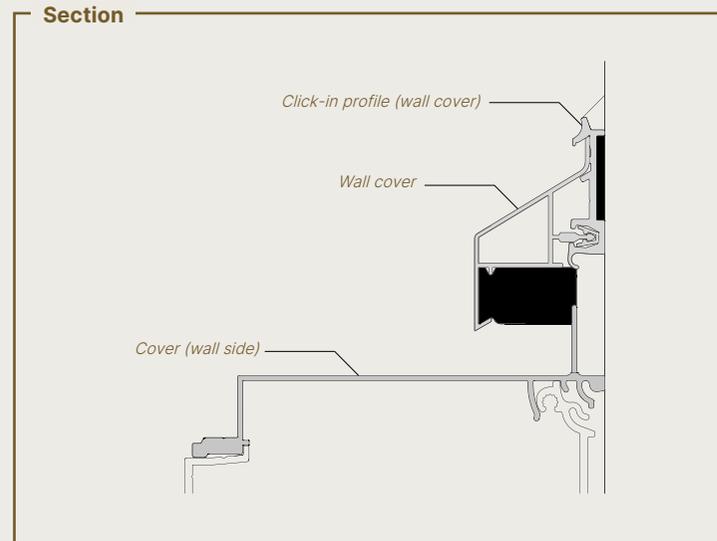
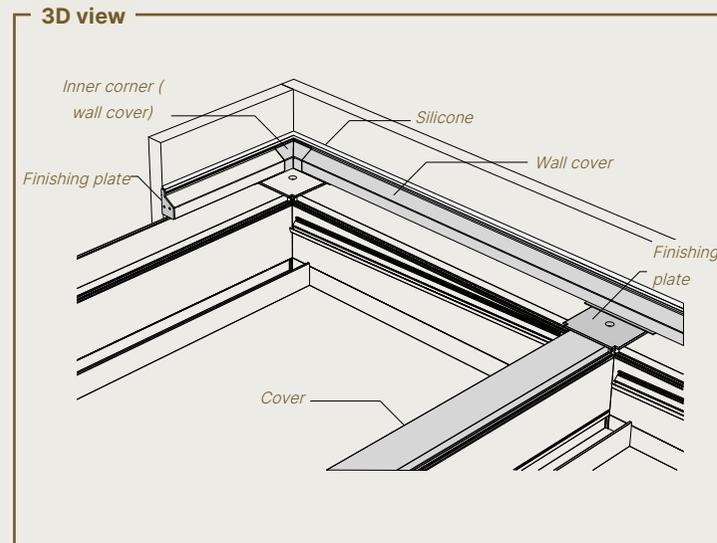
Profiles



Waterproof wall mounting

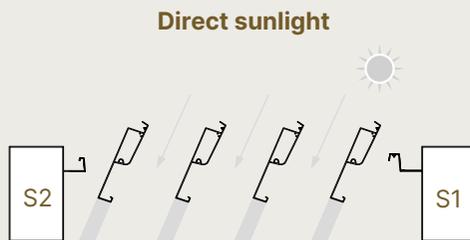
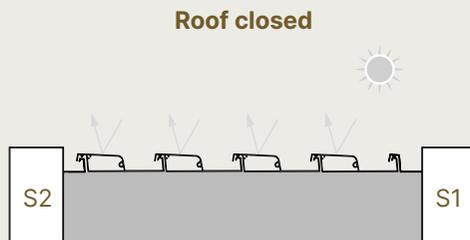
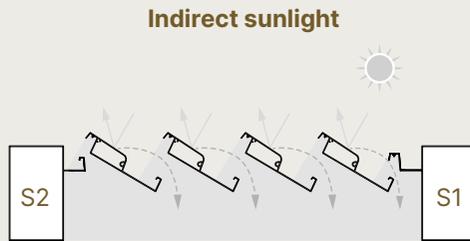
This (optional) solution guarantees a waterproof connection between Camargue and the façade. This is only applicable to covers with a side fully or partially mounted against a wall, and not to free-standing covers placed against a wall.

- Prevents water seepage between the façade and Camargue
- Also sealed against powder snow
- Compensates for irregularities in the façade up to 25/32"
- Easy installation and disassembly
- Controls accessible without removing and re-applying silicone

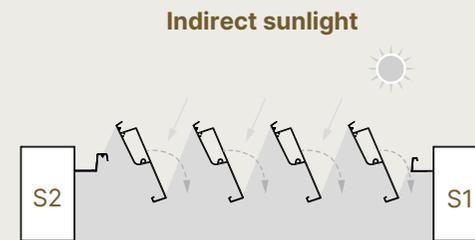
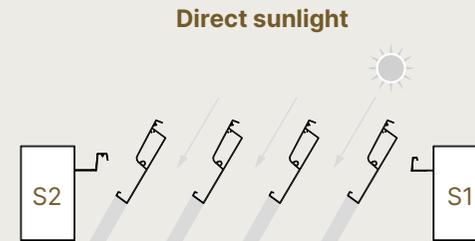


Blade orientation

Sun protection: keep light out when open



Light allowed to enter when open



Mounting bases

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

Standard structure version

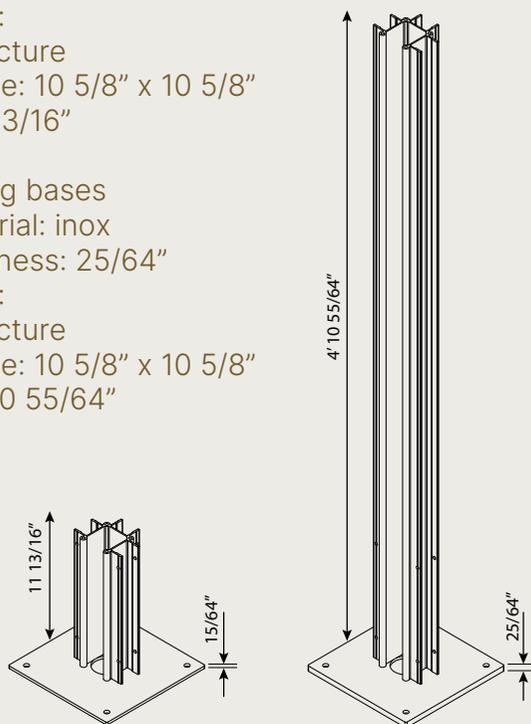
For use in normal circumstances, without increased wind load. Certain side infills do require reinforced mounting bases on the adjacent columns.

Standard mounting bases

- Base plate material: inox
- Base plate thickness: 15/64"
- Base plate color: color of the structure
- Visible base plate: 10 5/8" x 10 5/8"
- Core length: 11 13/16"

Reinforced mounting bases

- Base plate material: inox
- Base plate thickness: 25/64"
- Base plate color: color of the structure
- Visible base plate: 10 5/8" x 10 5/8"
- Core length: 4' 10 55/64"



Extra reinforced structure version

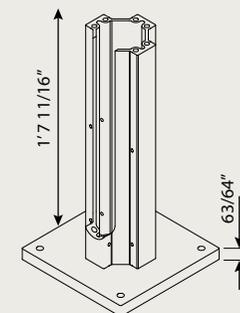
At locations with increased wind loads, the cover must be equipped with reinforced mounting bases to guarantee the stability of the structure.

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

These mounting bases must be fixed directly to the concrete.

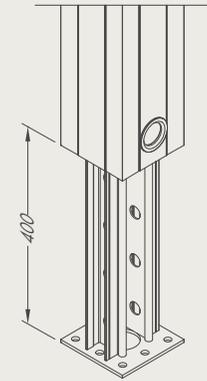
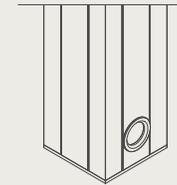
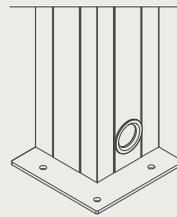
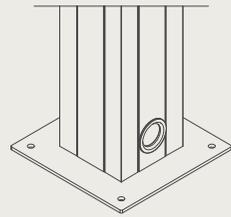
Extra reinforced mounting bases

- Base plate material: aluminium
- Base plate thickness: 63/64"
- Base plate color: RAL 7016 (visible + visible corner type)
Color of the structure (invisible type)
- Visible base plate: 10 5/8" x 10 5/8"
- Core length: 1' 7 11/16"



Mounting bases

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



Type	Visible mounting base		Invisible mounting base	Cast mounting base
Application	Not against a structure	Pivot or span against a structure	All applications	Cast in concrete foundation
Non-reinforced mounting base	Available at standard price			
(Extra) reinforced mounting base	Available at a surcharge			Not available

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 arranged 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:

Standard or reinforced mounting bases

- 2 19/32" relative to bottom side of the base, regardless of whether or not overlength is applicable (standard).
- 2 19/32" + 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 2 19/32".

For example: an overlength of 3 15/16" means water drainage at 6 17/32" relative to the bottom side of the mounting base.

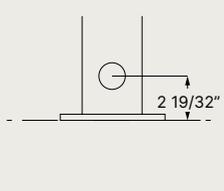
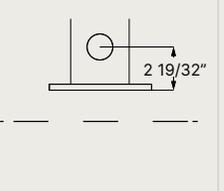
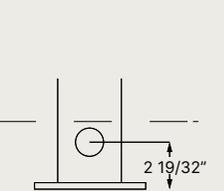
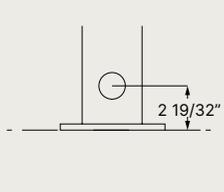
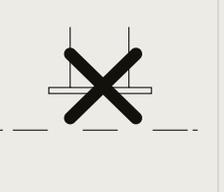
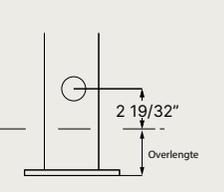
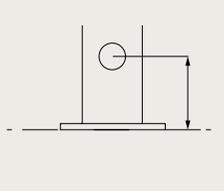
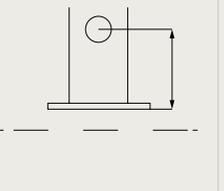
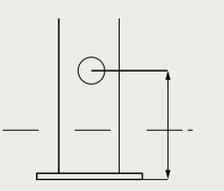
- Variable height Minimum distance above ground level = 1 37/64". Maximum distance = passage height – 1' 4 11/32". The height is always measured from the bottom side of the mounting base to the centre of the drainage hole.

Extra reinforced mounting bases

- 4 23/32" relative to bottom side of the base, regardless of whether or not overlength is applicable (standard).
- 4 23/32" + 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 4 23/32".

For example: an overlength of 3 15/16" means water drainage at 6 17/32" relative to the bottom side of the mounting base.

- Variable height Minimum distance above ground level = 4 23/32". Maximum distance = passage height – 1' 4 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
66 mm relative to bottom side of base (standard)			
66 mm + overlength relative to bottom side of base			
Variable height (mm)			

OTHER TOOLS

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

- Technical drawings
- Training documents
- Installation manual
- User manual
- [Digital photo book & social media](#)
- ...

