

# bioclimatic pergola systems

premium outdoor living

**MSDESIGN**  
BESPOKE LIVING AND DECOR

## GIVING OUTDOOR SPACES THE ATTENTION THEY DESERVE

There is a place outside every home – a terrace, a garden, the corner you return to when the light is right.

We believe those spaces deserve the same thought and care as any room inside. Protection from heat when the sun is strong. Natural light when you want it. A quiet connection to the outdoors that endures through every season.

We would like to support nature by consuming less energy. To surround ourselves – and our clients – with products that carry a low environmental impact. Because the environment is our home. And what is good for the environment is good for us.

### MS DESIGN IS SUSTAINABILITY

## “Built for how you actually live outside”



We work exclusively with manufacturers that operate on 100% renewable energy



Our structural profiles are manufactured from recycled aluminium – material that can be reclaimed and used again



We are committed to progressively eliminating single-use plastics across our full product range



We specify FSC-certified materials wherever possible – including the papers used in this brochure

## bioclimate pergolas

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# BIOCLIMATIC PERGOLAS

## with retractable blade cover

Design, versatility, and high-performance engineering define our retractable blade bioclimatic pergola range – conceived to let you live in the light and control the degree of brightness around you at any moment.

In our Sway model, the blades rotate from the closed position and compact into a small space in a single movement, allowing light to filter through the roof. In the Velvet and Velvet Plus models, the patented Velvet Motion system allows the blades to rotate in response to the sun's position across an angle ranging from 0° to 85°, creating a comfortable microclimate – or to retract completely, opening the roof to the sky. With blades closed against rain, drainage is routed directly through the posts or integrated downspouts.

### Velvet - Velvet Plus

Blades position:	0°	Blades position:	45° - 85°*	Folding blades

### Sway

Blades position:	0°	Folding blades:	* Safety position in case snow

### Rain protection

Closed blades efficiently block the rain, directing water into integrated drainage channels.

### Solar protection

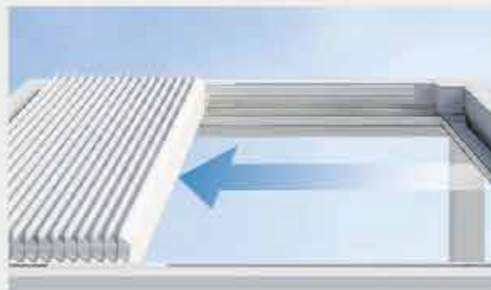
Total block of direct solar radiation – effective and completely safe.

### Ventilation

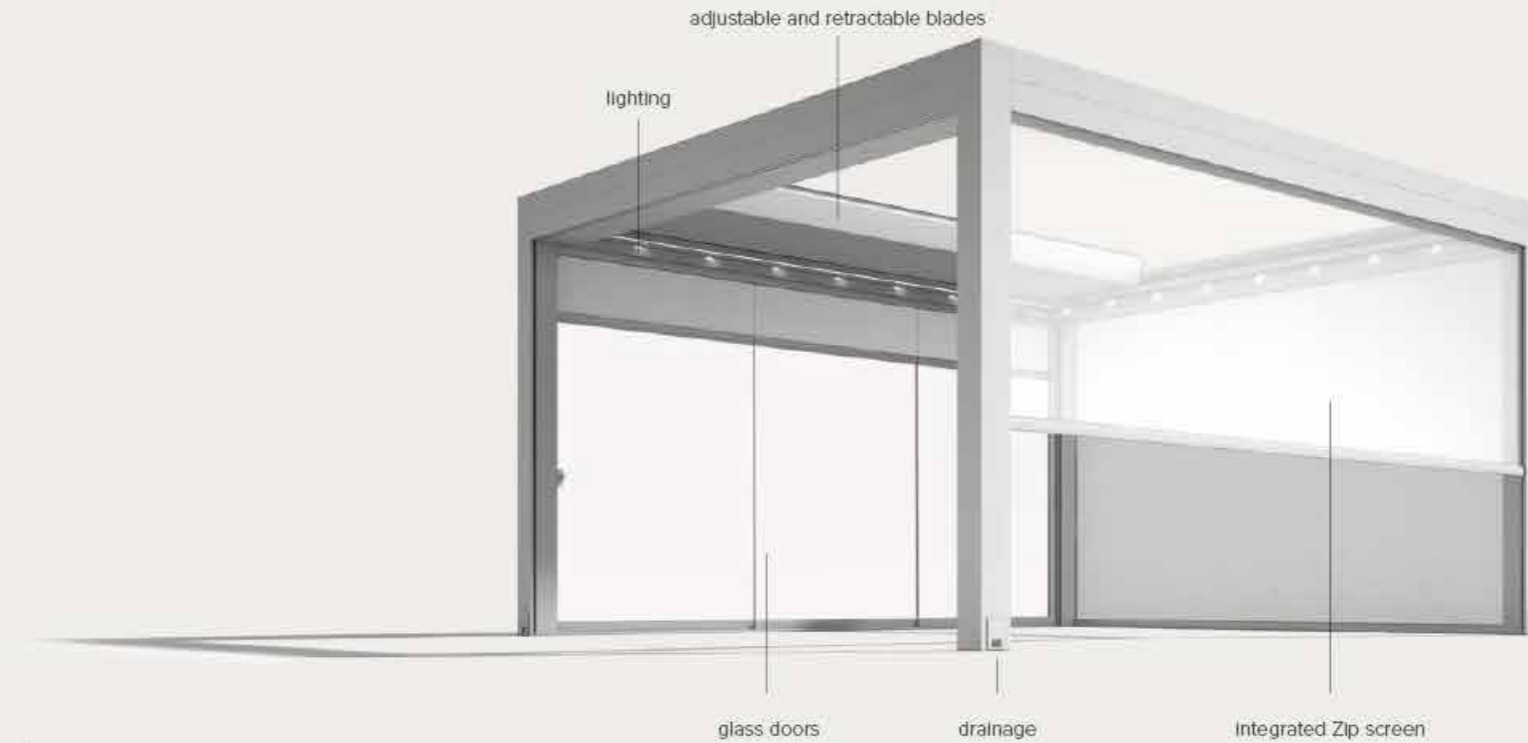
By slightly opening the blades, a natural upward flow of air is created beneath the cover.

### Open sky

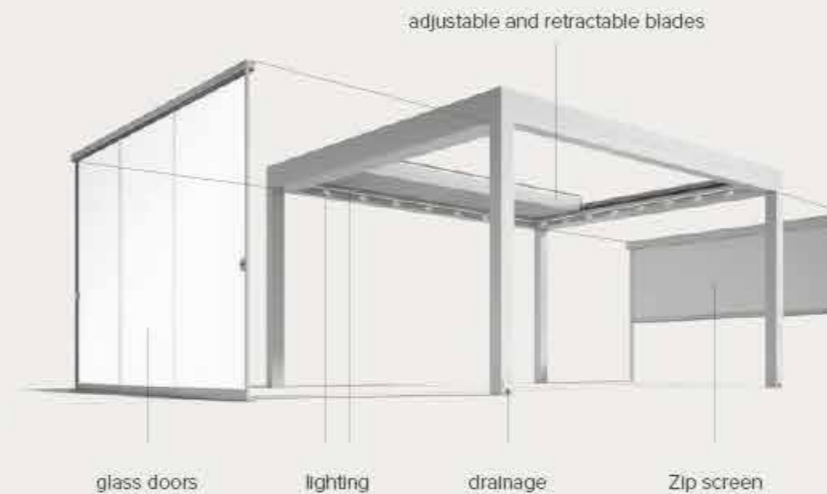
With blades fully retracted, the roof opens entirely – maximum light, maximum view.



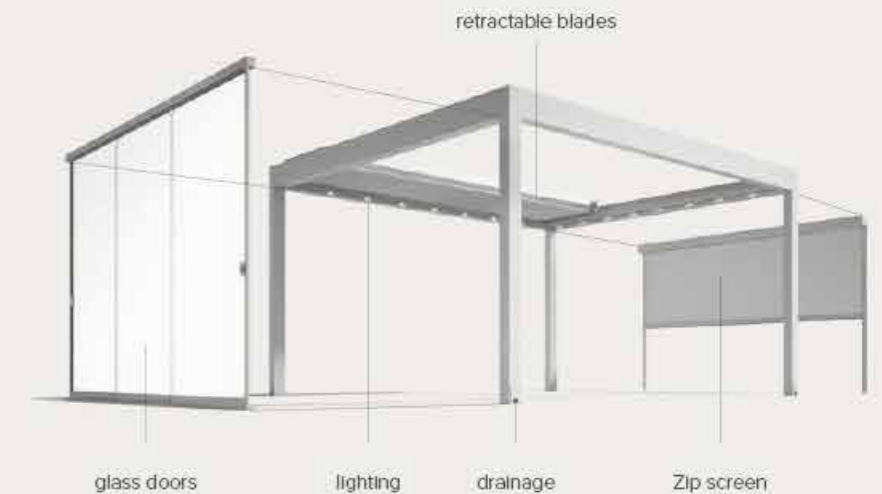
## velvet plus



## velvet



## sway



## BIOCLIMATIC PERGOLAS with adjustable blade cover

Our design works with nature to achieve maximum comfort with minimum energy use. The bioclimatic cover systems with adjustable blades regulate the microclimate of the space beneath by creating natural ventilation. The aluminium blades that form the cover are motor-driven and can rotate from the closed horizontal position – which provides an excellent seal against rain – to an open position, across an angle variable from 0° to 120°.

Solar exposure on the external face of the blade generates warmth, which induces a natural convective movement of air upward through the open blades. You experience a pleasant, cooling breeze without any mechanical intervention – no energy consumed, purely natural. Adjusting the blades modulates the refreshing effect and the sunlight filtering into the space below, giving full control of your microclimate and your own comfort.

Even in rain, protection is complete. The blades are engineered to provide an excellent seal, and rainwater is directed through the posts or integrated drainage columns. A naturally beautiful, efficient, and reliable system – supported by a range of registered patents.

### Varia - Twist - Joy - Movie

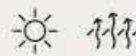
Blades position:

0°



Blades position:

45° - 120°



Blades position:

90°\*



\* Safety position in case snow.

#### Ventilation

The slightly opened blades create a natural flow of air that rises upwards from down below.



#### Solar protection

Total block of direct sun radiation that is completely safe.



#### Protection from rain

The closed blades efficiently block the rain, conveying water into the drainage ducts.

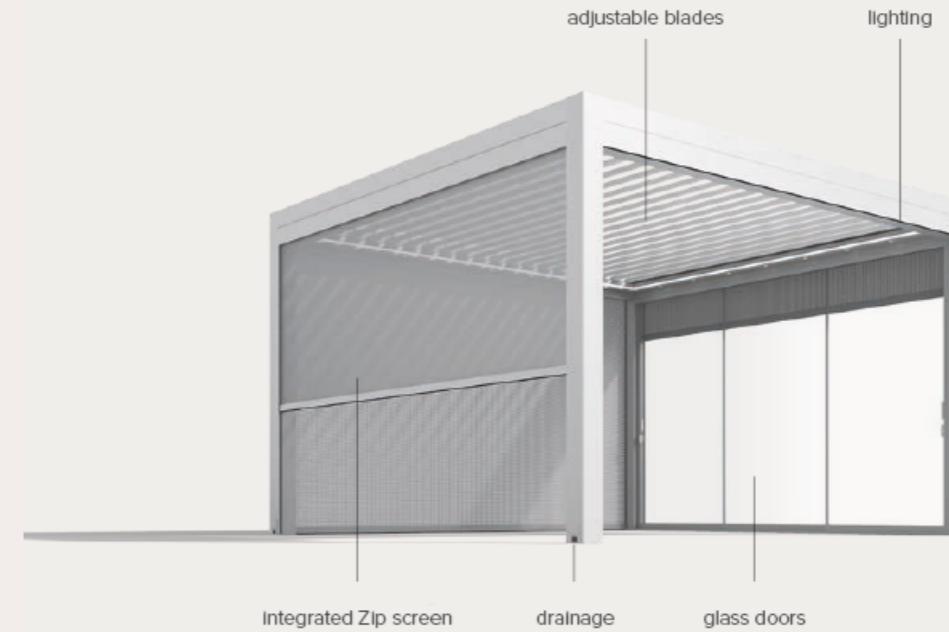


#### Water drainage

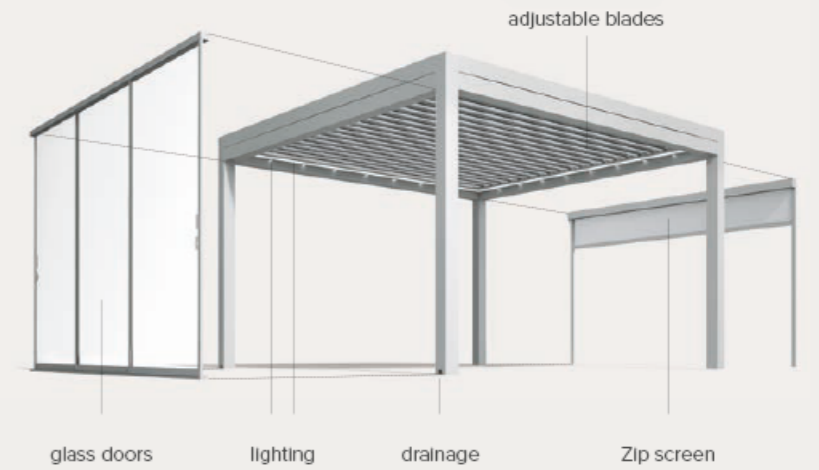
The patented seal between the blades and along the perimeter, as well as their particular shape, make the rainwater efficaciously flow down the drainage ducts.



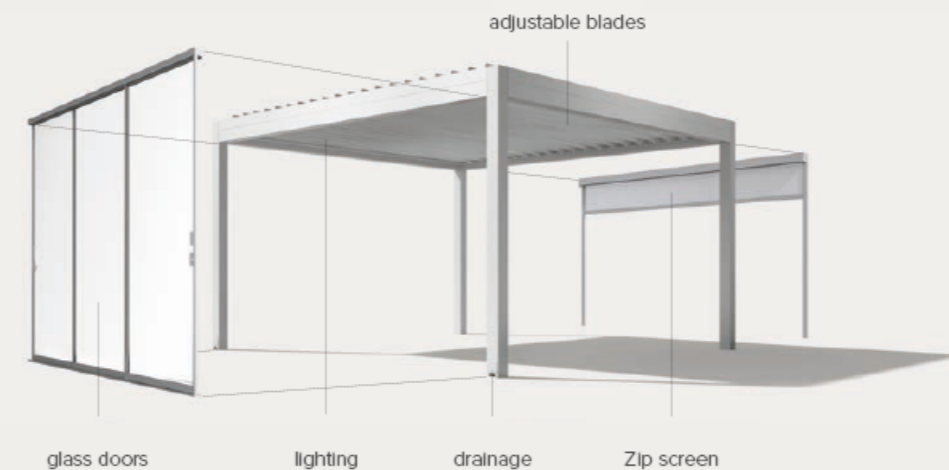
### varia



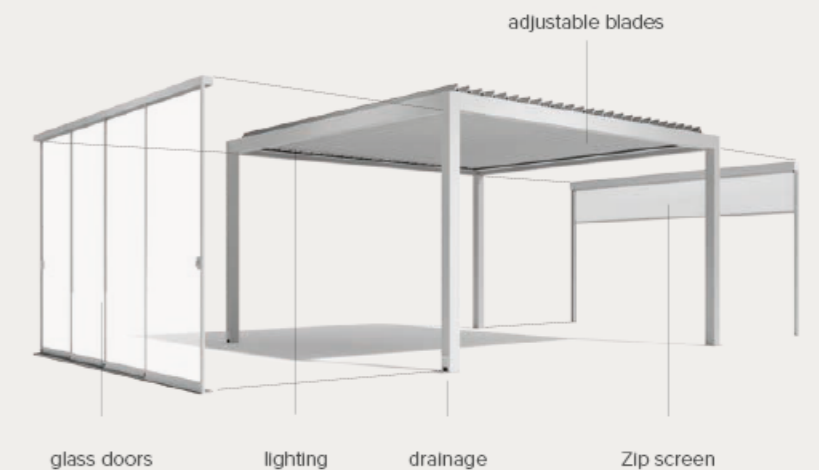
### twist



### joy



### movie



## innovative patents by MS DESIGN



### Velvet Motion

Patented blade movement system for the Velvet Plus and Velvet models. The system allows the opening movement of the blades (orientation) with blades extended, independently from the packaging of the blades.



### Twist Motion

The exclusive and elegant two side-pin rotation movement of the cover blades is patented. The blade movement is synchronised by the thrust of a side bar that moves and drives the lower pin horizontally. The upper pin rises, fastened to a vertical guide, rotating the blade toward the open position. When the blade opens to 90°, the pin lowers to allow the blade to continue rotating to 120°. Available for Varia and Twist.



### Side Seal

Patent describing the perimetral sealing system of the blades, which rest on a seal along the internal border, providing excellent insulation from the external environment. Each blade, along its entire length, also carries a seal that the adjacent blade rests on when closing, keeping out water and air. Available for Velvet Plus, Velvet, Sway, Varia, Twist, Joy, and Movie.



### Quick Blade

Patented fast blade insertion and removal system. Available for Velvet Plus, Velvet, and Sway.



### Blade Seal

Blades sealing system with special multi-fin rubber gasket granting perfect air and waterproofing at every blade-to-blade contact point. Available for Velvet Plus, Velvet, Sway, Varia, Twist, Joy, and Movie.



### Snow Melt

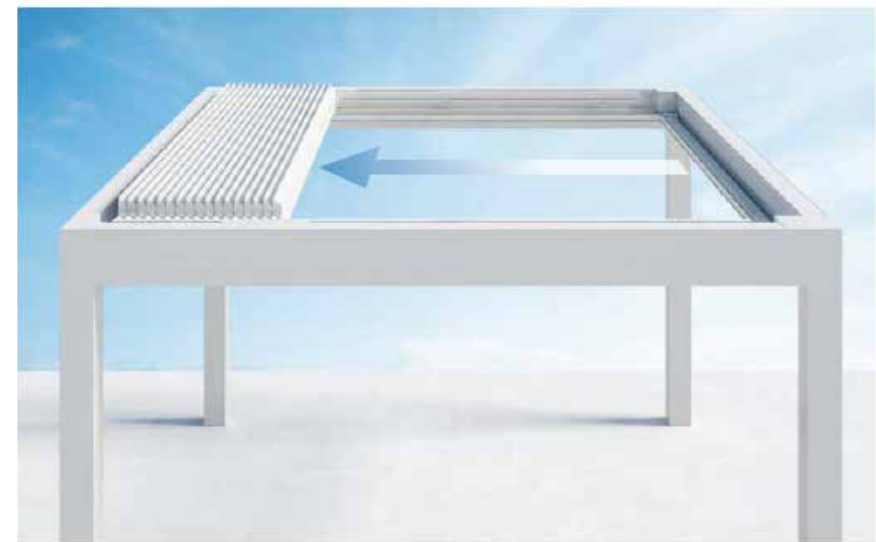
Heating system integrated into the upper surface of the blades, able to prevent snow forming and accumulating on the cover. Allows the cover to remain closed even during snowfall. Available for Varia and Twist.

## velvet plus

Velvet Plus is a modular bioclimatic pergola with an adjustable and fully retractable blade cover, fabricated from powder-coated extruded aluminium. Available in island (free-standing) or leaning configurations.

Velvet Plus has two degrees of blade movement: the blades can rotate in response to the sun's position, or retract completely to open the roof to the sky. The structure fully integrates Zip screens within the profiles – combining functional performance with the clean minimalism of the lines.

Velvet Plus supports the installation of glass doors on the sides for cooler months, and shading zip screens for summer protection.



### velvet plus

**Residential:** private property

**Location:** available on request

**Our product:** Velvet with LED spot lighting



## velvet

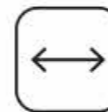
**Residential:** private property

**Location:** available on request

**Our product:** Velvet with LED Spot lighting

Velvet is a modular bioclimatic pergola with an adjustable and retractable blade cover, fabricated from powder-coated extruded aluminium. Available in island or leaning configurations.

Closed blades protect from rain and sun. When opened, they create a pleasant natural ventilation across the covered area; when fully retracted, they open the roof to the sky and flood the space with light. The minimal design integrates perfectly into any architectural context, enhancing it. The structure supports the installation of Zip screens or glass enclosures on the sides.



## sway

**Residential:** private property

**Location:** available on request

**Our product:** Sway multi-module

Sway is a modular bioclimatic pergola with a retractable blade cover, fabricated from powder-coated extruded aluminium. Available in island, leaning, and Wall configurations. The structure is defined by its slender, minimal silhouette - 13 x 13 cm section uprights and a 25 cm perimeter frame.

In a single movement, the blades rotate and compact into a small space, allowing light to flood through. The closed position at 0° provides optimal protection against water and air, thanks to the gasket system mounted on the blade and along the perimeter of the structure. The structure supports the installation of Zip screens or glass door enclosures.





## varia

**Residential:** private property  
**Location:** available on request  
**Our product:** Varia with integrated Zip screens and LED lighting

## varia

Varia is a modular bioclimatic pergola with adjustable aluminium blades, fabricated from powder-coated extruded aluminium. Available in island or leaning configurations.

The structure integrates Zip screens fully within the profile sections - combining functional performance with clean, minimal lines. Varia supports the installation of glass doors on the sides for cooler months, and shading screens for summer sun management.





## twist

**Residential:** private property  
**Location:** available on request  
**Our product:** Twist with LED lighting screens and LED lighting

Twist is a modular bioclimatic pergola with adjustable blades, fabricated from powder-coated extruded aluminium. Available in island or leaning configurations.

Closed blades protect from rain and sun; open blades create a pleasant natural ventilation across the covered space. The minimal design integrates seamlessly into any architectural setting, quietly enhancing it.

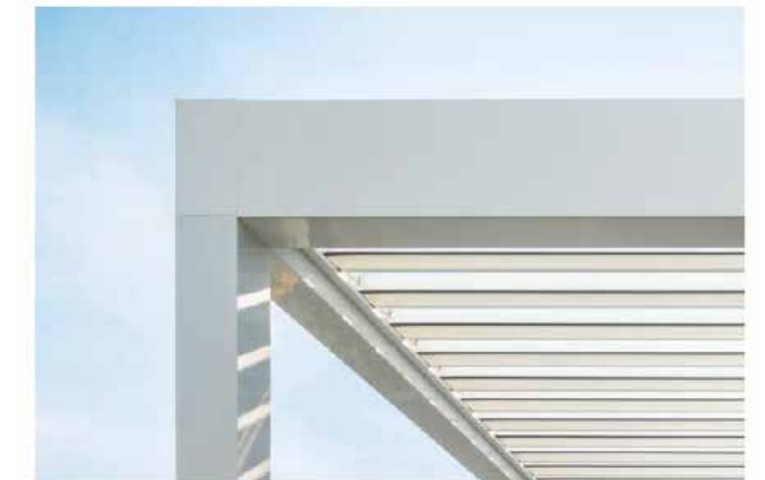


## joy

**Residential:** private property  
**Location:** available on request  
**Our product:** Joy with LED lighting

Joy is a modular bioclimatic pergola with adjustable blades, fabricated from powder-coated extruded aluminium. Available in island or leaning configurations. The structure is built from 13 x 13 cm section uprights and a 25 cm perimeter frame.

The covering blades can be positioned from 0° to 120°. In the closed position, the cover provides full resistance against rain and adverse weather.



## movie

Movie is a smart modular bioclimatic pergola with adjustable blades, fabricated from powder-coated extruded aluminium. Available in island, leaning, and Wall configurations. Its elegant design combines light volumes with essential lines – enhancing outdoor spaces and making them genuinely welcoming.

Movie is fully connected and compatible with home automation systems. As long as the home Wi-Fi network reaches the pergola, it can be controlled via smart device. The blade movement can be integrated directly into the building's automation system without the need for additional control units.



## movie

**Residential:** commercial  
**Location:** available on request  
**Our product:** Movie with LED lighting

# modularity and design

Maximum flexibility of solutions and modules.

Design by playing with the versatile modular system. Total freedom to assemble customisable modules across a vast range of possible combinations. Maximum design flexibility.

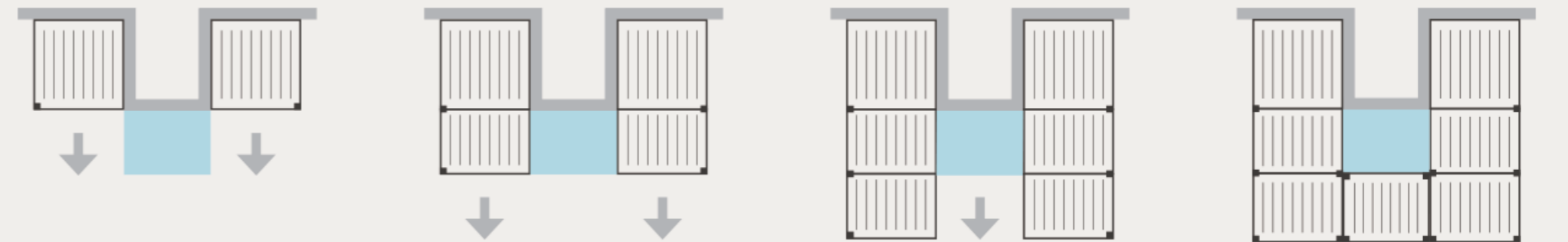
Our bioclimatic pergola range is equipped with the ideal mobile cover system for any designer seeking freedom of expression and flexibility in outdoor projects. The MS Design team works with architects and designers to find the optimal solution for every space - from a compact terrace to a large commercial installation



"Wherever you imagine it - we can build it."

## possible configurations for a project

Unlimited configuration solutions are possible. The following examples illustrate a selection for those planning protected outdoor spaces.



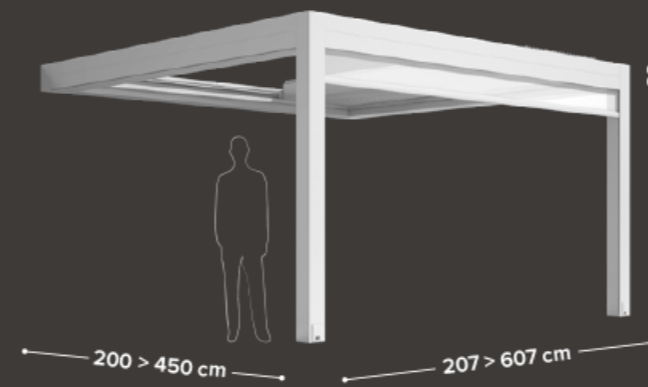
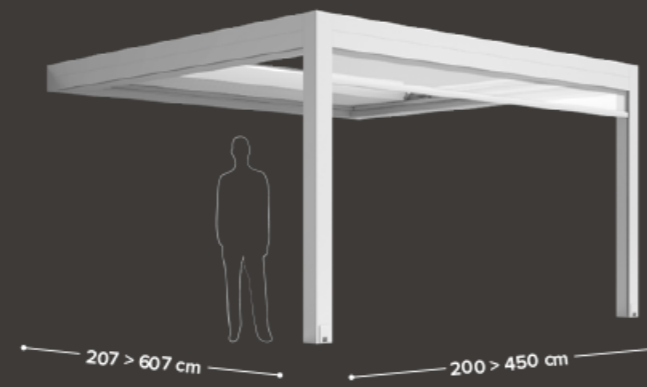
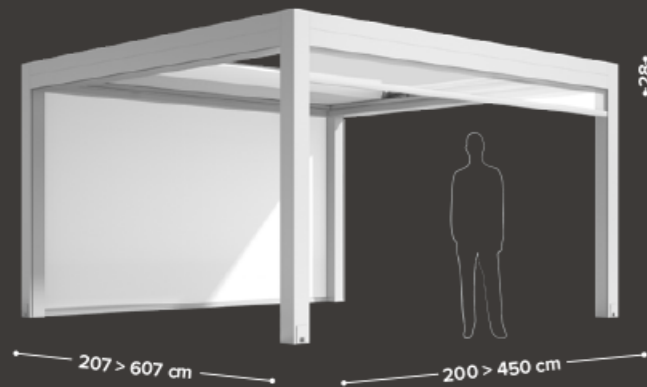
# CONFIGURATIONS RETRACTABLE BLADES

## velvet plus

**ISLAND**  
basic module 4 posts

**FRONT LEANING**  
basic module 2 posts

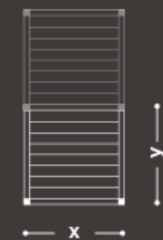
**LATERAL LEANING**  
basic module 2 posts



basic module 4 posts

coupled module 2 posts

coupled module 2 posts



x 200 → 450 cm  
y 207 → 607 cm

x 200 → 450 cm  
y 190 → 590 cm

x 200 → 450 cm  
y 207 → 607 cm



y	z
207/190 cm	40 cm
307/290 cm	65 cm
407/390 cm	90 cm
507/490 cm	115 cm
607/590 cm	140 cm

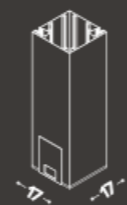
y = pergola project  
z = blades folding stack

Velvet Plus - Varia

Velvet - Twist

Joy - Sway

Movie

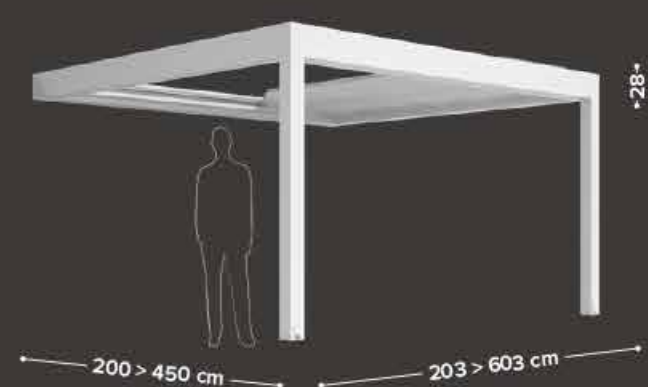
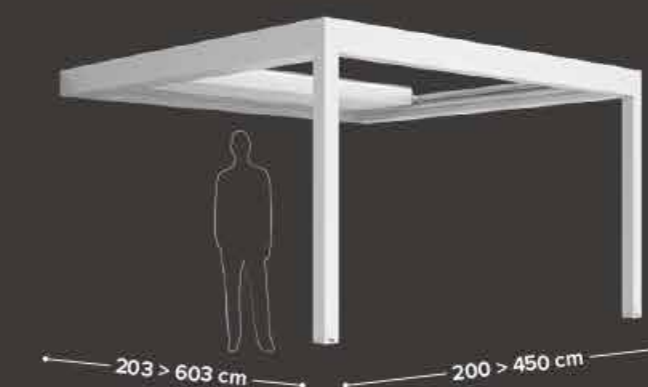
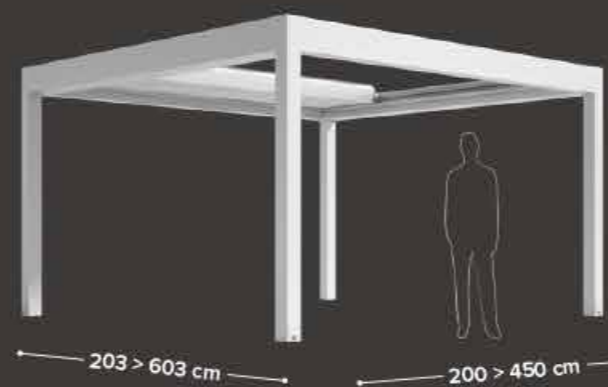


## velvet

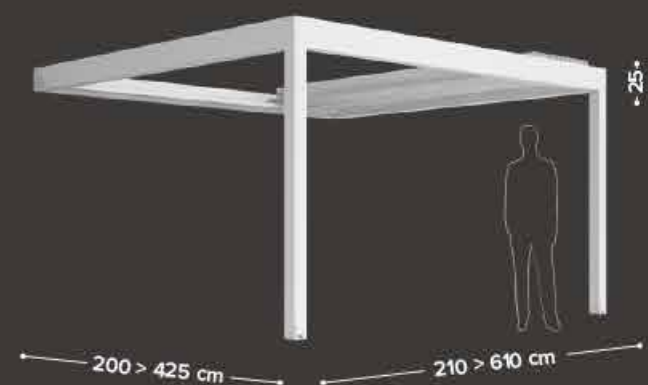
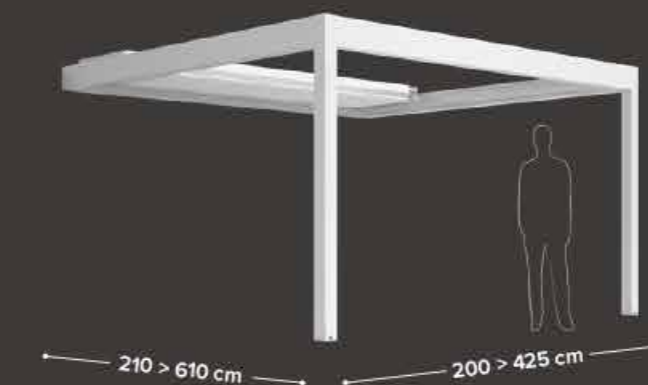
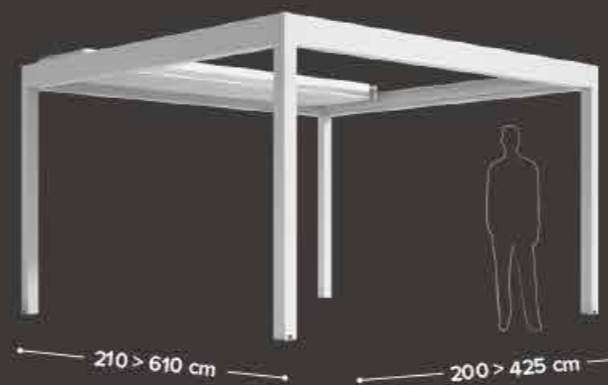
**ISLAND**  
basic module 4 posts

**FRONT LEANING**  
basic module 2 posts

**LATERAL LEANING**  
basic module 2 posts



## sway



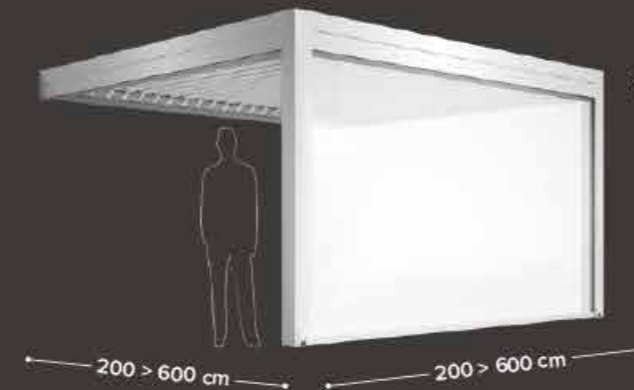
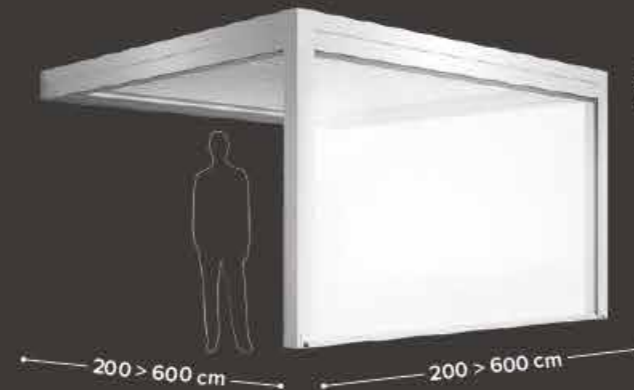
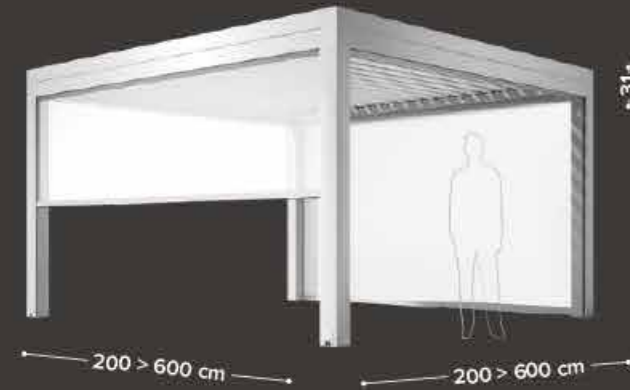
## CONFIGURATIONS ADJUSTABLE BLADES

### varia

ISLAND\*  
basic module 4 posts

FRONT LEANING\*  
basic module 2 posts

LATERAL LEANING\*  
basic module 4 posts



basic module 4 posts

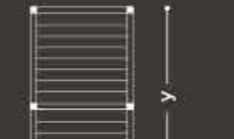
coupled module 2 posts

coupled module 2 posts

basic module 6 posts

coupled module 3 posts

coupled module 4 posts



x 200 → 600 cm  
y 200 → 600 cm

x 200 → 600 cm  
y 200 → 600 cm

x 200 → 600 cm  
y 183 → 583 cm

x 200 → 600 cm  
y 620 → 740 cm

x 200 → 600 cm  
y 620 → 740 cm

x 200 → 600 cm  
y 603 → 723 cm

\* The limit dimensions may refer to either the standard blade or the XL blade. For specifications, please refer to the current price list.

### twist

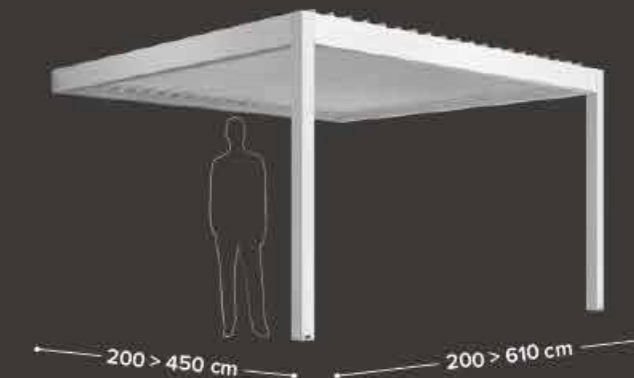
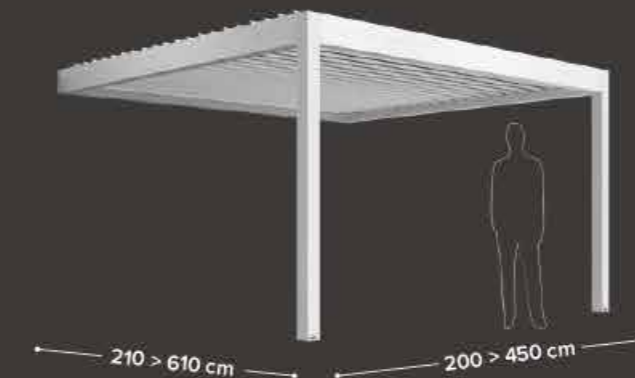
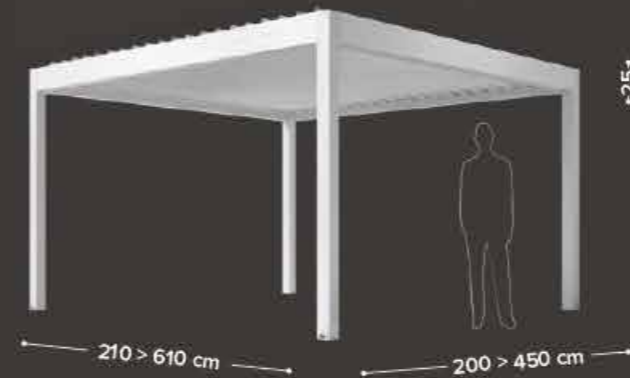
ISLAND\*  
basic module 4 posts

FRONT LEANING\*  
basic module 2 posts

LATERAL LEANING\*  
basic module 2 posts



### joy

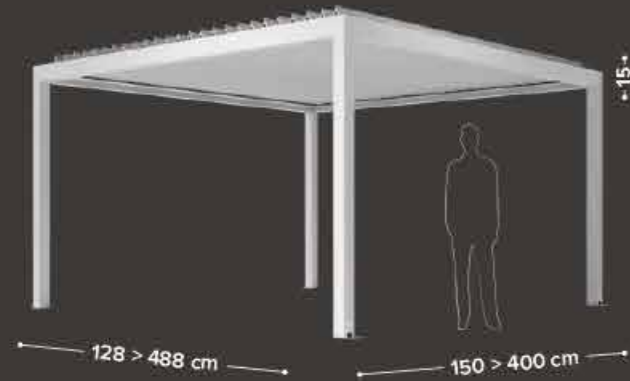


For coupled modules of Twist and Joy please refer to the current price list

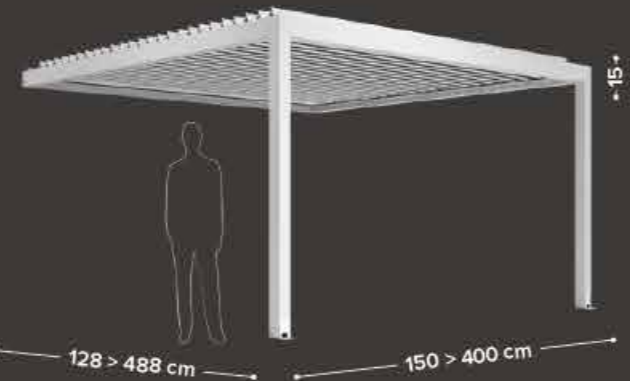
## CONFIGURATIONS ADJUSTABLE BLADES

### movie

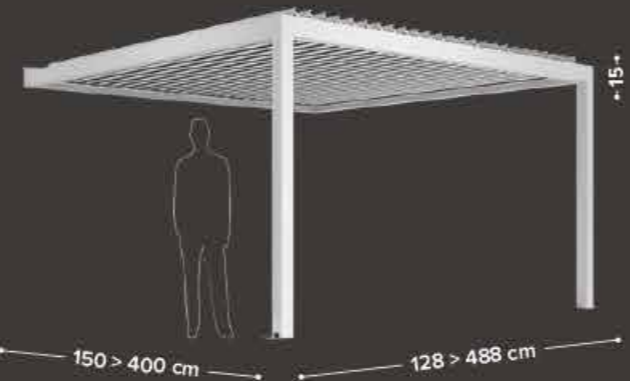
ISLAND  
basic module 4 posts



FRONT LEANING  
basic module 2 posts



LATERAL LEANING  
basic module 2 posts



basic module 4 posts



x 150 → 400 cm  
y 128 → 488 cm

coupled module 2 posts



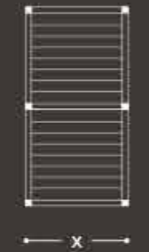
x 150 → 400 cm  
y 128 → 488 cm

coupled module 2 posts



x 150 → 400 cm  
y 128 → 488 cm

basic module 6 posts



x 150 → 400 cm  
y 503 → 608 cm

coupled module 3 posts



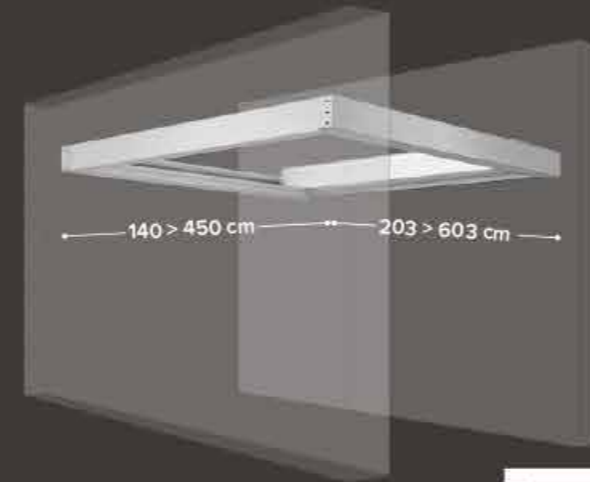
x 150 → 400 cm  
y 503 → 608 cm

coupled module 4 posts

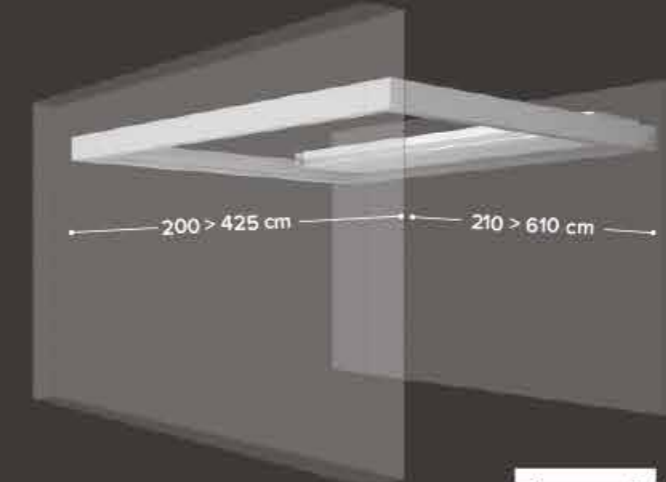


x 150 → 400 cm  
y 503 → 608 cm

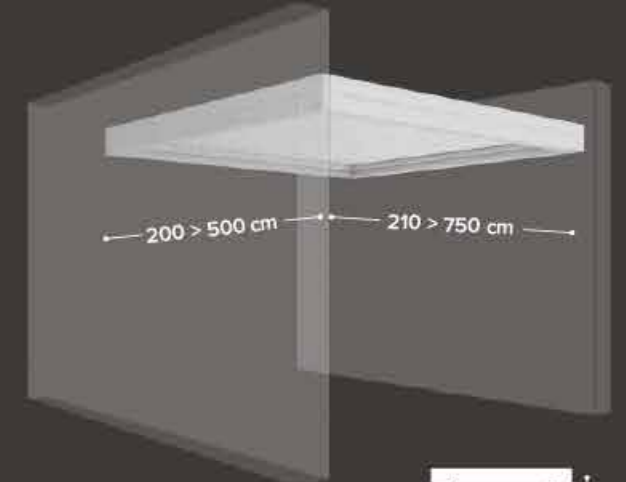
## CONFIGURATIONS WALL



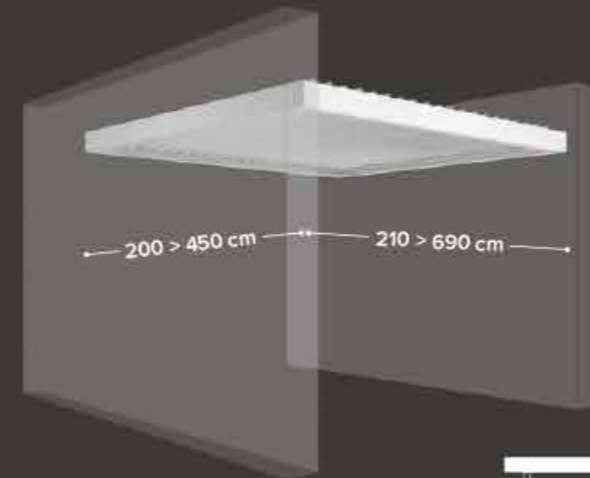
VELVET  
1 basic module



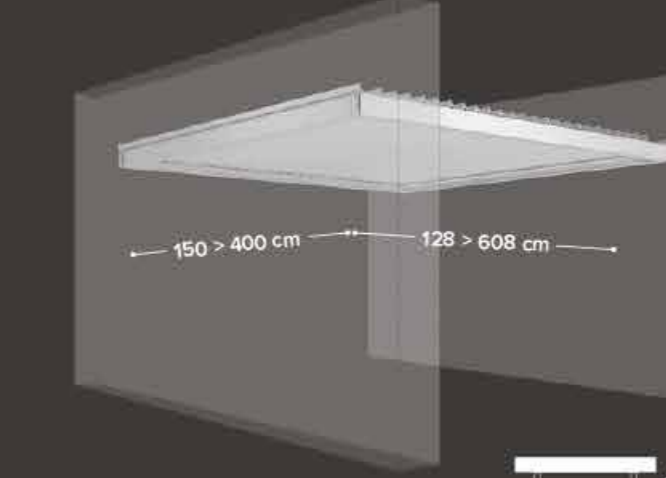
SWAY WALL  
1 basic module



TWIST WALL  
1 basic module



JOY WALL  
1 basic module



MOVIE WALL  
1 basic module



## ACCESSORIES

### deck – modular flooring

Deck is a modular platform system that creates an even, stable surface beneath the pergola, with the flexibility to install different types of flooring to match the project's design style. It can be laid without permanent fixings to the ground and is designed to integrate with Glisse sliding glass panels, ensuring visual and aesthetic continuity. Adjustable elements, supports, and integrated lighting solutions complete the system – allowing precise, refined customisation of the outdoor space.



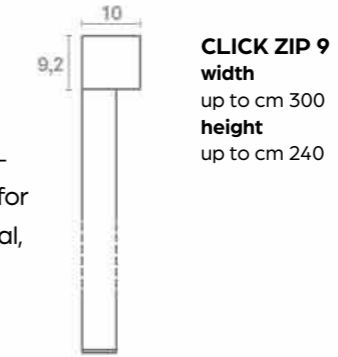
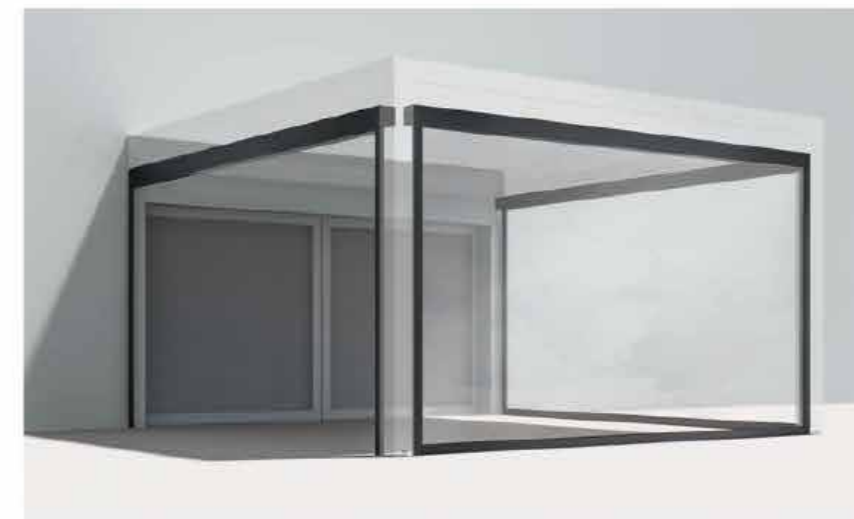
### soft – draped curtain

Soft is a draped curtain designed to add shade, comfort, and warmth to the space beneath the pergola. Made from Parà Tempotest fabric, it glides smoothly along its track via integrated hooks and sliders. Available as a single unit up to 290 cm in height, or in two panels for widths over 350 cm. Complete with coordinated ties and spare accessories, Soft offers soft light control and a warm, inviting atmosphere.

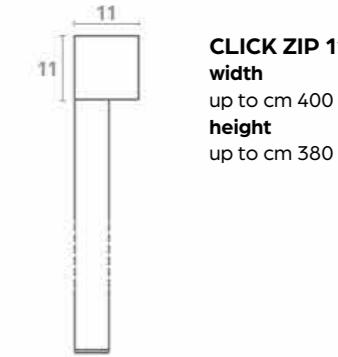


### zip screens

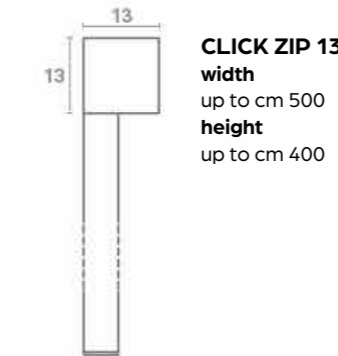
For Velvet, Sway, Twist, Joy, and Movie – depending on your protection requirements – our range of Zip screens offers several models, all featuring zip-retention technology for a clean, draught-free seal. Fabric options include blackout, shading, transparent Cristal, and insect screen. Dimension limits may vary according to the fabric selected.



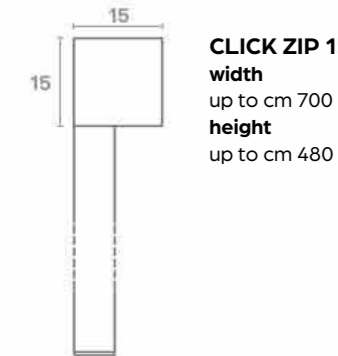
**CLICK ZIP 9**  
width  
up to cm 300  
height  
up to cm 240



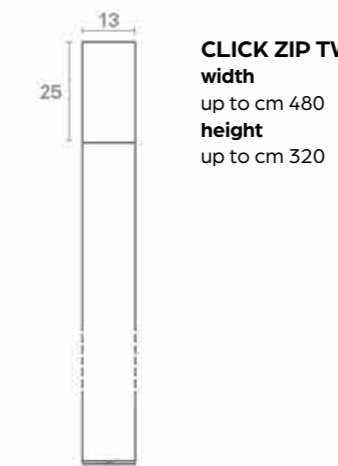
**CLICK ZIP 11**  
width  
up to cm 400  
height  
up to cm 380



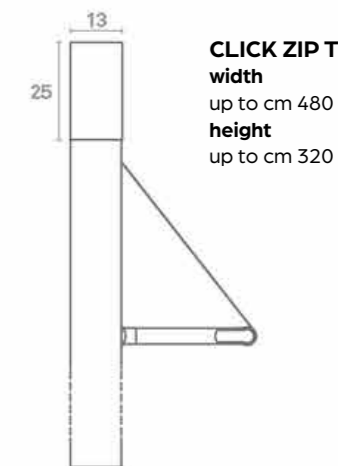
**CLICK ZIP 13**  
width  
up to cm 500  
height  
up to cm 400



**CLICK ZIP 15**  
width  
up to cm 700  
height  
up to cm 480



**CLICK ZIP TWIN**  
width  
up to cm 480  
height  
up to cm 320



**CLICK ZIP TWIN BG**  
width  
up to cm 480  
height  
up to cm 320

## ACCESSORIES

### glisse glass doors

Glisse is characterised by exceptional attention to finish and material quality – tempered safety glass (available in extra-clear, satin, mirrored, or smoked) combined with a powder-coated aluminium structure and anodised aluminium track rails. Each tempered glass panel (10 or 12 mm) slides on parallel aluminium rails via two carriages, allowing a smooth, silent movement.

Available in 2, 3, 4, and 5 rail configurations up to a maximum of 10 panels, with lateral or central opening options. Aluminium handles make panel operation effortless. The rails are designed to drain condensation efficiently. Noise insulation up to 19 dB.

**Standard finish:** White RAL 9010 Satin (unless otherwise specified)

**Additional finishes:** Available on request – see colour range on page 34

**Lower rail and tracks:** Anodised aluminium



#### SIDE OPENING

internal panel on the left (standard)

**2 panels / 2 tracks**  
min. W cm 125  
max. W cm 300



**3 panels / 3 tracks**  
min. W cm 179  
max. W cm 440



**4 panels / 4 tracks**  
min. W cm 232  
max. W cm 600



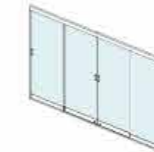
**5 panels / 5 tracks**  
min. W cm 286  
max. W cm 720



#### CENTRAL OPENING

internal panels on the side

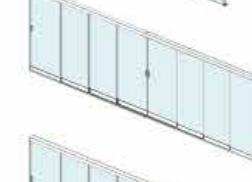
**4 panels / 2 tracks**  
min. W cm 245  
max. W cm 600



**6 panels / 3 tracks**  
min. W cm 352  
max. W cm 860



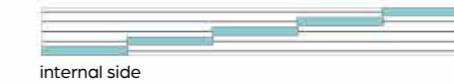
**8 panels / 4 tracks**  
min. W cm 459  
max. W cm 1160



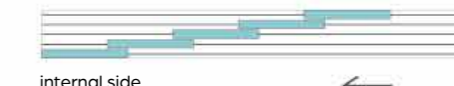
**10 panels / 5 tracks**  
min. W cm 566  
max. W cm 1280



#### Folding panels – side opening



internal side



internal side

#### Side folding panels – central opening



internal side



internal side

#### Central folding panels – central opening



internal side

#### Dragging Handle

The rectangular anodized aluminium dragging handle is standard supplied on the inner side of the glass wall. Optional: additional handle on the outside.



#### Lock – optional

Lock with knob on the inner side. Lock with key on the outer side and knob on the inner side, in satin-finished steel.



#### Anodized aluminium tank rails

Standard equipped with sealing gasket between the panels to improve weather resistance.



#### Lower locking – optional

Lower locking with single lever, in silver colour (on the inner side). Lower locking with double lever, in silver colour (on the inner and outer side).



## ACCESSORIES lighting system

Our bioclimatic pergola systems extend your outdoor moments well beyond sunset. The emotion of light from every angle – perimetral light that defines the space; chromatic variation that transforms the mood; precise distributed illumination that makes the pergola work at night as well as by day. All solutions are low energy consumption, thanks to LED technology throughout.

### LED Spotlights – Blade-Integrated

Rectangular LED spotlights, 3 Watts per point, integrated inside the louvred blades. Optimal light distribution across the entire covered surface is achieved by inserting an illuminated blade at every fourth or fifth position, with spotlights spaced at 50 cm intervals along each blade. Available on all models.

### LED Spotlights – Gutter-integrated

Rectangular LED spotlights integrable inside the internal perimeter gutter of the structure, on every side. Spaced at 50 cm intervals, with each point consuming 3 Watts. Available for Varia, Twist, Velvet, Velvet Plus, and Sway.

### Strip LED RGB

RGB LED strips applied along the internal perimeter of the structure. Projects an even light that creates evocative colour effects – set to a single colour or programmed for continuous colour variation via remote control. Available on all models.

**Colour temperature:** 4,000 K (WHITE) – 2,700 K or 3,000 K warm light available on request



## Sound system

Integrated audio installation with Bluetooth connectivity and loudspeakers. The system comprises a base unit and one or more peripheral units according to the number of pergola modules – each peripheral unit incorporates two speakers. Audio modules are integrated within the blades for Varia and Twist. For all other models, external units fixed to the posts are available.



French Schuko



European Schuko



Doble USB



## Electrical Sockets

Electrical sockets are supplied pre-installed within the posts. Unless otherwise specified, they are positioned at 40 cm from the footplate. Available in European Schuko and French Schuko, as well as dual USB formats. Client is responsible for cabling to the structure.



## MS DESIGN app

New Wi-Fi interface for remote automation control. The compatible apps allow simultaneous control by multiple users and full remote operation – there is no need to be near the structure. Simply connect to the home Wi-Fi router. The system is compatible with Google Assistant and Amazon Alexa for voice control and the creation of complex automated routines.

## Misting System



Steam nebulising system integrated into the perimeter of the structure. Water is pressurised via a high-pressure pump and released through patented nebulising nozzles, creating an ultra-fine mist of droplets smaller than 10 microns. As these droplets evaporate, they rapidly absorb the surrounding heat – providing natural cooling without mechanical refrigeration.

## TECHNICAL DATA

### frame colours

#### Powder coating and aluminium treatment

All aluminium used in our products receives a preventive surface treatment prior to powder coating, fixing the finish to the cleaned surface and slowing the effects of weathering and salt spray. Powder coating further increases protection against corrosion and aggressive external agents, with highly sophisticated mechanical properties. Paint quality and durability are Qualicoat certified.

**N.B.** For combinations and availability, always refer to the MS DESIGN price list in force.



## wind resistance

Maximum total wind load per square metre of awning [kg/m<sup>2</sup>]. In each available dimension, the load values exceed the requirement corresponding to Class 4 of EN 13561 – EN 1932. Velvet Plus achieves minimum Class 5.



## snow load resistance

Maximum total wind load per square metre of awning [kg/m<sup>2</sup>]. In each available dimension, the load values exceed the requirement corresponding to Class 4 of EN 13561 – EN 1932. Velvet Plus achieves minimum Class 5.

## blade insulation – optional

#### Optional: internal insulation of the blades

Internal insulation of the blades using extruded expanded polystyrene reduces sound energy generated by rain impact on the blades by 70% (-5,6 dB). Results from a controlled test simulating heavy rain on an 800 x 500 cm structure, with measurement taken 50 cm below the underside of the blades.



## automatisms / remote control

#### Structure remote control

Portable 6+3 channel transmitter with wall-mounting clip. Controls: blade orientation; LED Spot on/off and intensity; RGB colour scenarios; lateral Zip screen operation.

#### Snow-rain detector

The snow condition is determined when temperature falls below 2°C and the rain detector registers high humidity. This triggers the blades to move to the vertical position to prevent weight accumulation on the closed blades. Above 2°C, the blades close automatically. In rain, the covering blades close automatically. Integrated heating in the sensor prevents false readings caused by ice or frost.

#### Wind detector

If wind speed exceeds the set threshold, the blades automatically position at 45°. The blades close again when speed returns below the set level.

#### Sun-wind sensor (Nosy)

Wireless sensor with battery recharge via solar panel.

## MS DESIGN – our quality



From the awning to the technical details, from production to the client: MS DESIGN total quality is excellence in fabrics, mechanisms and production up to assistance and competence in the points of sale.



For any specific information a MS DESIGN Atelier dealer will be at your disposal: to make an on-site consultation and to prepare an accurate quotation.



Certified safety of a solid and robust pergola, at the forefront with regard to European Union standards. CE/UKCA mark, obligatory for pergola according to what is set forth in the European EN 13561 standard. MS DESIGN tests all awnings to check they resist to wind in accordance to the EN 13561 standard. Wind classification: class 4.



A collection of 600 designs, which can be coordinated with the other parts of the structure. Countless opportunities for a made-to-measure awning like the ones of an Italian tailor.

- Fabric treated with TELFON to make them resistant to sun, rain, smog and mould.
- Sewn with TENARA thread, guaranteed for 10 years against wear.
- Two series of specific filtering PVC for total protection from sun and rain.
- Fabrics in polyester for better performance.
- Screen and Soltis to protect yourself from the sun without renouncing the light.



MS DESIGN makes use of holographic anti-counterfeit security technology and a unique alphanumeric code. It is the unmistakable signature of the authenticity and quality of MS DESIGN. A system that protects the end user, guaranteeing maximum transparency since originality, place of origin and quality of materials are well declared.



We are the first to be satisfied and certain of the quality of our products, for this reason we give you a five-year guarantee. The guarantee terms are specified in detail in the "use and maintenance" manual that accompanies each product.



Cutting edge manufacturing technologies and craftsmanlike attention for the finishing, for the mechanisms that last and work over time.

- Light aluminium alloy structure
- Stainless steel components
- Chromate-treated aluminium to protect even the most remote and hidden parts from the aggression of external agents.



ISO 9001 certification attests that the company's quality management system has been recognised as meeting a standard of excellence. ISO 45001 certification ensures that the management system complies with the relevant standard and informs employees and the public that the company protects the health and safety of its workers by providing organisational, instrumental and economic resources.

**PRODUCT CHART**

Key: = Standard • = Available on request – = Not available

Technical Characteristics	Velvet Plus	Velvet	Sway
Bespoke sizing	Yes	Yes	Yes
Maximum module size	450 × 607 cm	450 × 603 cm	425 × 610 cm
Standard post height	240 cm (max 300 cm)	240 cm (max 300 cm)	240 cm (max 300 cm)
Post dimensions	17 × 17cm	15 × 15cm	13 × 13cm
Frame height	28cm	28cm	25cm
Blade section dimension	4.3 × 23.7 cm	4.3 × 23.7 cm	4.3 × 23.7 cm
Blade rotation angle	0°–85°	0°–85°	—
Sealed blade closure	•	•	•
Blade insulation	•	•	•
Modularity	✓	✓	✓
Configurations	Island, front leaning, side leaning	Island, front leaning, side leaning	Island, front leaning, side leaning, Wall
Blade movement	2 linear motors (adjustable), 2 geared motors (retractable)	2 linear motors (adjustable), 2 geared motors (retractable)	1 tubular motor (retractable)
Integrated side screen movement	Tubular radio motor, IO tubular motor, standard tubular motor	—	—
Structure remote control	Radio 6+3 channels, 7 functions per channel	Radio 6+3 channels, 7 functions per channel	Radio 6+3 channels, 7 functions per channel
Integrated side screen remote	Radio, IO, 6 radio channels, 42 functions	—	—
Integrated water drain	✓	✓	✓
Operating temperature	–10°/+50°	–10°/+50°	–10°/+50°
Protection levels	Linear motor IP66, control units IP54–IP55, feeders IP67, tubular motors IP44	Linear motor IP66, control units IP54–IP55, feeders IP67	Tubular motor IP44, control units IP54–IP55, feeders IP67
LED light colour temperature	•	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request

**PRODUCT CHART**

Key: = Standard • = Available on request – = Not available

Zip Screens	Velvet Plus	Velvet	Sway
Zip Screens	•	•	•
Integrated Zip screens	•	—	—
Glass door closures	•	•	•
Lighting	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, perimetral LED spots, perimetral RGB strip
Wind detector	•	•	•
Rain detector	•	•	•
Snow detector	•	•	•
Temperature sensor	•	•	•
Integrated audio system	—	—	—
Misting system	—	—	•
Smart control (app)	Gibus Connect (Daisy)/ MS DESIGN Remote (T-Mate)	•	Daisy × 24V / MS DESIGN R. × 230V
Heaters	•	•	•
External sound system	•	•	•
Applique spotlights	•	•	•

## PRODUCT CHART

Key: = Standard • = Available on request – = Not available

Item	Velvet Plus	Velvet	Sway
Patents	Velvet Motion, Quick Blade, Blade Seal, Side Seal, Inner Guide, Quick Assembly	Velvet Motion, Quick Blade, Blade Seal, Side Seal, Quick Assembly	Quick Blade, Blade Seal, Side Seal, Quick Assembly, Fast Coupling
Wind resistance (EN 13561)	Min. Class 5 – Beaufort 8–12	Min. Class 4 – Beaufort 7–12	Min. Class 4 – Beaufort 7–12
Snow load resistance	✓ (without wind)	✓ (without wind)	✓ (without wind)
5-year warranty	✓	✓	✓
Traceability hologram	✓	•	–
Materials	Aluminium alloys, stainless steel	Aluminium alloys, stainless steel	Aluminium alloys, stainless steel
Powder coatings	See colour range – page 34	See colour range – page 34	See colour range – page 34
Certifications	Velvet Plus	Velvet	Sway
Qualicoat: painting certification	•	•	•
CE / UKCA mark – EN 13561, CPR 305/11, Machine Directive 2006/42/EC, NT EN 60335-1, EN 60335-2-97	•	•	•
Structural calculations according to EUROCODES	•	•	•
Calculations according to NTC 2018–CNR technical construction regulations	•	•	•
Earthquake-resistant construction per NTC 2018–CNR and EUROCODES	•	•	•
EN 60598: LED lights certification	•	•	•
EN 62031: Safety Specification LED Lighting certification	•	•	•
EN 14501: blade gtot certification	•	•	•
EN 14501: fabric gtot certification	•	•	•

## PRODUCT CHART

Key: = Standard • = Available on request – = Not available

Technical Characteristics	Varia	Twist	Joy	Movie
Bespoke sizing	Yes	Yes	Yes	Yes
Max module size	500 × 740 cm (XL: 600 × 720 cm)	500 × 750 cm (XL: 600 × 710 cm)	450 × 690 cm	400 × 608 cm
Standard post height	240 cm (max 300 cm)	240 cm (max 300 cm)	240 cm (max 300 cm)	240 cm (max 280 cm)
Post dimensions	17 × 17 cm	15 × 15 cm	13 × 13 cm	11 × 11 cm
Frame height	31 cm	31 cm	25 cm	15 cm
Blade section dimension	4.3 × 23.7 cm / XL: 6.5 × 25.2 cm	4.3 × 23.7 cm / XL: 6.5 × 25.2 cm	4.25 × 23.7 cm	3.5 × 17.4 cm
Blade rotation angle	0°–120°	0°–120°	0°–120°	0°–115°
Sealed blade closure	•	•	•	•
Blade insulation	•	•	•	•
Modularity	✓	✓	✓	✓
Configurations	Island, front leaning, side leaning	Island, front leaning, side leaning, Wall	Island, front leaning, side leaning, Wall	Island, front leaning, side leaning, Wall
Blade movement	2 linear motors	2 linear motors	2 linear motors	1 linear motor
Integrated side screen movement	Tubular radio motor, IO tubular motor, standard tubular motor	–	–	–
Structure remote control	Radio 6+3 channels, 7 functions per channel / Radio IO, 6 channels, 42 functions	Radio 6+3 channels, 7 functions per channel	Radio 6+3 channels, 7 functions per channel	Radio 6 channels
Integrated side screen remote	Radio, IO, 6 channels, 42 functions	–	–	–
Integrated water drain	✓	✓	✓	✓
Operating temperature	–10°/+50°	–10°/+50°	–10°/+50°	–10°/+50°
Protection levels	Linear motor IP66, control units IP54–IP55, feeders IP67, tubular motors IP44	Linear motor IP66, control units IP54–IP55, feeders IP67	Linear motor IP66, control units IP54–IP55, feeders IP67	Linear motor IP69K, control units IP66
LED light colour temperature	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request	4,000 K (WHITE) – 2,700 K & 3,000 K warm on request

## PRODUCT CHART

Key: = Standard • = Available on request – = Not available

Technical Characteristics	Varia	Twist	Joy	Movie
Zip screens	•	•	•	•
Integrated Zip screens	•	—	—	—
Glass door closures	•	•	•	•
Lighting	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, RGB strip	Blade LED spots, RGB strip
Wind detector	•	•	•	•
Rain detector	•	•	•	•
Snow detector	•	•	•	—
Temperature sensor	•	•	—	—
Integrated audio system	•	•	—	—
Misting system	•	•	•	—
Our smart control (app)	Compatible	Compatible	Compatible	Compatible
Heaters	2 linear motors	2 linear motors	2 linear motors	1 linear motor
External sound system	•	•	•	•
Glass door closures	•	•	—	—

## PRODUCT CHART

Key: = Standard • = Available on request – = Not available

Technical Characteristics	Varia	Twist	Joy	Movie
Zip screens	•	•	•	•
Integrated Zip screens	•	—	—	—
Glass door closures	•	•	•	•
Lighting	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, perimetral LED spots, perimetral RGB strip	Blade LED spots, RGB strip	Blade LED spots, RGB strip
Wind detector	•	•	•	•
Rain detector	•	•	•	•
Snow detector	•	•	•	—
Temperature sensor	•	•	—	—
Integrated audio system	•	•	—	—
Misting system	•	•	•	—
Our smart control (app)	Compatible	Compatible	Compatible	Compatible
Heaters	2 linear motors	2 linear motors	2 linear motors	1 linear motor
External sound system	•	•	•	•
Glass door closures	•	•	—	—
Warranties, Patents & Certifications	Varia	Twist	Joy	Movie
Patents	Blade Seal, Twist Motion, Side Seal, Inner Guide, Quick Assembly, Snow Melt, Safe Blade	Blade Seal, Twist Motion, Side Seal, Quick Assembly, Snow Melt, Safe Blade	Blade Seal, Side Seal, Quick Assembly	Smart Pin, Screw Cap, Blade Seal, Side Seal, Quick Assembly
Wind resistance (EN 13561)	Min. Class 4 – Beaufort 7–12	Min. Class 4 – Beaufort 7–12	Min. Class 4 – Beaufort 7–12	Min. Class 3 – Beaufort 6–12
Snow load resistance	✓ (without wind)	✓ (without wind)	✓ (without wind)	✓ (without wind)
Registered design	—	—	•	•
5-year warranty	✓	✓	✓	✓
Traceability hologram	✓	✓	✓	✓
Materials	Aluminium alloys	Aluminium alloys	Aluminium alloys	Aluminium alloys
Powder coatings	See colour range – page 34	See colour range – page 34	See colour range – page 34	See colour range – page 34



# bioclimatic pergola systems

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