

soltec | More light,
more life.

sensor

LED lights

sliding panels / glass panels

sound
system

ZIP roller
blinds



Bioclimatic Pergola Agava SL

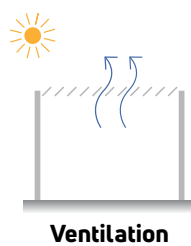
Index

3	Outdoor living comfort
4	Why choose Bioclimatic Pergola Agava?
5	Configurations
6	Colours
8	Dimensions and characteristics
10	Model configurations
12	Blade performance
13	Value proposition
15	Agava SL 160/28
17	Agava SL 170/28
19	Agava SL 170/36
21	Agava SL 240/36
23	Agava SL 240/60
OPTIONS	
25	ZIP roller blinds
26	Glass panels
28	Sliding panels (wood, wood double, screen, alu, alu double)
31	Glass roof
32	Roof types
33	Special water evacuation
34	Mounting
38	Wind resistance
42	How to understand the markings and Accessories
43	Patent
44	Contact

Outdoor living comfort

Regulate the
temperature,
control **sunlight**,

protect yourself
from **rain*** & **snow***,
extend the outdoor
season.



COMFORT OF PERGOLA ACCESSORIES

Personalize your pergola by choosing among many options integrated in the structure to optimize your comfort:



Lighting



Heaters



Speakers



Sliding
Panels



Glass
Panels



ZIP
Rollos

Why choose Bioclimatic Pergola Agava?

40²m

Best value proposition for covering outdoor space up to 40m² with 5 different models to achieve best ratio price performance.



Strong frame reinforcement under 45° angle.



Frame fixation without visible screws.



High performance of solid profiles.

INOX

All standard parts and screws are in inox.



Customer support and education.



Simple and fast installation.



Simple ordering system and tracing of the project via web configurator.



Complete support from design to production and installation of bigger custom made projects.



Patent roof solution.

DESIGN & INNOVATION

Our design office is constantly on the lookout for new products and improvements in order to offer you perfectly suited products at the right price. Our attention to detail makes it possible for us to create pergolas with careful finishes:



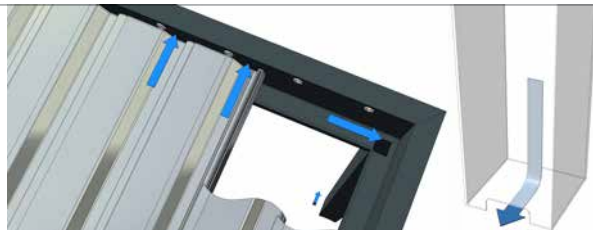
Invisible fixings



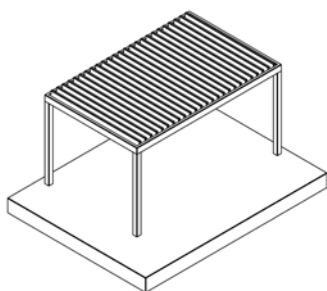
LED lights incorporated in the blades

Evacuation of water concealed in the structure

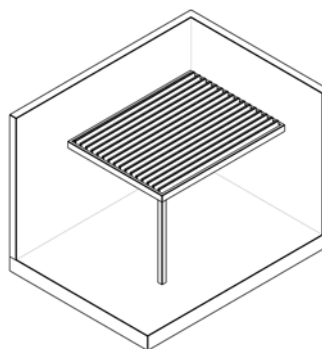
Different options of water evacuation



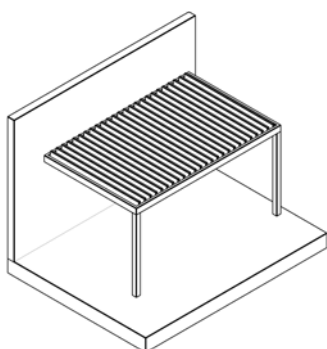
Configurations



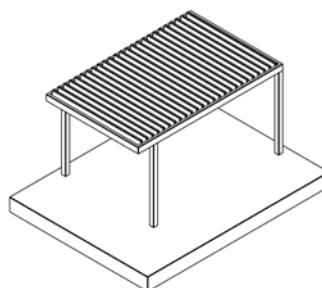
Type 1
Self-standing



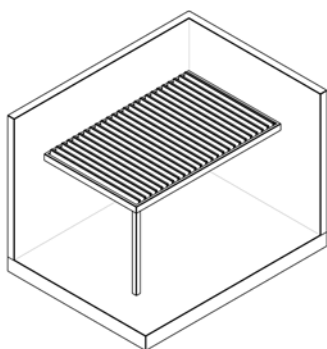
Type 5
Wall-mounted
blades parallel
to wall



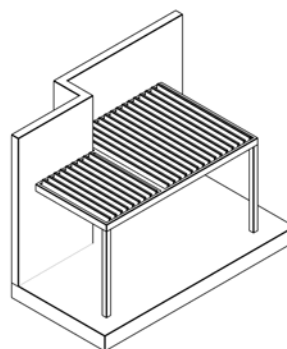
Type 2
Wall-mounted
blades
perpendicular
to wall



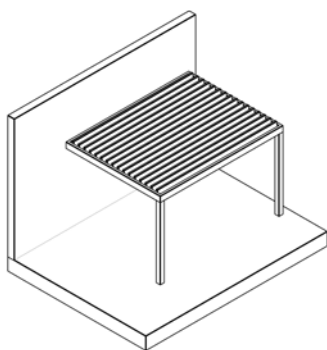
Type 6
Self-standing
poles off-center



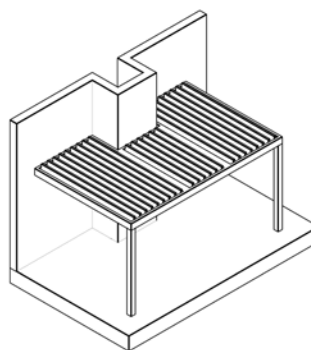
Type 3
Wall-mounted on
two sides blades
perpendicular
to wall



Type 7
Wall-mounted
blades
perpendicular
to wall








Type 4
Wall-mounted
blades parallel
to wall



Type 8
Wall-mounted
blades
perpendicular
to wall

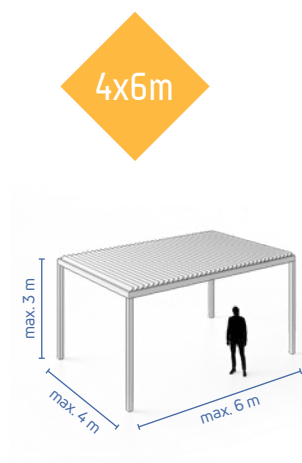
Colours

	Colours	Finish	Surface
Standard	 Anthracite Grey RAL 7016	Matt	Smooth
	 Aluminium Grey RAL 9006	Matt	Smooth
	 Traffic White RAL 9016	Gloss	Smooth
	 DB 703	Matt	Microstructure (for construction only) Smooth (for blades)
Optional	<p>Customize your pergola Agava by selecting the color of your choice from more than 1600 existing RAL colors, different glossy and finishing standard.*</p> <p>RAL 1000 > RAL 9023</p> 	<p>Different gloss levels are available.*</p> <p>Gloss levels: < 30 % matt > 65 % satin > 80 % gloss</p>	<p>Different microstructure available.*</p> <p>Microstructure: Fine structural powder coating (deep matt)</p>

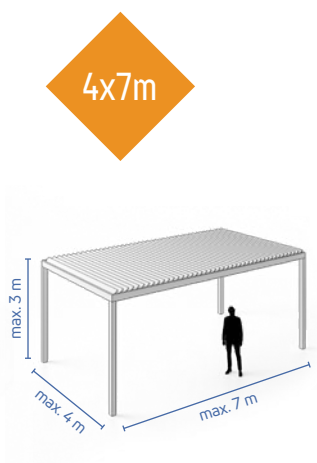
*Subject to additional payment. Gloss levels are +- 5 % accurate.



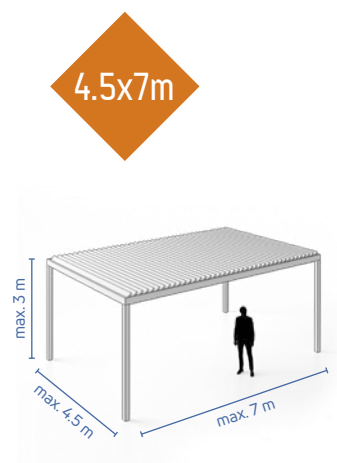
Dimensions & Characteristics



Agava SL
160/28
PROFILE 16
S BLADE



Agava SL
170/28
PROFILE 17
S BLADE

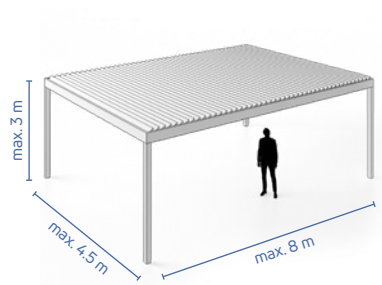


Agava SL
170/36
PROFILE 17
L BLADE

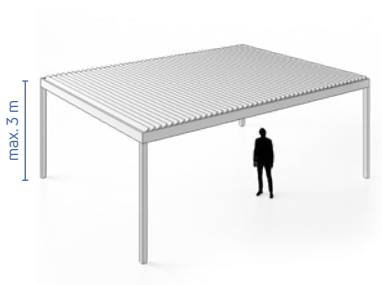
Blades	200/28	200/28	200/36
Profile	160/120	170/120	170/120
Poles	120/120	120/120	120/120
Max dimension 1 module	4 x 6 m	4 x 7 m	4.5 x 7 m
Installation - 4 poles	Self standing	Self standing	Self standing
Installation - up to 3 poles	Wall mounting	Wall mounting	Wall mounting
Foot type	Internal / external	Internal / external	Internal / external
Water exit	Standard / option	Standard / option	Standard / option
N° of water exit	2	2	2
Motorisation	1 motor	1 motor / 2 motors	1 motor / 2 motors

* on length above 6 m additional pole has to be installed

* on length above 6 m additional pole has to be installed



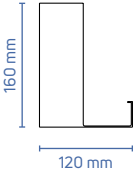
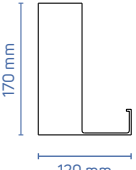
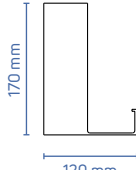


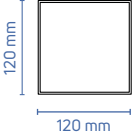
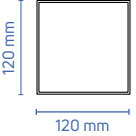
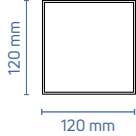
Agava SL
240/36
PROFILE 24
L BLADE



Agava SL
240/60
PROFILE 24
XL BLADE

Blades	200/36	270/60
Profile	240/150	240/150
Poles	150/150	150/150
Max dimension 1 module	4.5 x 8 m	6 x 6 m, 5 x 8 m, max. 40 m ²
Installation - 4 poles	Self standing	Self standing
Installation - up to 3 poles	Wall mounting	Wall mounting
Foot type	External	External
Water exit	Standard / option	Standard / option
N° of water exit	2 / 3	2 / 3
Motorisation	1 motor / 2 motors	1 motor / 2 motors

Model configurations

	Agava SL 160/28	Agava SL 170/28	Agava SL 170/36
Profiles	PROFILE 16 	PROFILE 17 	PROFILE 17 
Blades	S BLADE 	S BLADE 	L BLADE 
Poles	POLES 	POLES 	POLES 

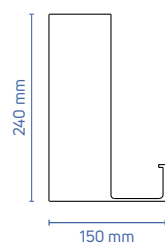
Aluminium profiles, blades, and poles. All standard parts are produced in inox.

Agava SL 240/36

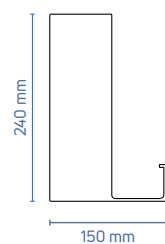
Agava SL 240/60

Profiles

PROFILE 24

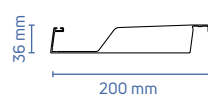


PROFILE 24

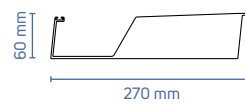


Blades

L BLADE

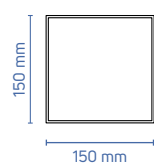


XL BLADE

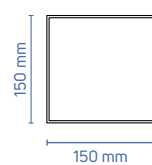


Poles

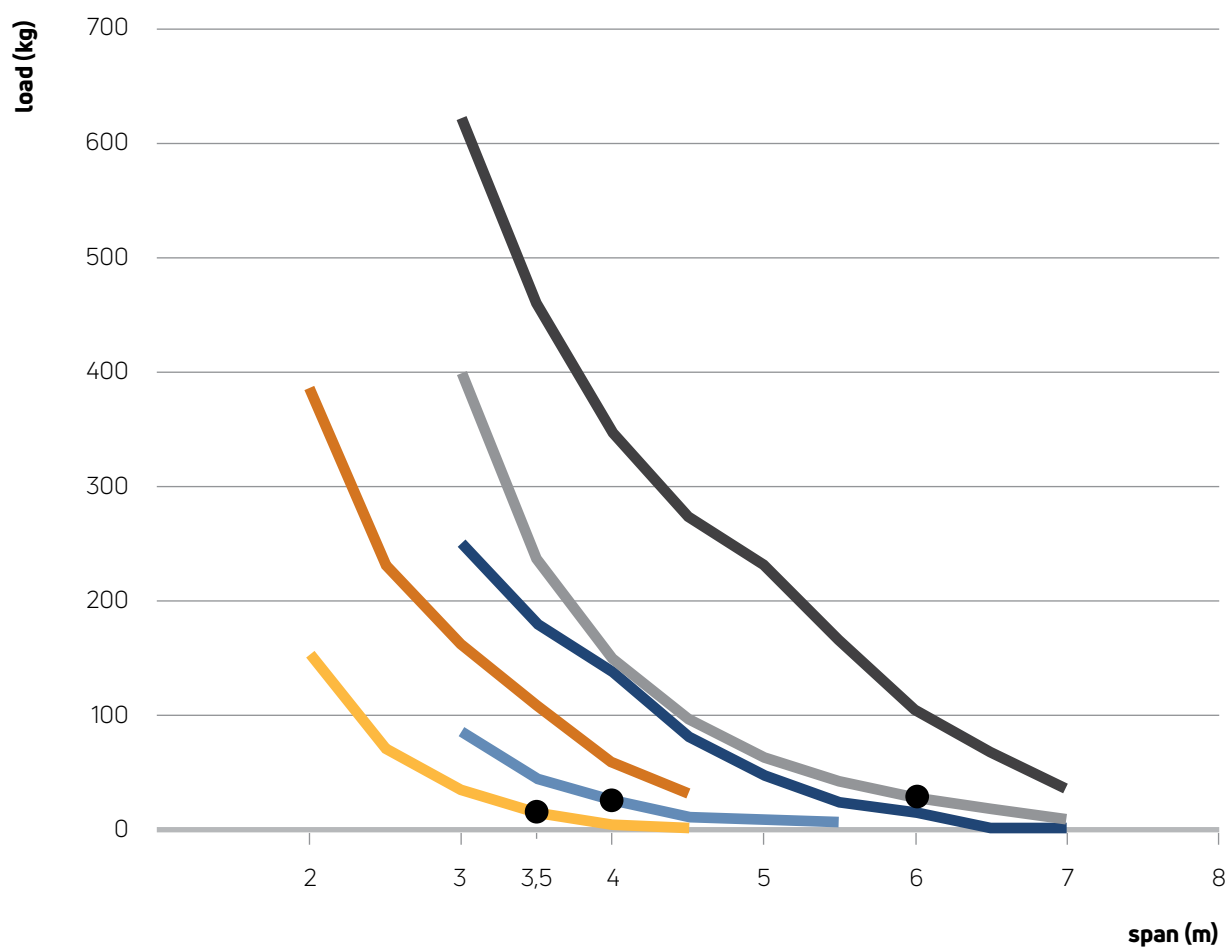
POLES



POLES



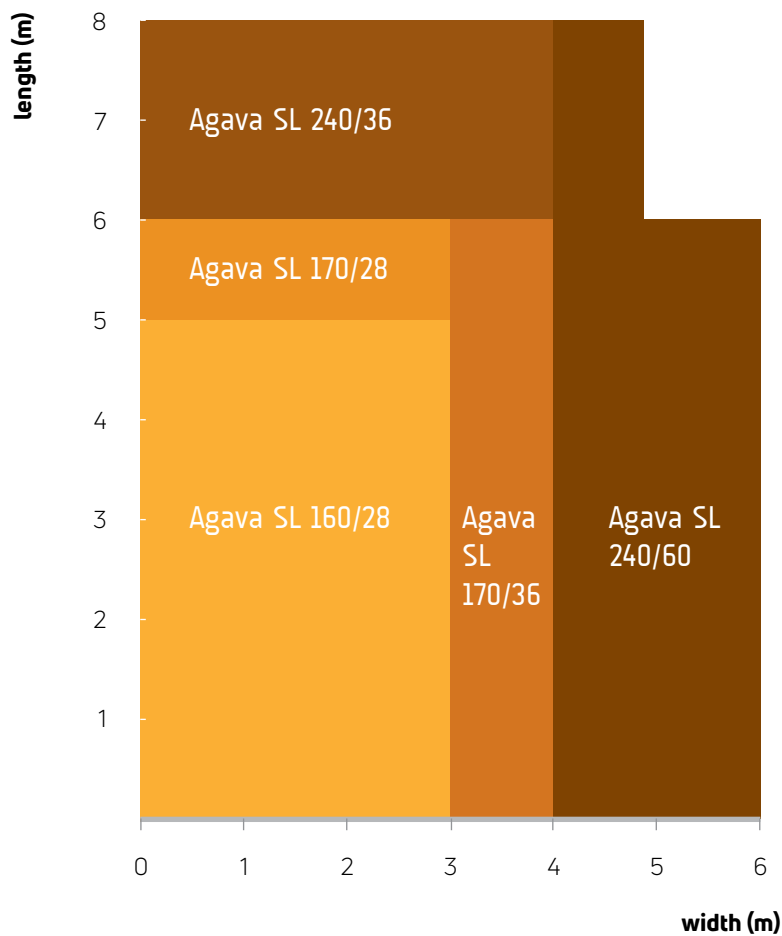
Blade performance



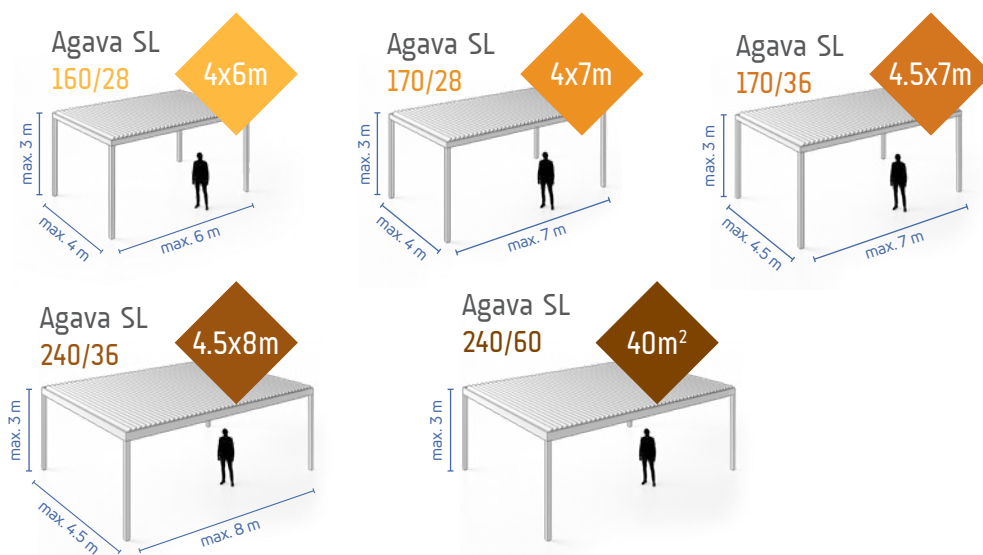
- **SL28 blade** / capacity
- **SL28 blade** / functional
- **SL36 blade** / capacity
- **SL36 blade** / functional
- **XL60 blade** / capacity
- **XL60 blade** / functional

The Maximum Possible Load chart is intended for user instructions providing information as with regards to the maximum static load capacity of the structure for the specific dimensions of the rotating blades. The two lines represent two limit load levels. The lower as the Functional level (operation is not affected deformation $L/200$ is reached where L is the length of the blade) and the higher as the Capacity level (80% material capacity reached - operation can be affected). In case of snow and for any other possible loads, it is recommended to remove any elements from the structure before operating. Customers should regularly check and remove objects that might affect the operation of the structure or reduce its water discharge capacity. It is advisable to take at least 30 kg of additional load into consideration to take into account the specific environmental loads. Advisable max length of the SL28 blade is 3.5 m and for the SL36 blade is 4 m.

Value proposition



We offer best value proposition for covering outdoor space up to 40m² with five different models to achieve best ratio price performance.

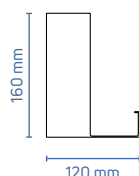




Agava SL 160/28

Blades	200/28
Profile	160/120
Poles	120/120
Max dimension 1 module	4 x 6 m
Installation - 4 poles	Self standing
Installation - up to 3 poles	Wall mounting
Foot type	Internal / external
Water exit	Standard / option
N° of water exit	2
Motorisation	1 motor

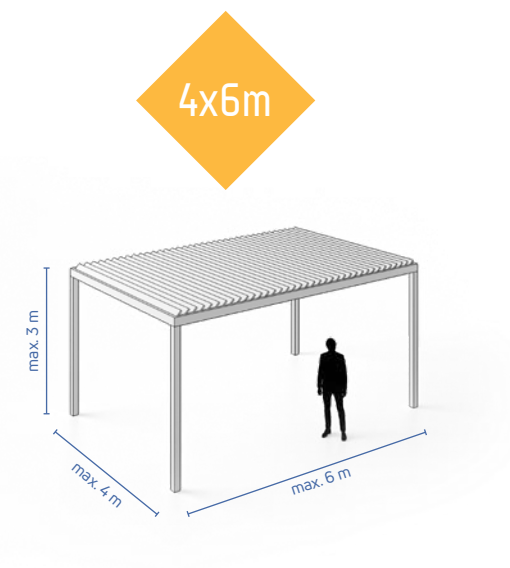
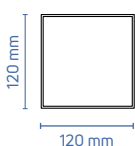
PROFILE 16



S BLADE



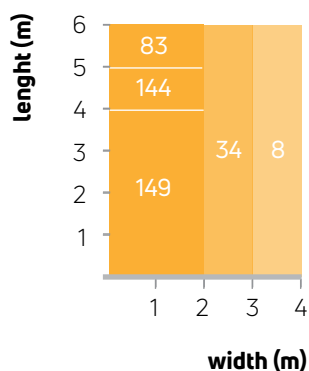
POLES



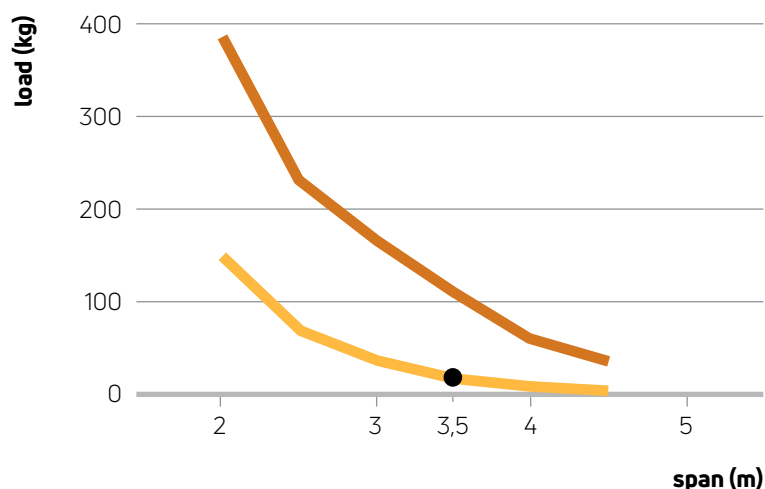
HIGH CORROSION RESISTANCE

Frame and all standard mechanical parts are made exclusively of aluminium and stainless steel.

PERGOLA FUNCTIONALITY LOAD (kg/m²)



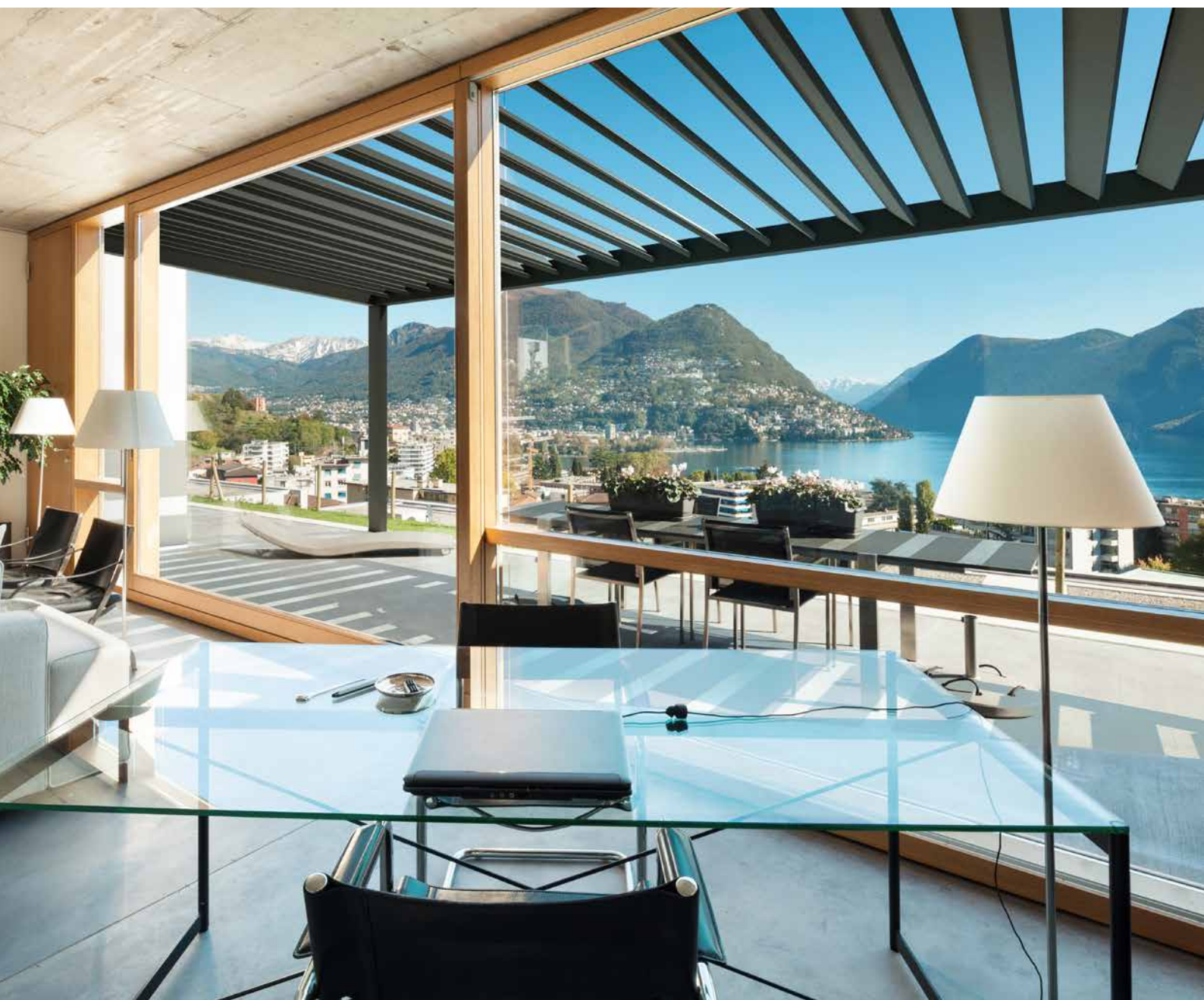
BLADE PERFORMANCE



— SL28 blade / capacity

— SL28 blade / functional

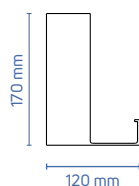
● recommended maximal width in most countries



Agava SL 170/28

Blades	200/28
Profile	170/120
Poles	120/120
Max dimension 1 module	4 x 7 m
Installation - 4 poles	Self standing
Installation - up to 3 poles	Wall mounting
Foot type	Internal / external
Water exit	Standard / option
N° of water exit	2
Motorisation	1 / 2 motors

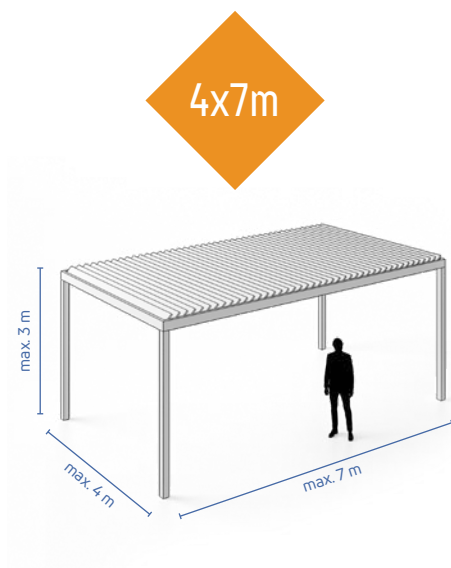
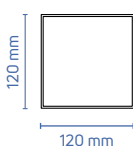
PROFILE 17



S BLADE



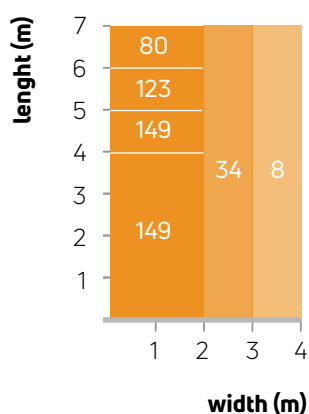
POLES



HIGH CORROSION RESISTANCE

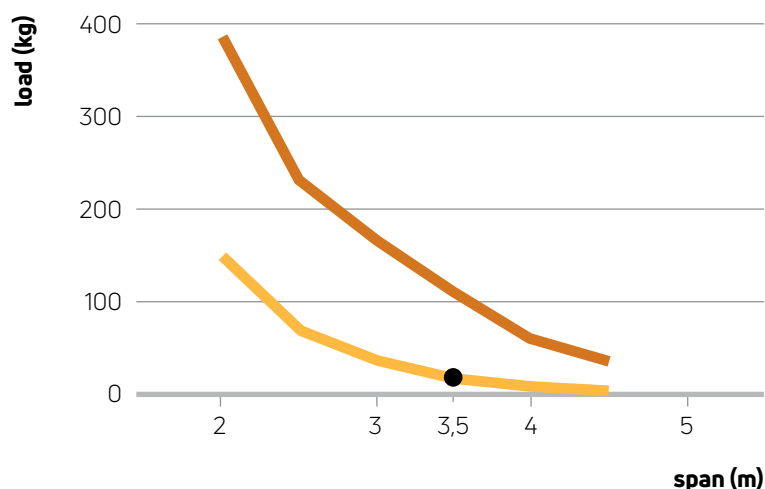
Frame and all standard mechanical parts are made exclusively of aluminium and stainless steel.

PERGOLA FUNCTIONALITY LOAD (kg/m²)



For pergola length over 6 m we suggest additional post or inclination on length for 3 cm.

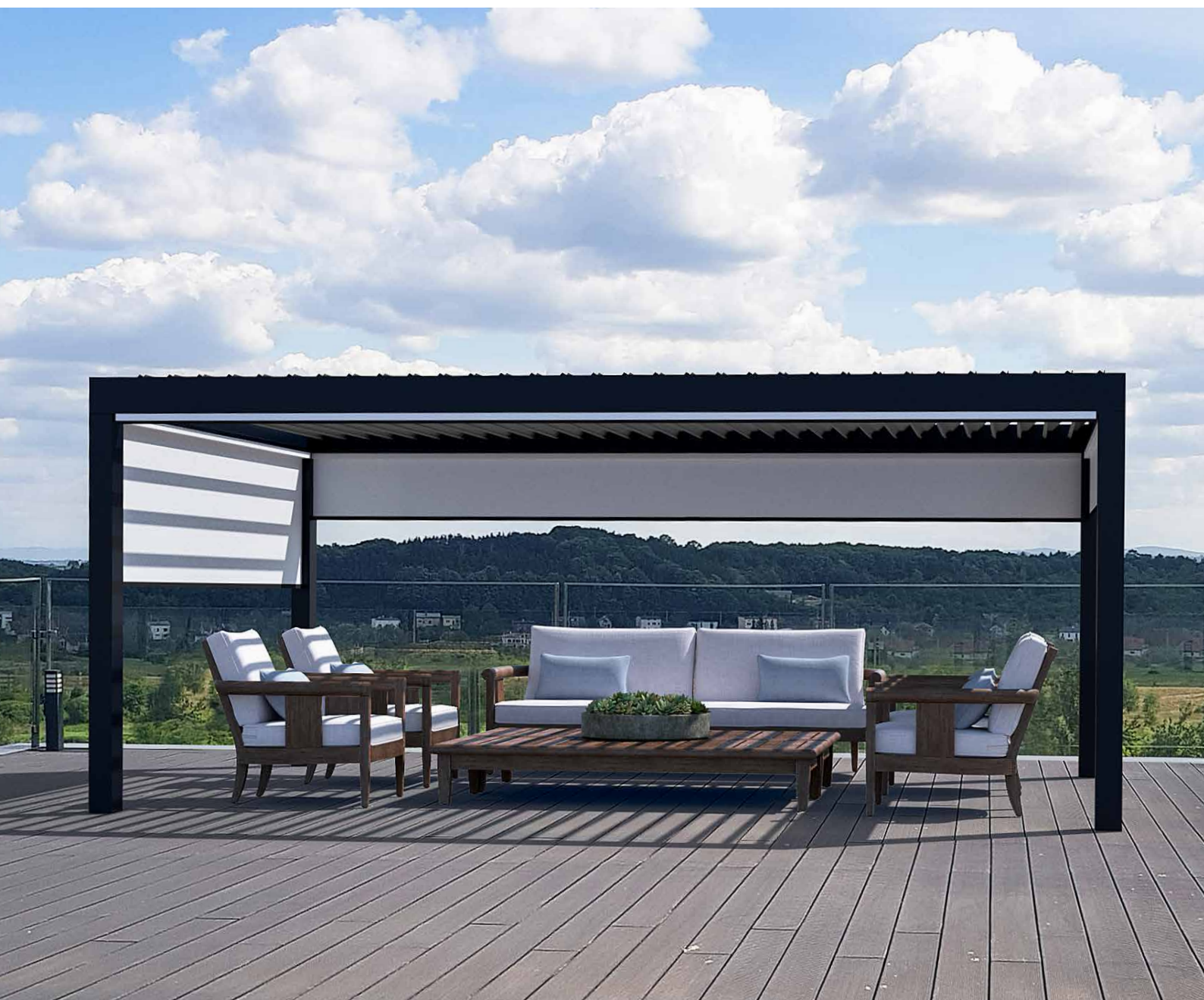
BLADE PERFORMANCE



— SL28 blade / capacity

— SL28 blade / functional

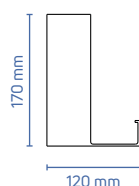
● recommended maximal width in most countries



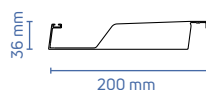
Agava SL 170/36

Blades	200/36
Profile	170/120
Poles	120/120
Max dimension 1 module	4.5 x 7 m
Installation - 4 poles	Self standing
Installation - up to 3 poles	Wall mounting
Foot type	Internal / external
Water exit	Standard / option
N° of water exit	2
Motorisation	1 / 2 motors

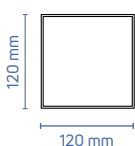
PROFILE 17



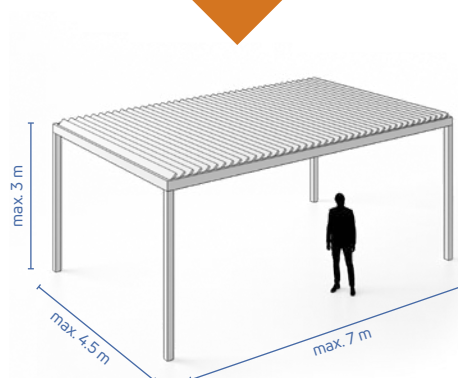
L BLADE



POLES



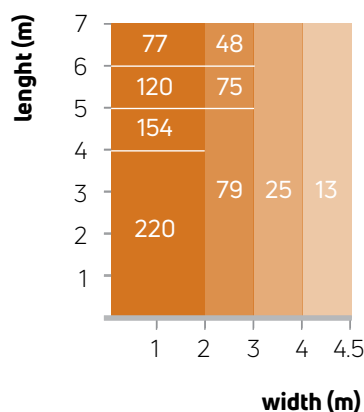
4.5x7m



HIGH CORROSION RESISTANCE

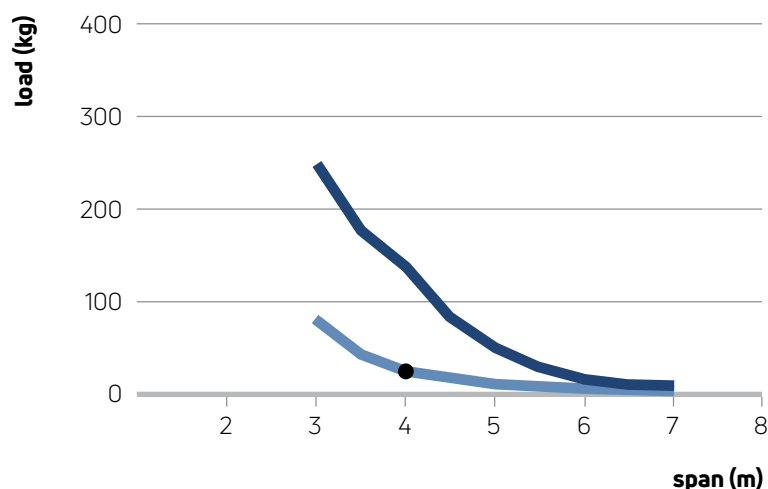
Frame and all standard mechanical parts are made exclusively of aluminium and stainless steel.

PERGOLA FUNCTIONALITY LOAD (kg/m²)



For pergola length over 6 m we suggest additional post or inclination on length for 3 cm.

BLADE PERFORMANCE



— SL36 blade / capacity

— SL36 blade / functional

● recommended maximal width in most countries

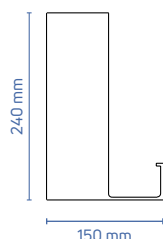


Agava SL 240/36

Blades	200/36
Profile	240/150
Poles	150/150
Max dimension 1 module	4.5 x 8 m
Installation - 4 poles	Self standing
Installation - up to 3 poles	Wall mounting
Foot type	External*
Water exit	Standard / option
N° of water exit	2 / 3
Motorisation	1 motor / 2 motors

* subject to additional payment

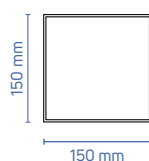
PROFILE 24



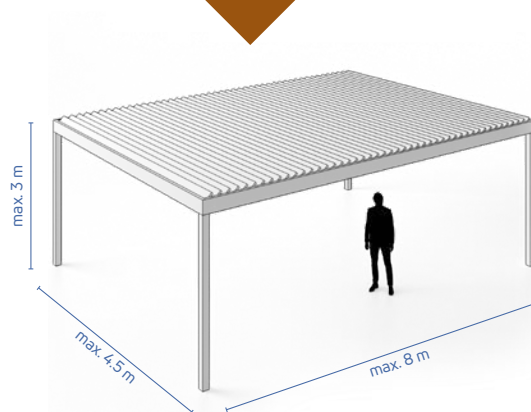
L BLADE



POLES



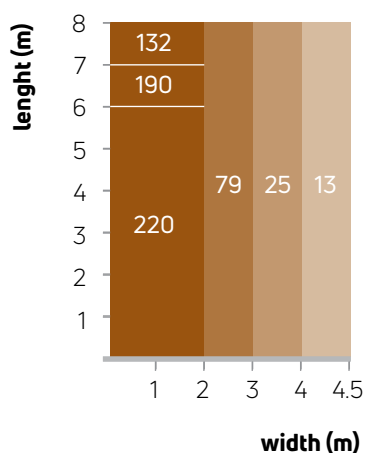
4.5x8m



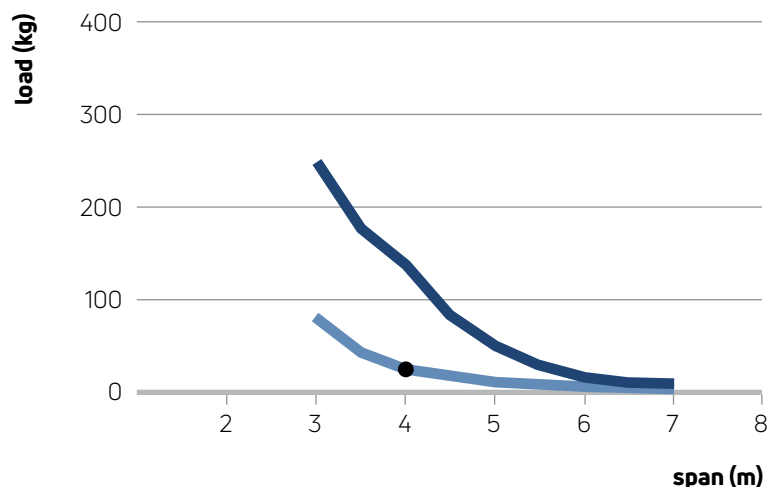
HIGH CORROSION RESISTANCE

Frame and all standard mechanical parts are made exclusively of aluminium and stainless steel.

PERGOLA FUNCTIONALITY LOAD (kg/m²)



BLADE PERFORMANCE



SL36 blade / capacity

SL36 blade / functional

● recommended maximal width in most countries

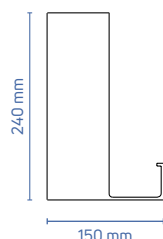


Agava SL 240/60

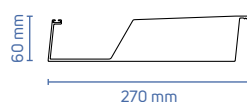
Blades	270/60
Profile	240/150
Poles	150/150
Max dimension 1 module	6 x 6 m, 5 x 8 m, max. 40 m ²
Installation - 4 poles	Self standing
Installation - up to 3 poles	Wall mounting
Foot type	External*
Water exit	Standard / option
N° of water exit	2 / 3
Motorisation	1 motor / 2 motors

* subject to additional payment

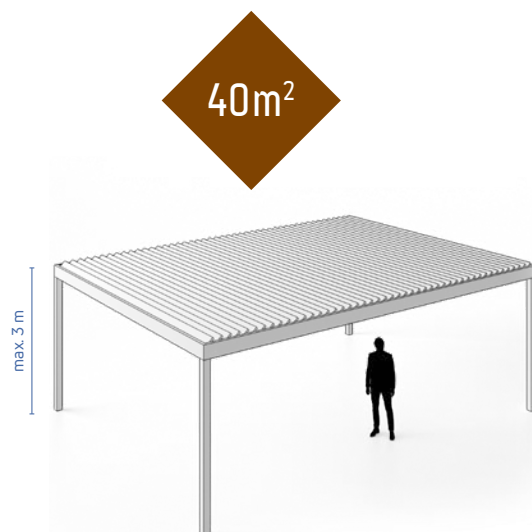
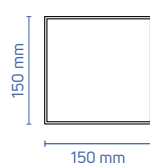
PROFILE 24



XL BLADE



POLES

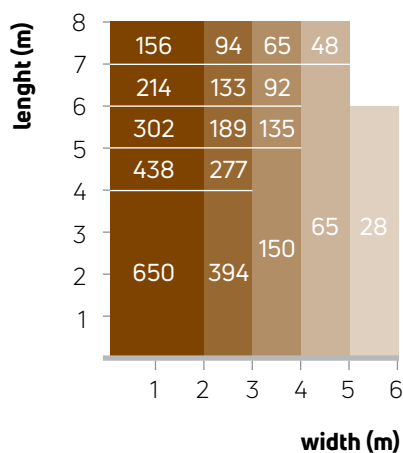


! The maximum dimensions are limited to the dimensions specified in the price list.

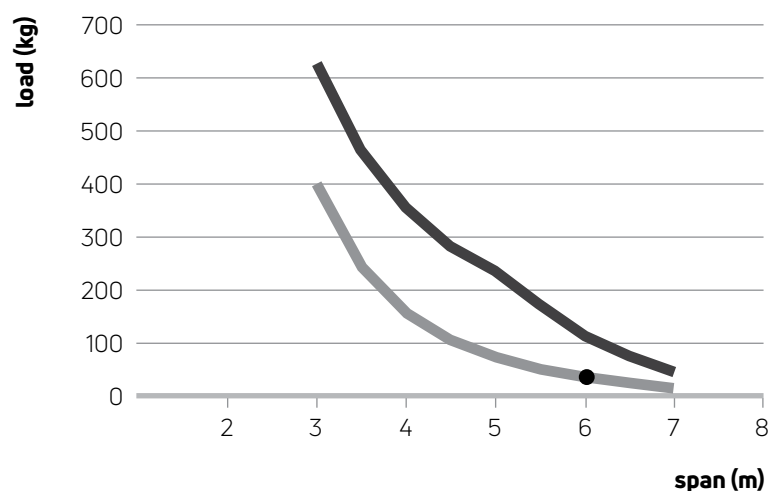
HIGH CORROSION RESISTANCE

Frame and all standard mechanical parts are made exclusively of aluminium and stainless steel.

PERGOLA FUNCTIONALITY LOAD (kg/m²)



BLADE PERFORMANCE



XL60 blade / capacity

XL60 blade / functional

● recommended maximal width in most countries

sensor

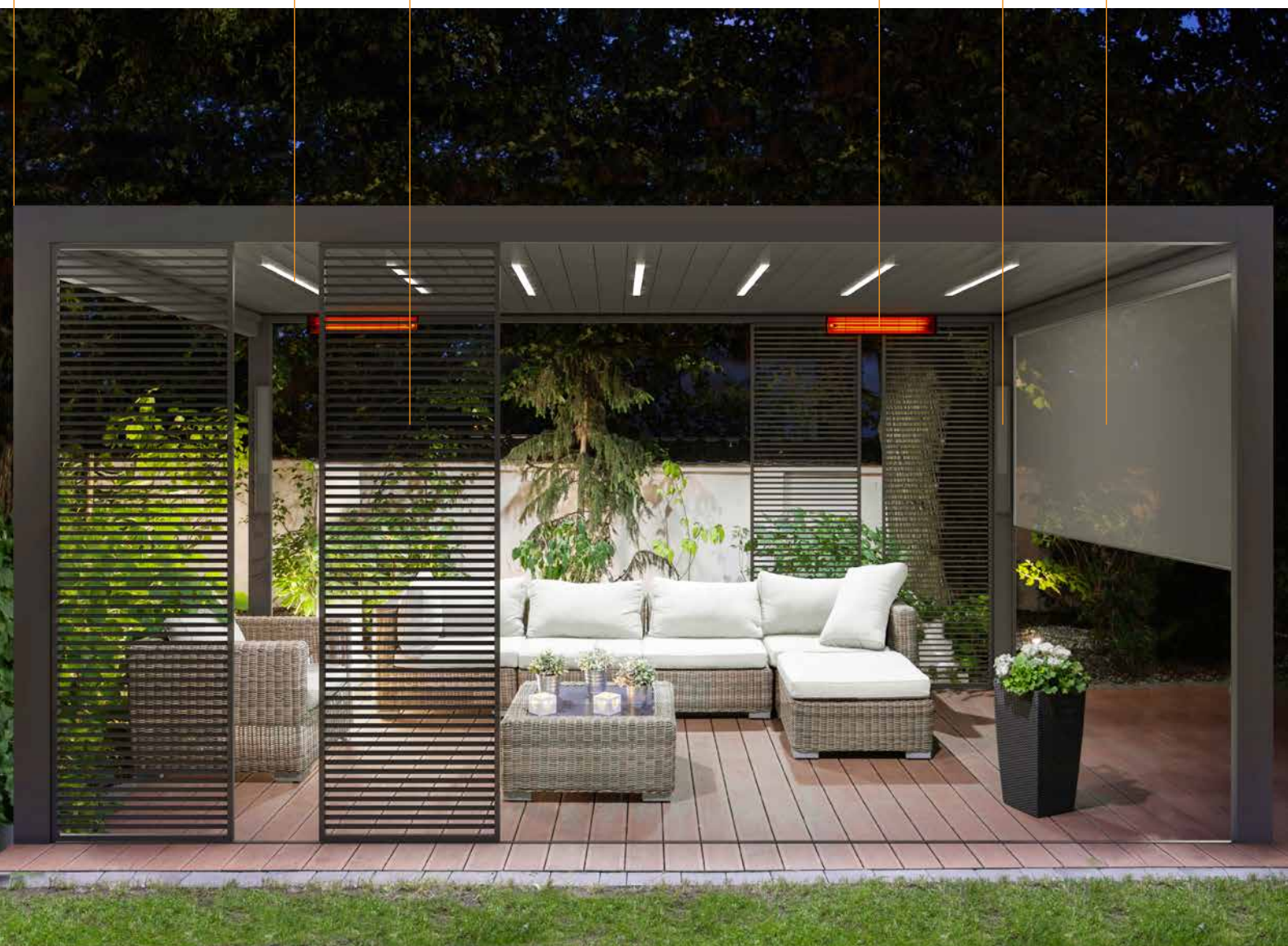
LED lights

sliding panels / glass panels

heater

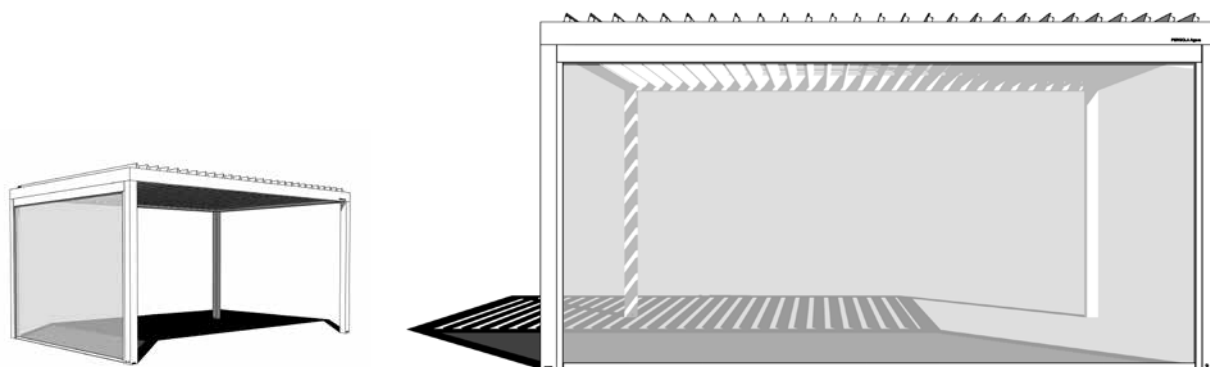
sound
system

ZIP roller
blinds



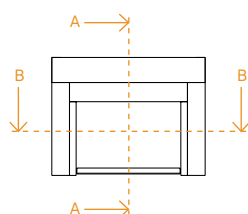
Options

ZIP roller blinds

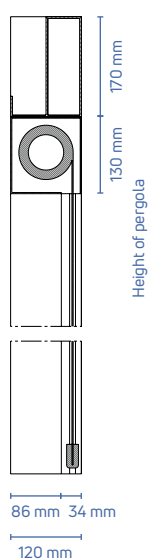


STANDARD

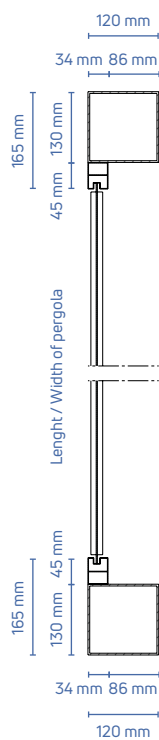
Front view



Section view A-A

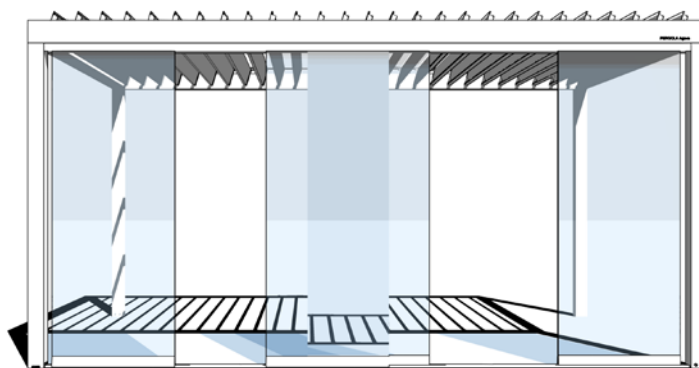
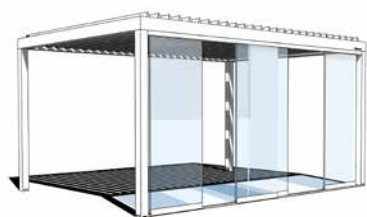


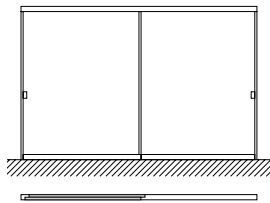
Section view B-B



Options

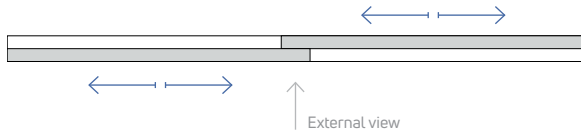
Glass panels



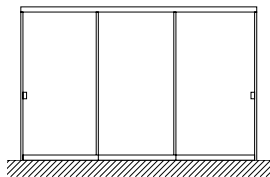
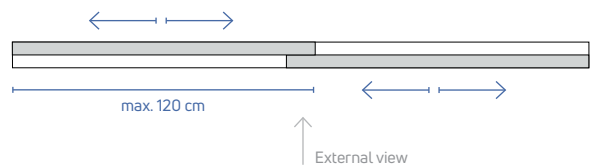


2 guides system

STANDARD

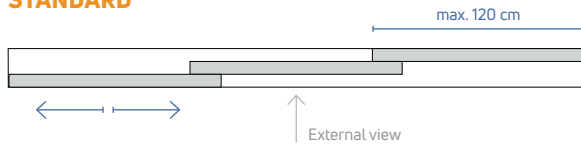


REVERSE

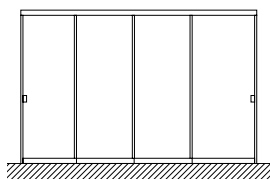
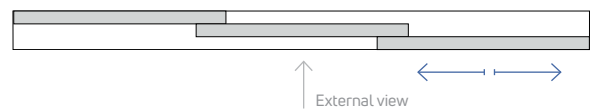


3 guides system

STANDARD

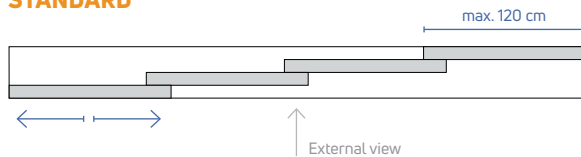


REVERSE

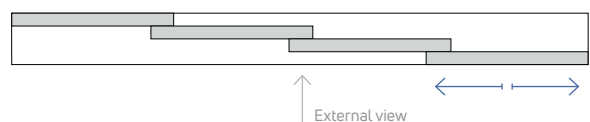


4 guides system

STANDARD

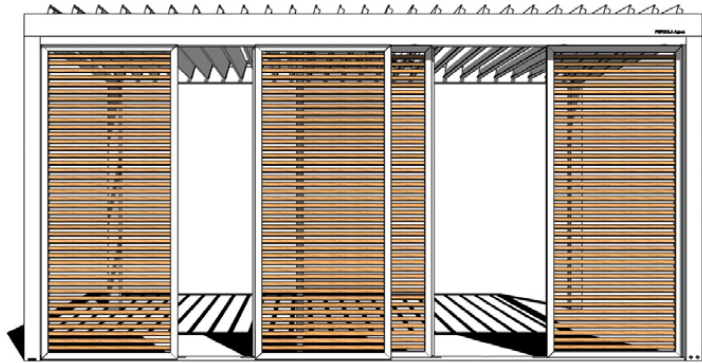


REVERSE

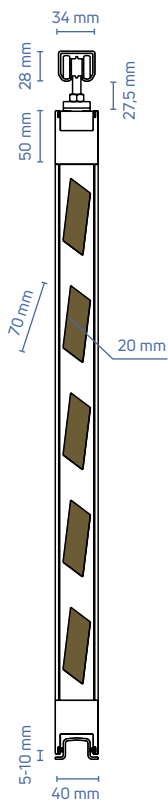


Options

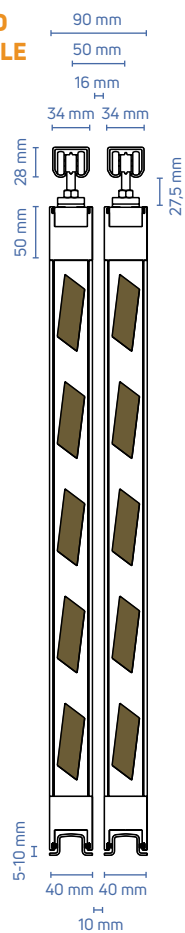
Sliding panels



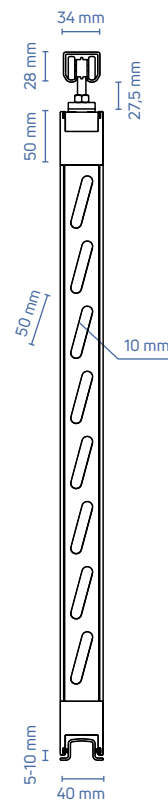
WOOD



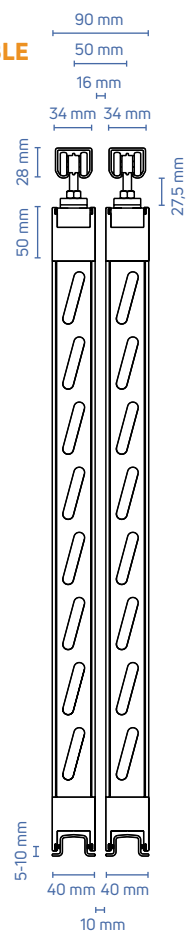
WOOD DOUBLE



ALU



ALU DOUBLE



1 guide
system



2 guides
system



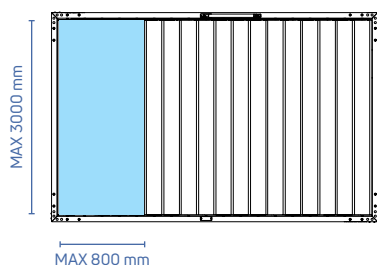


Options

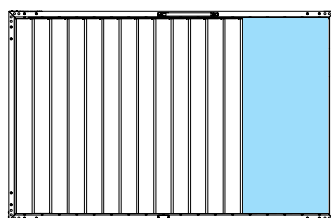
Roof

Special profile
for glass

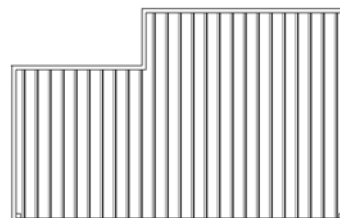
PROFILE 160 / PROFILE 170



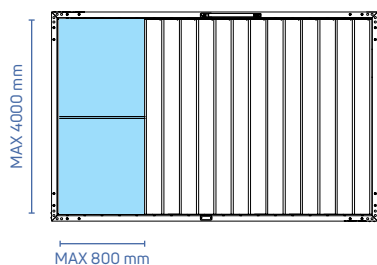
PROFILE 160 / PROFILE 170



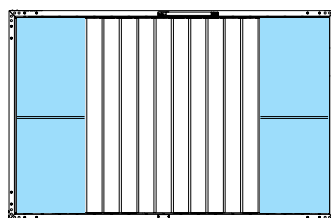
PROFILE 170



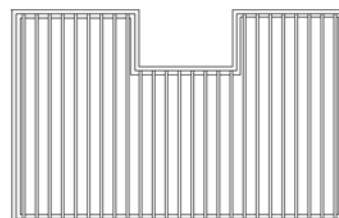
PROFILE 170



PROFILE 170



PROFILE 170



Subject to additional payment.

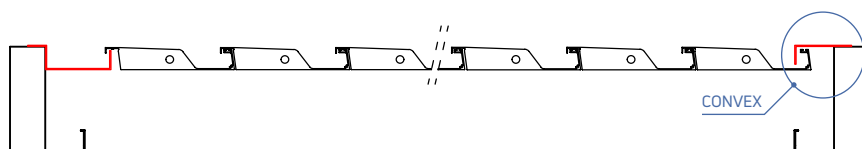
Options

Roof types

Type A

Convex type after the last blade

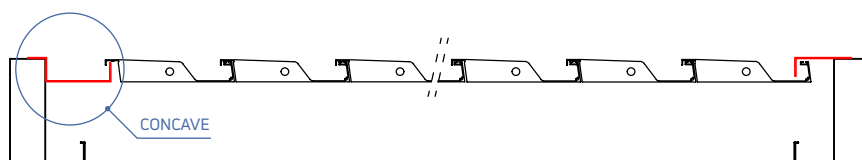
Covers must be installed by installer, covers are not pre-dread.



Type B

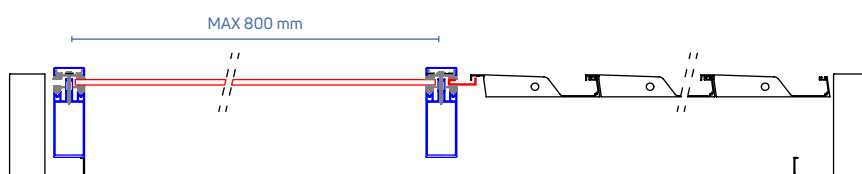
Concave type before the initial blade

Covers must be installed by installer, covers are not pre-dread.



Type C

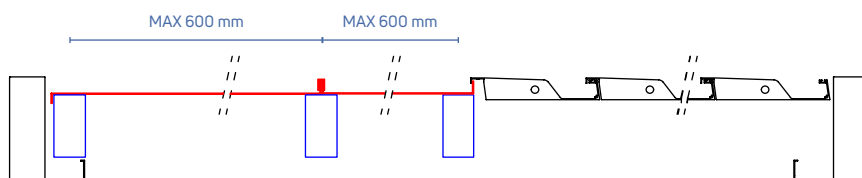
Glass roof integration



Type D

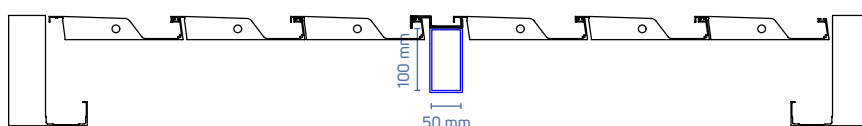
Aluminium sheet roof integration

Aluminium sheets can be delivered in maximal length of 3 m.



Type E

Aluminium sheet roof integration



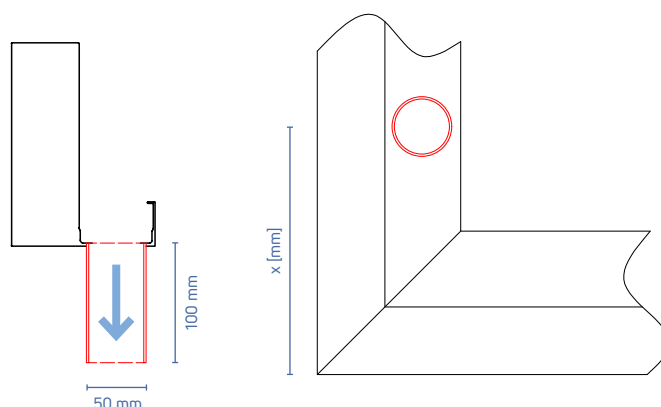
Options

Special water evacuation

Type V

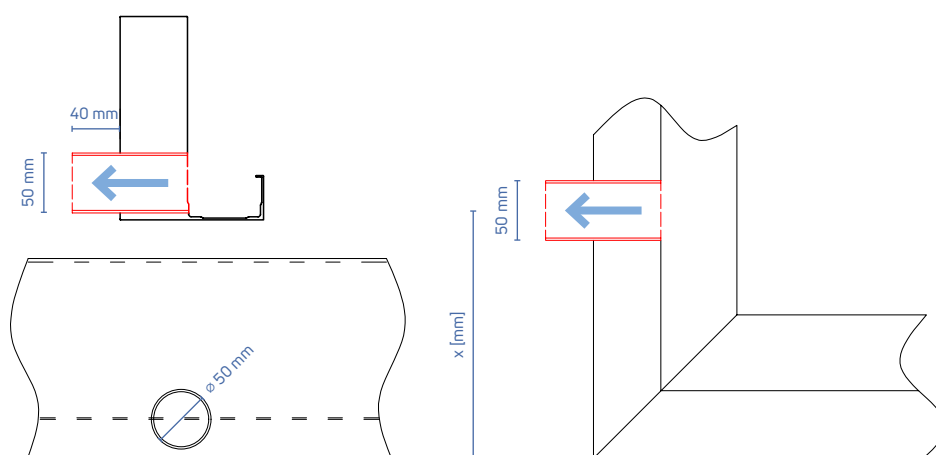
**Vertical evacuation
through rain gutter with
ALU tube \varnothing 50 mm**

Position of water location
and type must be marked
on drawing.



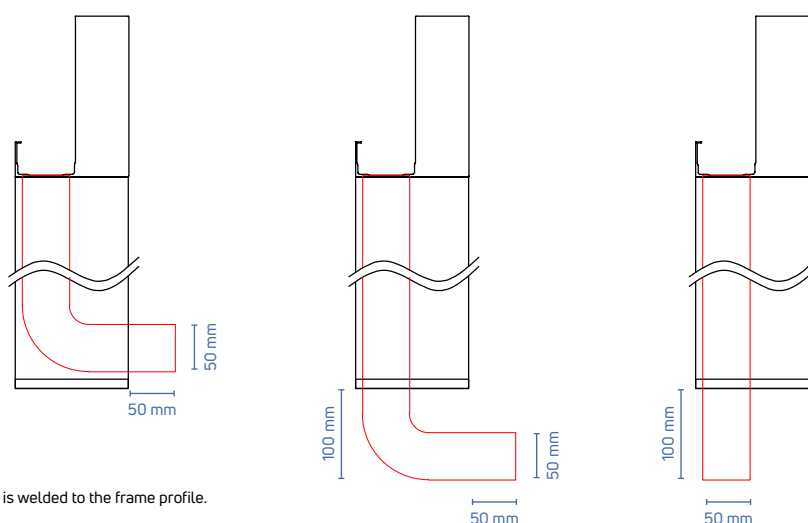
Type H

**Horizontal evacuation
through beam with
ALU tube \varnothing 50 mm**



Type P

**Horizontal evacuation
through beam with
PVC tube \varnothing 50 mm**

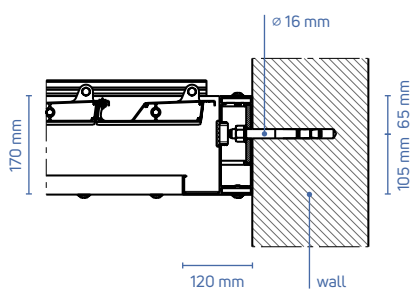


Subject to additional payment 150 € / pcs. Water exit pipe is welded to the frame profile.

Mounting

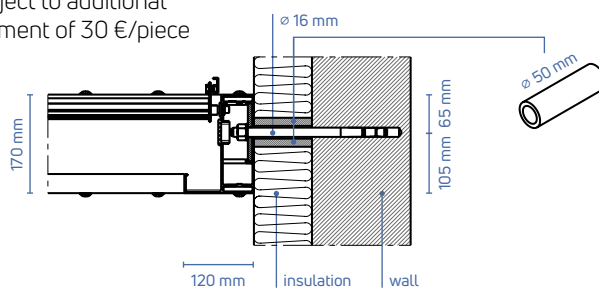
Wall Mounting

STANDARD



OPTIONAL

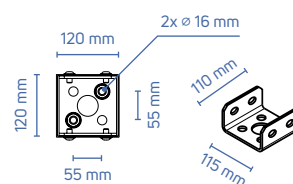
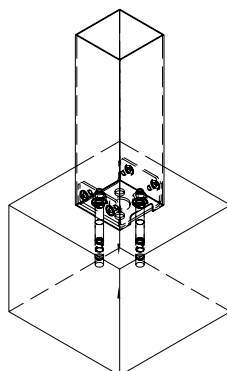
Subject to additional
payment of 30 €/piece



Foot Mounting

STANDARD / INTERNAL

Protection: inox.



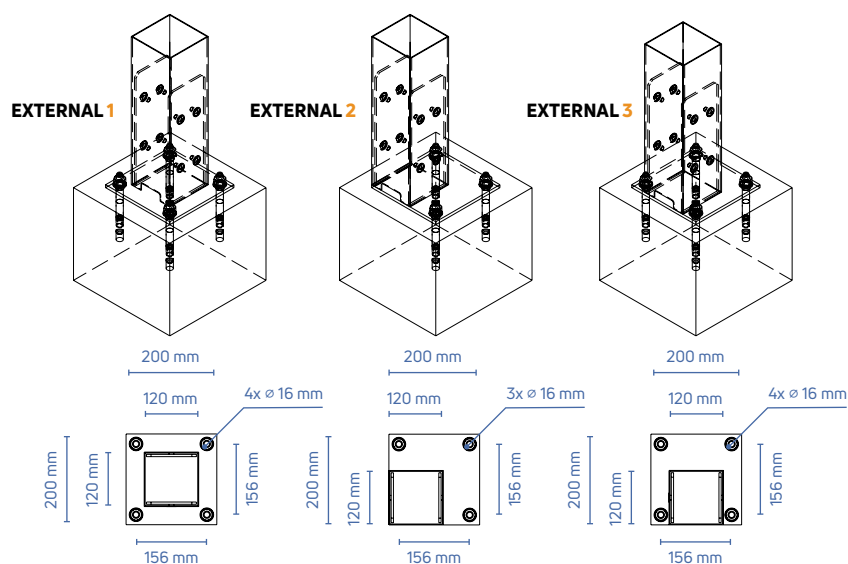
OPTIONAL / EXTERNAL

Protection:

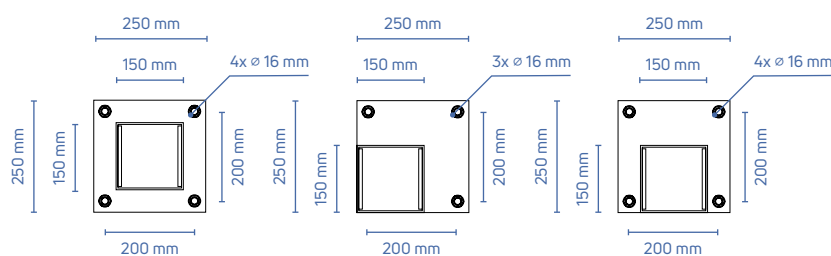
- galvanization
- galvanization+painting
- inox

Recommendation

We recommend using the Foot Mounting - EXTERNAL for all freestanding pergolas in conjunction with the stability function.



Poles 150/150 come only with external foot.



Wind resistance

The Pergola Agava series of bioclimatic pergolas are designed as an outdoor living space and are not meant for permanent living. The Pergola frame with blades can hold up to strong forces dependent of the span and declared possible additional vertical loading in the tables with the price lists. The quality of pergola Agava is declared accordingly to the European standard for shading systems EN 13561. All pergolas come with Technical approval and CE sign. According to the standard EN 13561 there are four classes for wind resistance.

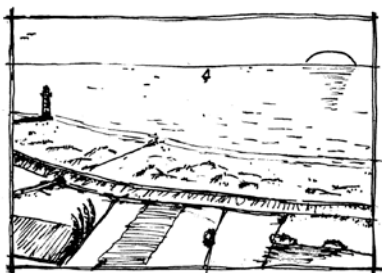
Class	0	1	2	3
Wind speed resistance	< 28 km/h	max 28 km/h	max 38 km/h	49 km/h
Beaufort scale	< 4	4	5	6
EN 13561 pressure		4 kg/m ²	7 kg/m ²	11 kg/m²

All pergola Agava structures with rotating blades are approved to the highest wind class 3. Further we designed the structure with the blades to bear even higher possible loads. The structure can bear wind loads up to 60 km/h. With wind higher then 60 km/h blades must be open as all accessories have to be retracted. In this way the structure can bear loads up to 120 km/h. We provide a wind and weather sensor to open the blades automatically in such cases.

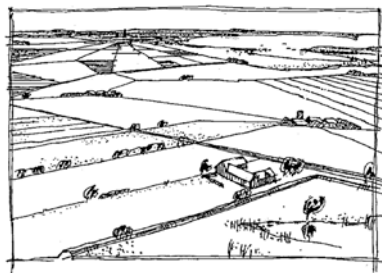
Wind speed and wind load dependence is addressed differently by different standards and depends of lot of circumstances such as Location, Terrain, presence of bigger obstacles in the vicinity, etc. We design the structures according to the Eurocodes.

EUROCODE WIND/LOAD DEPENDENCE:

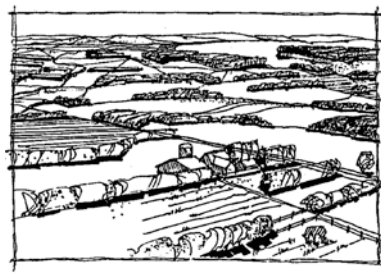
Terrain 0



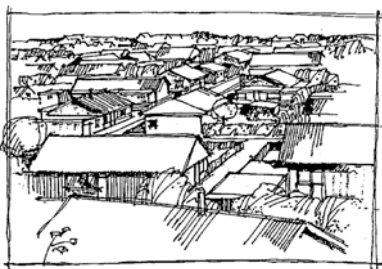
Terrain I



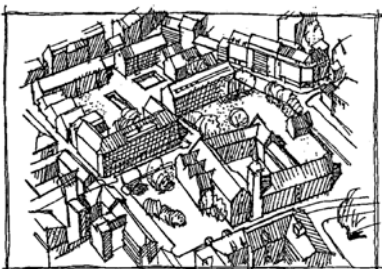
Terrain II



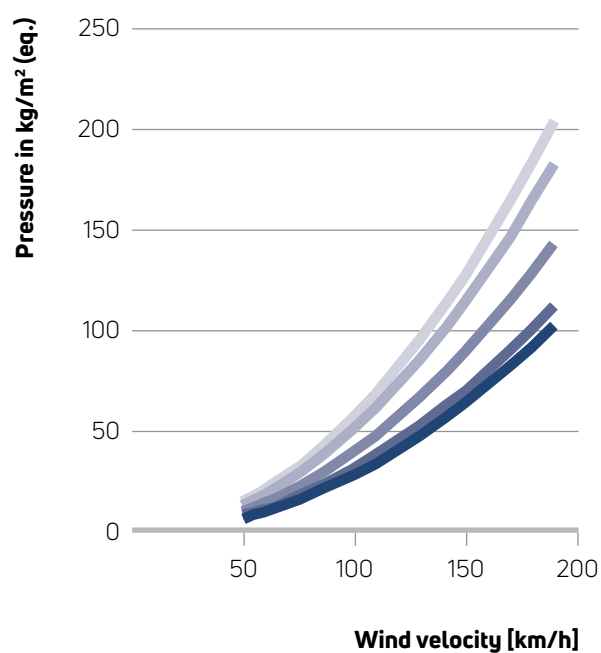
Terrain III



Terrain IV

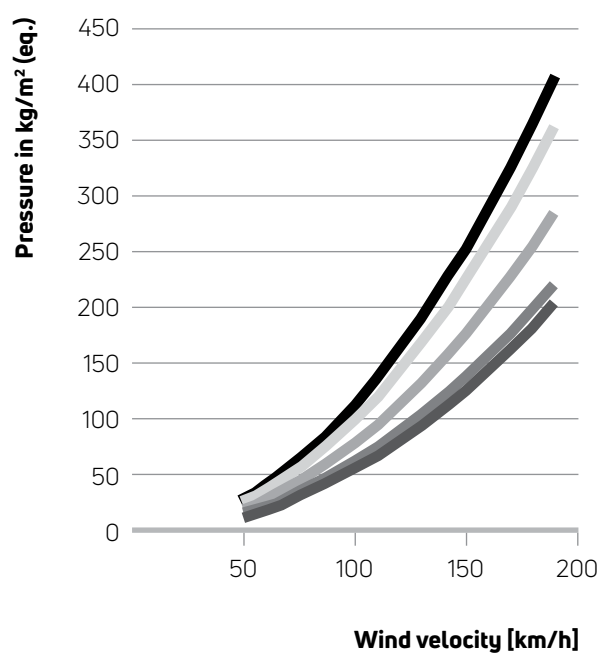


WIND SPEED/PRESSURE ROOF PRESSURE



- Terrain 0 / Roof pressure
- Terrain I / Roof pressure
- Terrain II / Roof pressure
- Terrain III / Roof pressure
- Terrain IV / Roof pressure

WIND SPEED/PRESSURE BASIC PRESSURE ACCORDING TO STANDARD EN 1991-1-4



- Terrain 0 / Basic pressure
- Terrain I / Basic pressure
- Terrain II / Basic pressure
- Terrain III / Basic pressure
- Terrain IV / Basic pressure

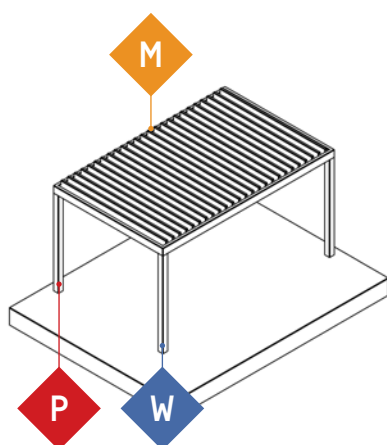
BEAUFORT SCALE:

Beaufort number	Wind speed [km/h]	Description	Land conditions
0	<1	Calm	Calm. Smoke rises vertically.
1	1-5	Light air	Wind motion visible in smoke.
2	6-11	Light breeze	Wind felt on exposed skin. Leaves rustle.
3	12-19	Gentle breeze	Leaves and smaller twigs in constant motion.
4	20-28	Moderate breeze	Dust and loose paper raised. Small branches begin to move.
5	29-38	Fresh breeze	Branches of a moderate size move. Small trees begin to sway.
6	39-49	Strong breeze	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic garbage cans tip over.
7	50-61	High wind, moderate gale, near gale	Whole trees in motion. Effort needed to walk against the wind. Swaying of skyscrapers may be felt, especially by people on upper floors.
8	62-74	Fresh gale	Twigs broken from trees. Cars veer on road.
9	75-88	Strong gale	Larger branches break off trees, and some small trees blow over. Construction/temporary signs and barricades blow over. Damage to circus tents and canopies.
10	89-102	Whole gale, storm	Trees are broken off or uprooted, saplings bent and deformed, poorly attached asphalt shingles and shingles in poor condition peel off roofs.
11	103-117	Violent storm	Widespread vegetation damage. More damage to most roofing surfaces, asphalt tiles that have curled up and/or fractured due to age may break away completely.
12	>117	Hurricane force	Considerable and widespread damage to vegetation, a few windows broken, structural damage to mobile homes and poorly constructed sheds and barns. Debris may be hurled about.

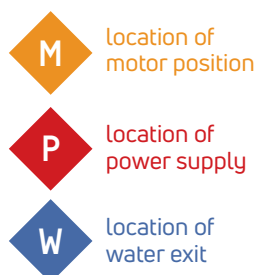




How to understand the markings



LEGEND:



ATTENTION!



Water exit is possible on same pole as electricity, but only if Type P is ordered as special option of water evacuation.

- minimal 1 water exit up to roof dimension 10m²
- minimal 2 water exit up to roof dimension 24m²
- minimal 3 water exit up to roof dimension 34m²

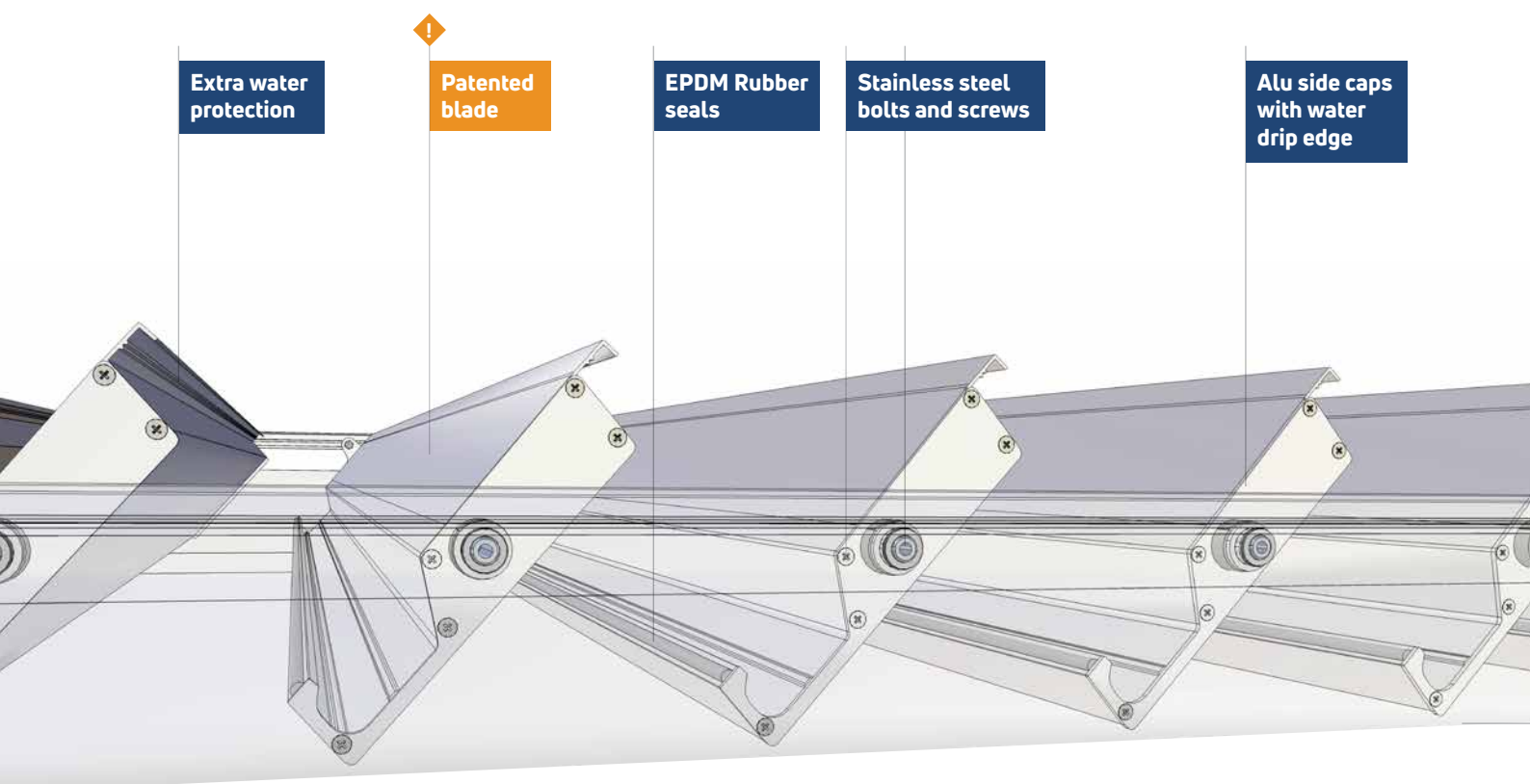
Accessories

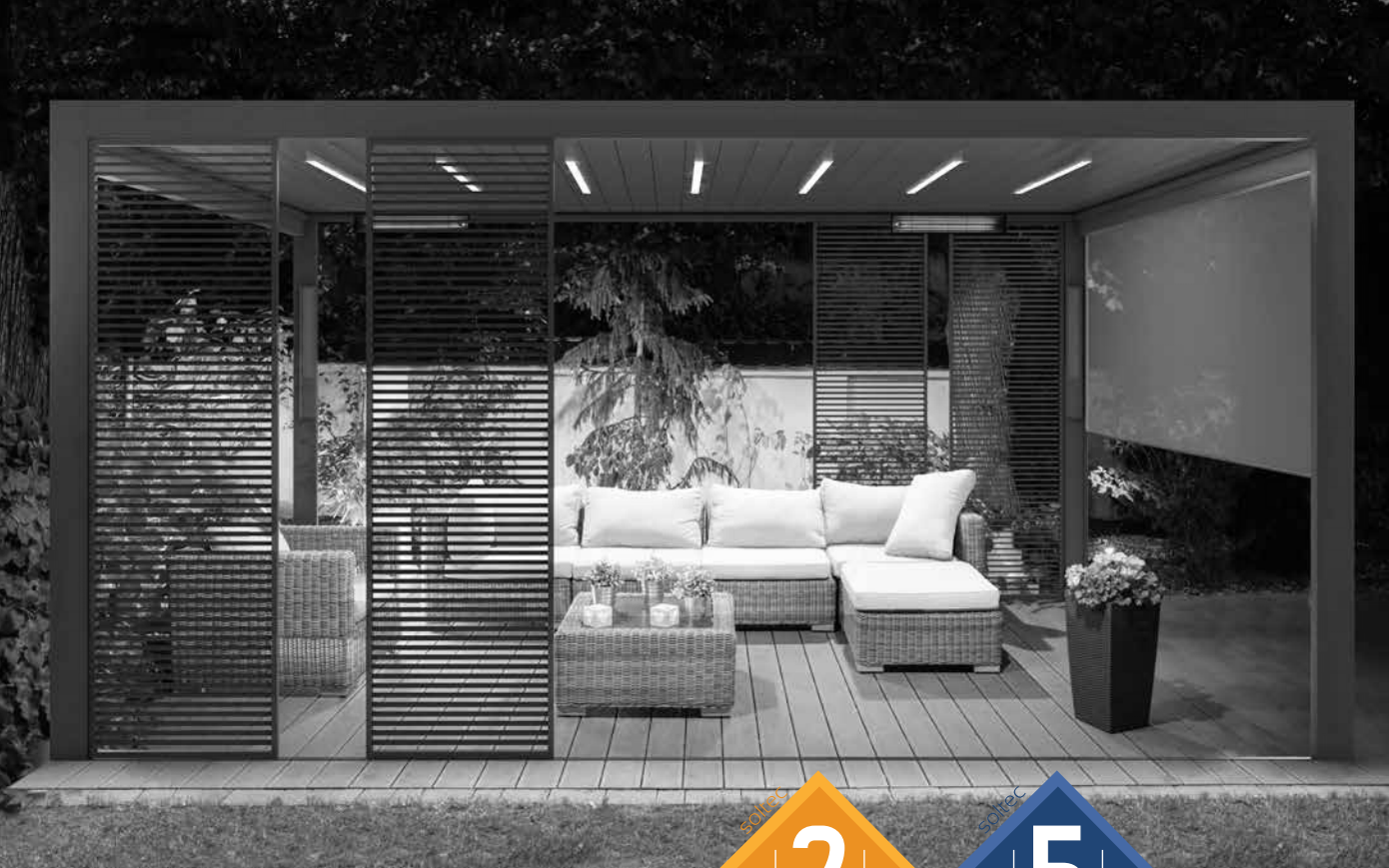


Patent

A specially designed blade, an integral part of the Pergola Agava, is made from extruded aluminium and patented and patent-protected SI 24401 A. All standard parts are produced in inox.

This watertight roofing blade is the basic structural element. When in a sequential sectional layout, it forms a water tight cover of exterior surfaces, resistant to loads such as wind and snow. The blades rotate and allow opening, thus regulating the balance of shade and sun exposure. This provides us with an excellent exterior living space in all seasons and ensures long-term use.





2-year warranty on
electronic equipment
and components



5-year warranty
on the structure of
Pergola Agava™

5 year warranty,
made in EU, fully
certified

soltec | More light,
more life.

INOX
STAINLESS
STEEL



To ensure optimal quality, Pergola Agava is in accordance with the following EN standards:

EN 1990:	Basis of Structural Design
EN 1991:	Actions on structures
EN 1991-1-1:	General actions - Densities, self-weight, imposed loads for buildings
EN 1991-1-3:	General actions - Snow loads
EN 1991-1-4:	General actions - Wind actions
EN 1991-1-5:	General actions - Thermal actions
EN 1993:	Design of steel structures
EN 1998:	Design of structures for earthquake resistance
EN 1999:	Design of aluminium structures
EN 1090:	Execution of steel and aluminium structures
EN 13561:	External blinds and awnings. Performance requirements including safety
EN 60335-1:	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-2-97:	Household and similar electrical appliances. Safety. Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment

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