

ALUPROF

SUN SHADING SOLUTIONS



 Technical supplement - PERGOLAS

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PERGOLA SB 400

THE SB 400 pergola is a functional, attractive construction kit with a fixed roof consisting of rotating slats, which provides protection from both sun and rain. The system is available in a single-module version and a multi-module version by connecting individual modules.

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and steel components
- Structure equipped with a drainage system
- No roof pitch
- Electrically controlled rotation of roof blades (230V AC motor, 24V DC motor)
- Option to use weather-dependent automation
- Waterproofing of the retractable roof and aesthetic water drainage via integrated side gutters and posts
- Limits sunlight depending on requirements
- Protects against the effects of weather conditions: rain and wind
- Protects against snow loads of up to 50 kg/m² (uniform load, version without Open Slide glazing)
- Possibility of installing Open Slide glazing (snow load reduction to 10 kg/m² required)
- Does not emit toxic substances during operation
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort
- The rotation of the roof slats can be activated manually via a switch or remotely
- Easy access to the motor
- Installation holes for cabling provided inside the corners

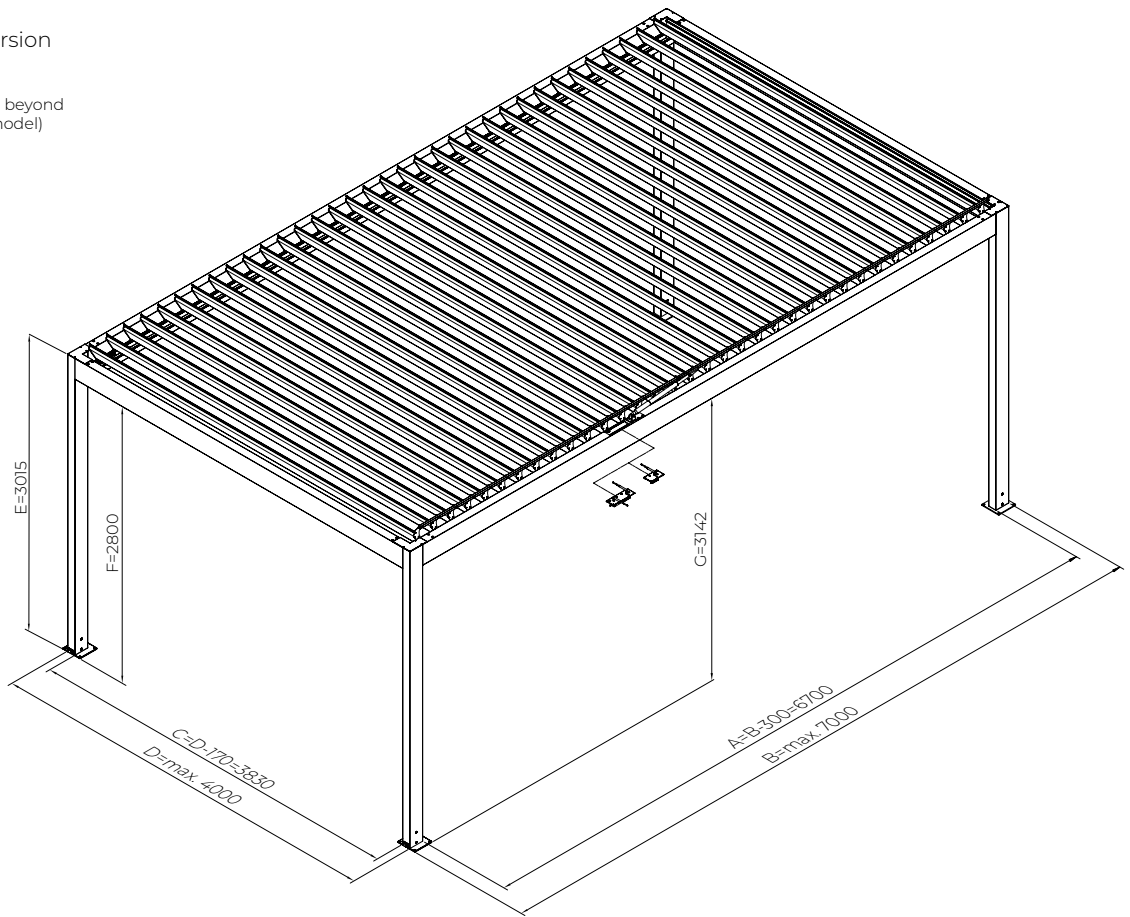
TECHNICAL PARAMETERS

- Maximum module width - 4000 mm
- Maximum projection - 7000 mm
- Maximum clear height of roof beams - 2800 mm
- Max. structure height 3015 mm; blade rotation mechanism – 3140 mm
- Free-standing or wall-mounted construction, single- or multi-module, by connecting individual modules, made of extruded aluminium profiles and components made of stainless steel and powder-coated galvanised steel, equipped with a drainage system
- Roof pitch 0°
- 20 mm cross-sectional drop at the tongue ends; the drop is standard from the motor downwards
- 200 mm slat spacing
- Blade rotation range 0° - 110°±5° (for Picolo) or 0° to approx. 120° (for 24V motor)
- Roof wind resistance class 6 (400 Pa ~41 kg/m²)
- The maximum drainage capacity handles rainfall with an intensity of up to 0.04 l/s/m² for a maximum duration of 5.3 minutes (depending on the configuration of the drainage holes)
- COB LED lighting in 4000K, 3200K or RGB (integrated into gutters) or 3300K (light points in the slats)
- Drainage via 92 mm wide gutters (with angle overflows concealed in the beams only for 4 gutters) and drainage to the beams and posts, as well as drainage through holes at the bottom of the posts
- Electric drive, ELERO Picolo XL linear motor (230V AC) or 24V DC motor
- Outdoor use
- Structure compliant with PN-EN 1090 and PN-EN 13659

PERMISSIBLE MANUFACTURING TOLERANCES FOR THE EXTERNAL DIMENSIONS OF PERGOLAS ARE +/- 10 mm.

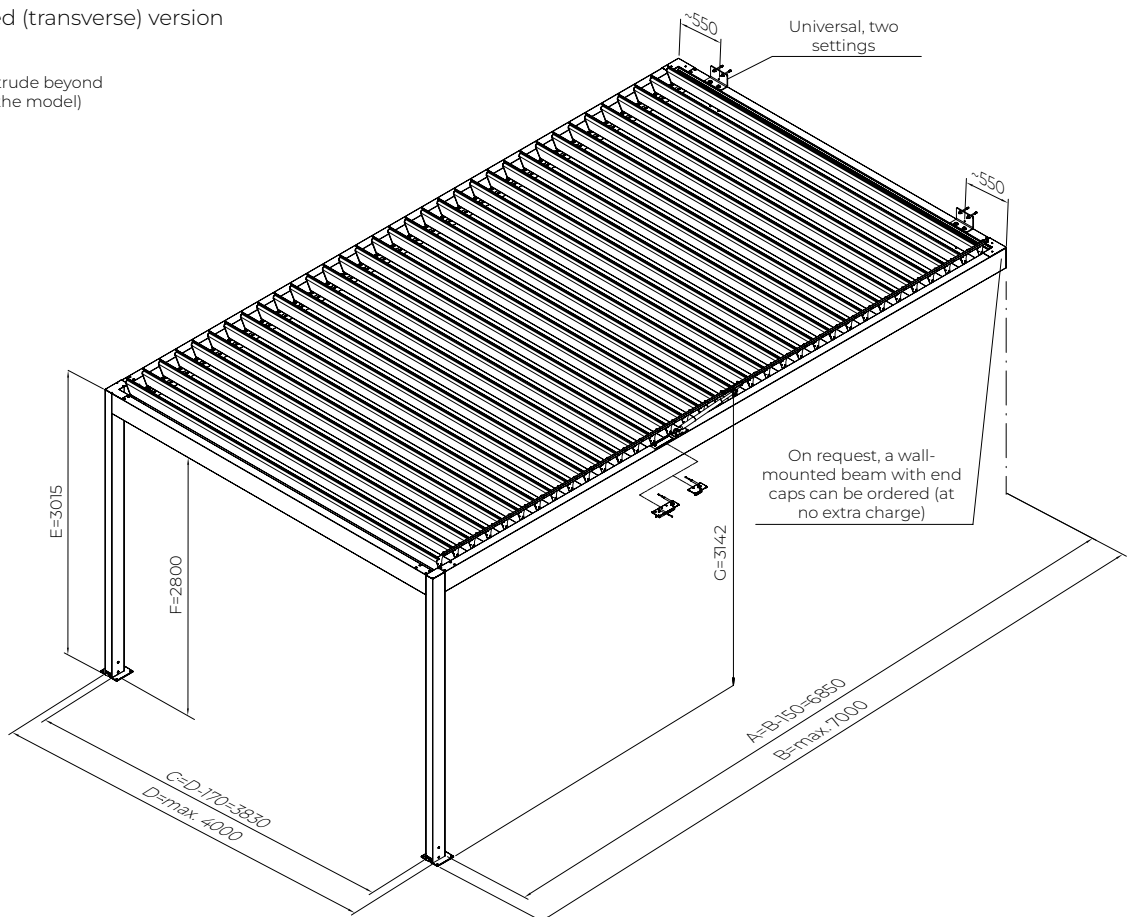
PERGOLA SB 400
Single free-standing version

Note
The base outline may protrude beyond
the posts (depending on the model)



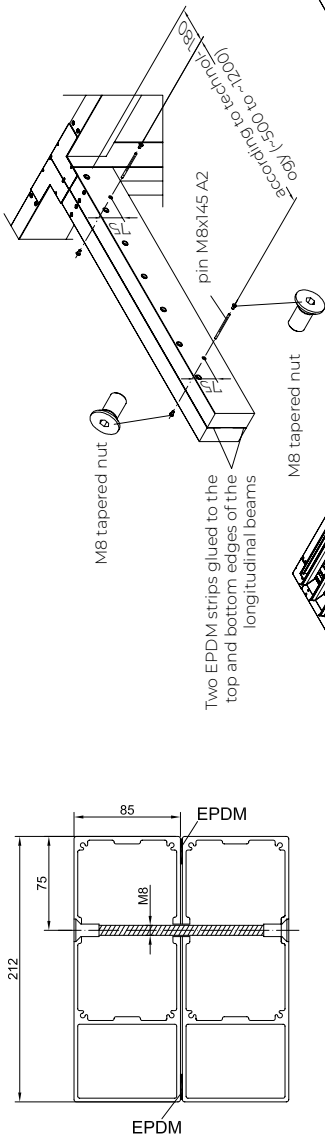
PERGOLA SB 400
Single wall-mounted (transverse) version

Note
The base outline may protrude beyond
the posts (depending on the model)

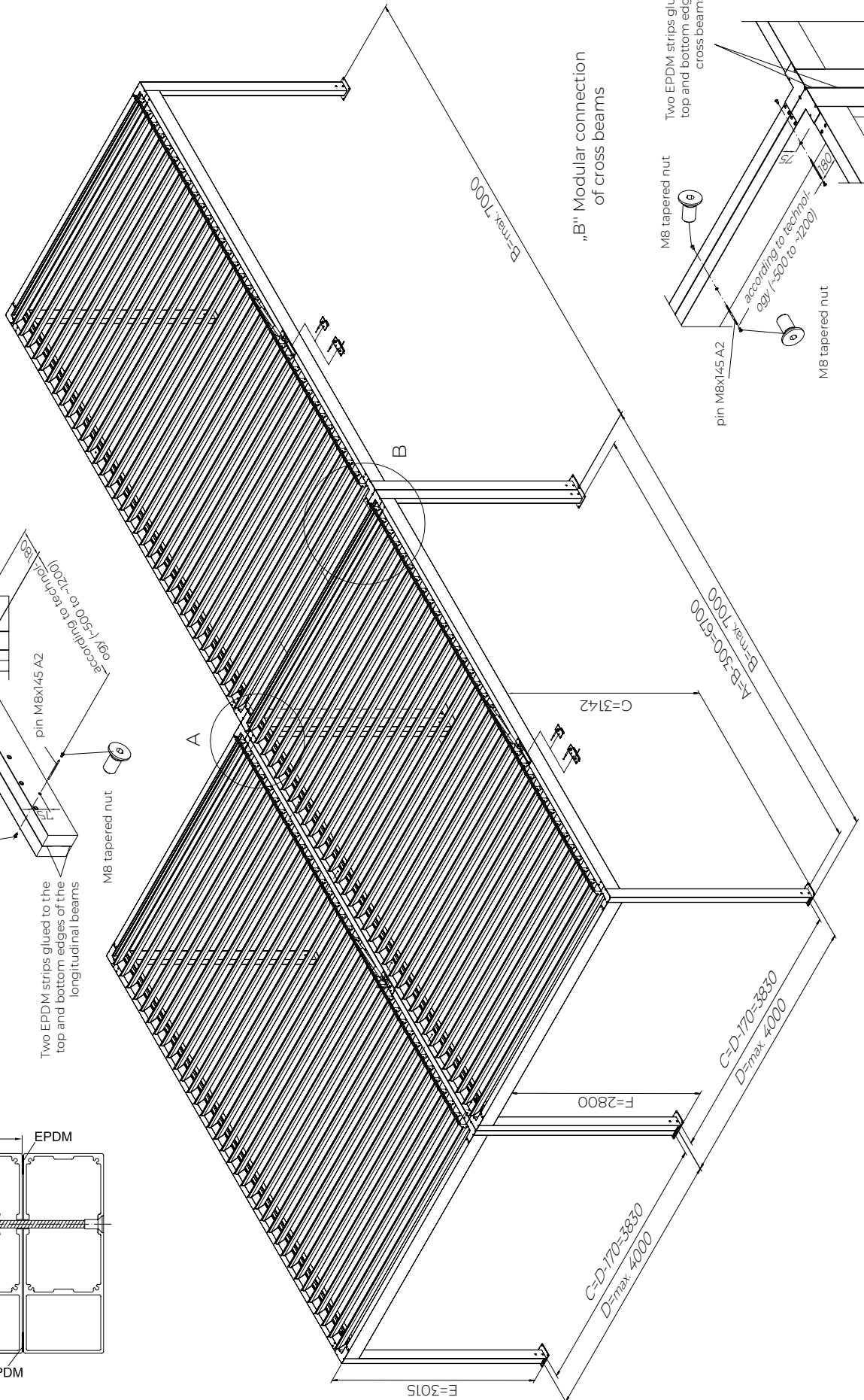
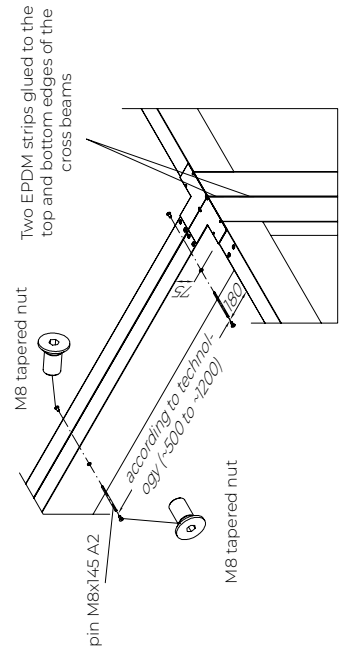


PERGOLA SB 400
Free-standing modular version

'A' Modular connection of longitudinal beams



'B' Modular connection of cross beams



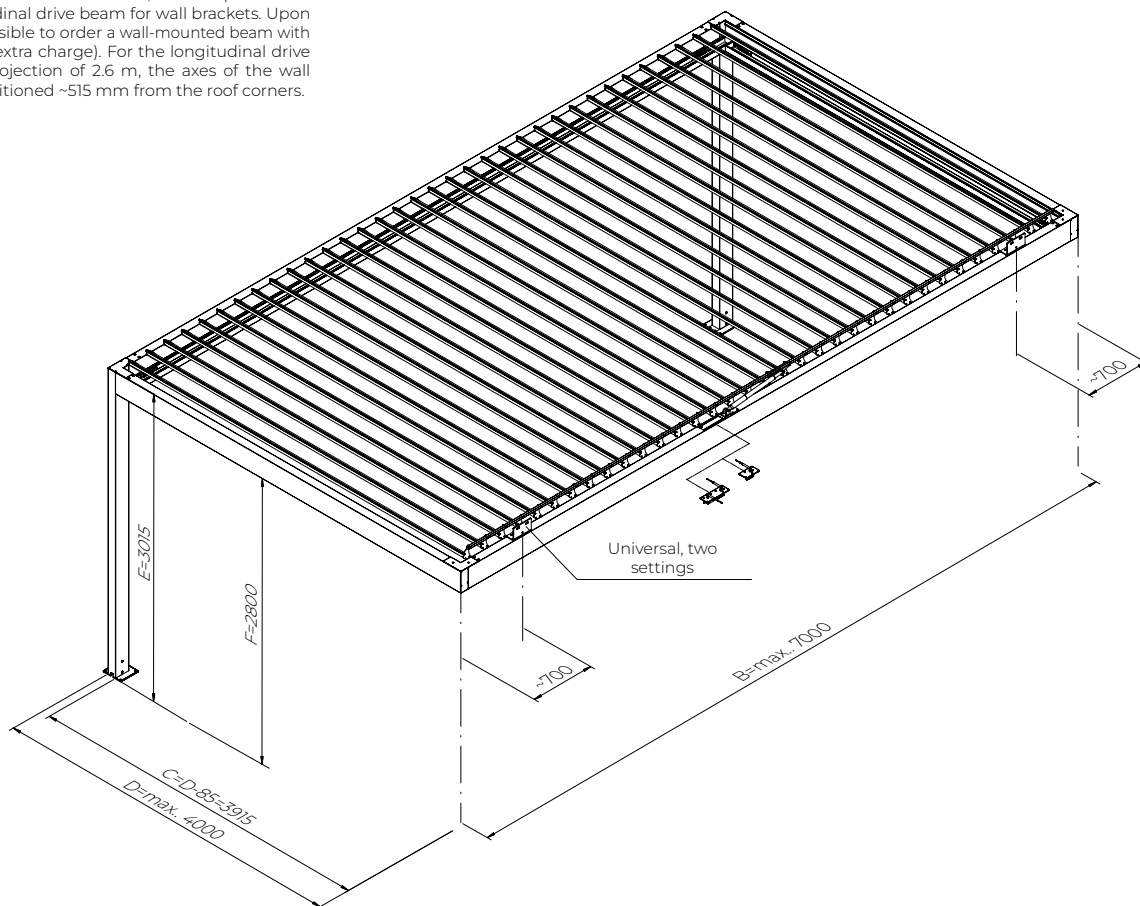
Modular solutions achieved by combining separate pergolas. Beams connected with M8 stainless steel studs and conical nuts. Posts are not connected. Sealing of beam joints using two strips of EPDM self-adhesive tape (this does not ensure watertightness).

PERGOLA SB 400

Single wall-mounted (longitudinal) version

Note

For a projection of less than 2.6 m, it is not possible to drill the longitudinal drive beam for wall brackets. Upon request, it is possible to order a wall-mounted beam with end caps (at no extra charge). For the longitudinal drive beam with a projection of 2.6 m, the axes of the wall brackets are positioned ~515 mm from the roof corners.

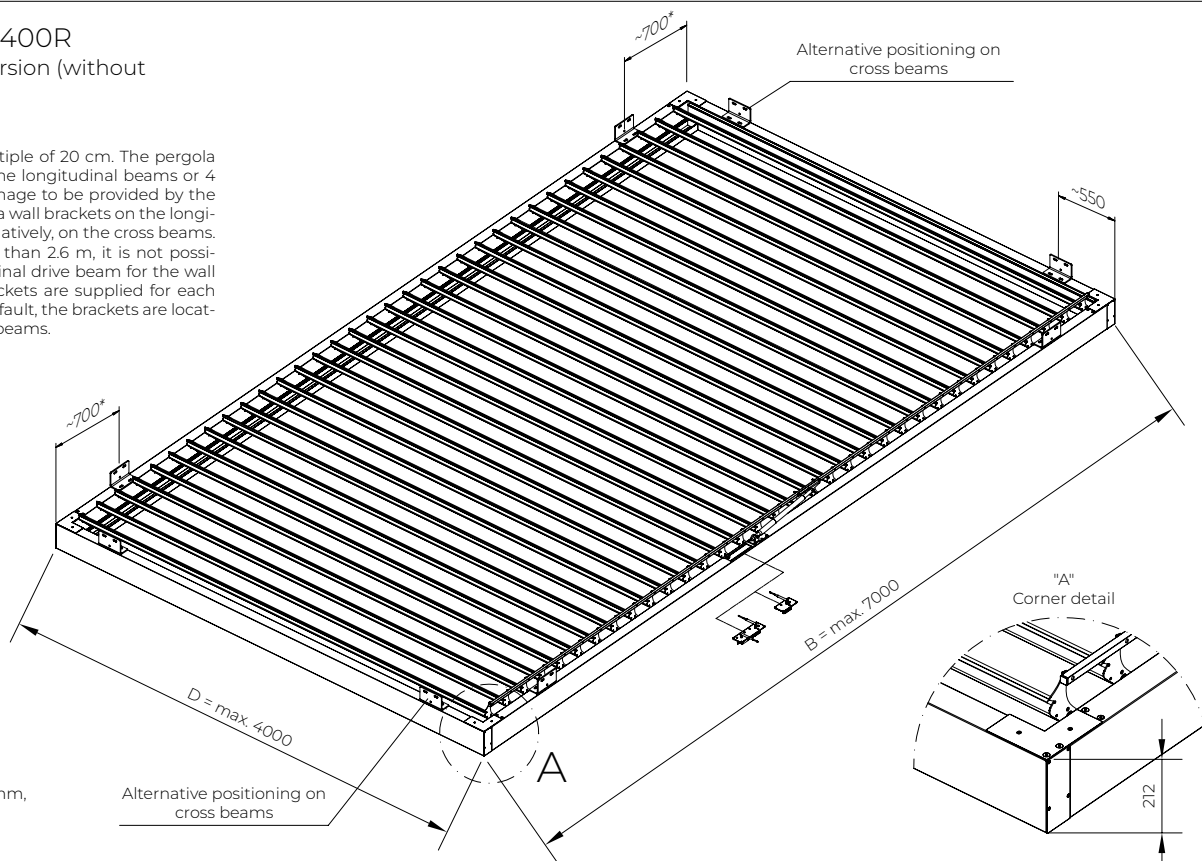


PERGOLA SB 400R

Roof-mounted version (without posts)

Note

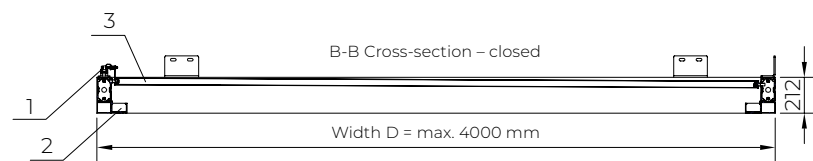
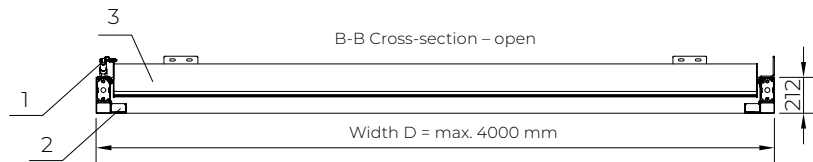
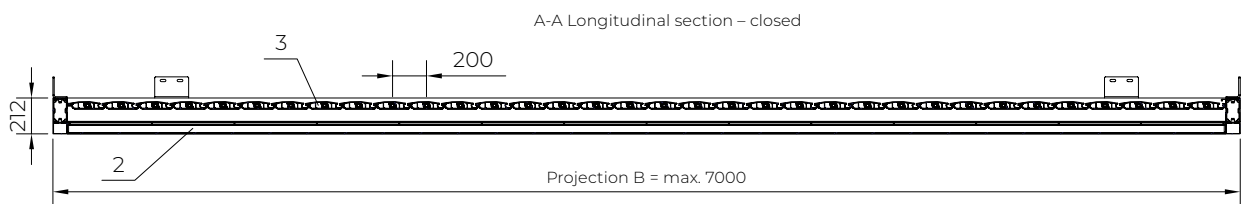
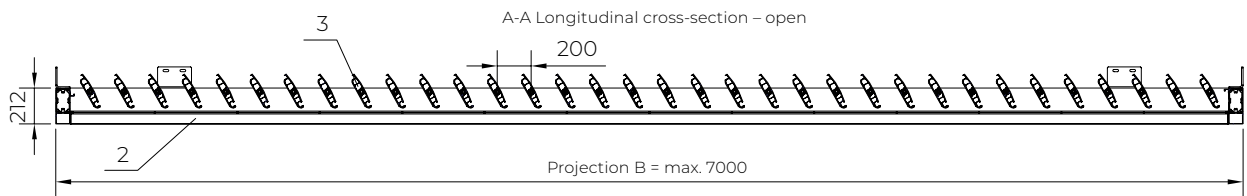
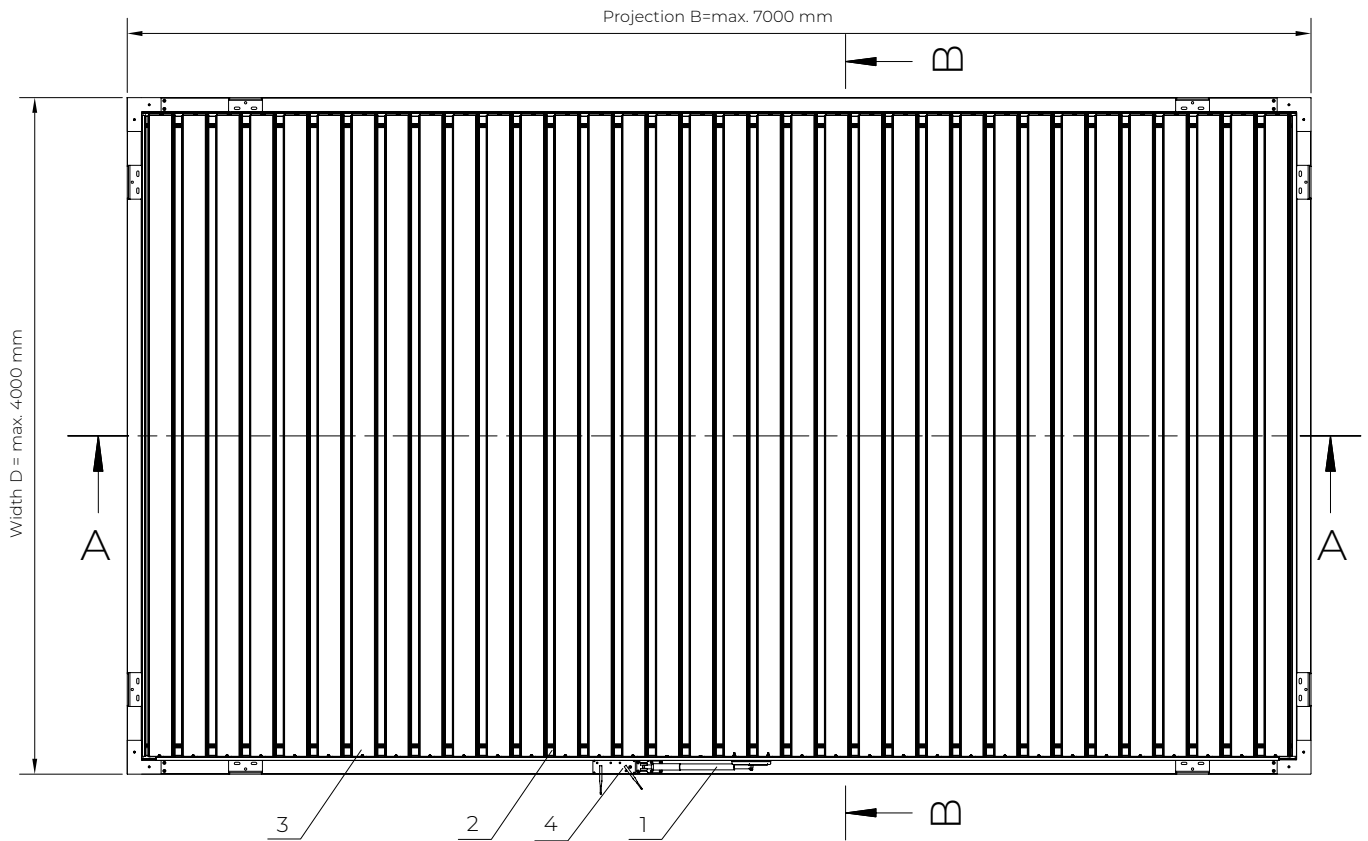
The projection is a multiple of 20 cm. The pergola includes 2 gutters on the longitudinal beams or 4 perimeter gutters. Drainage to be provided by the customer. Anchoring via wall brackets on the longitudinal beams or, alternatively, on the cross beams. For a projection of less than 2.6 m, it is not possible to drill the longitudinal drive beam for the wall brackets. Four wall brackets are supplied for each SB 400R module. By default, the brackets are located on the longitudinal beams.



*for dimension B=2600 mm, the position of the wall brackets is ~515 mm

PERGOLA SB 400R
Views and cross-sections

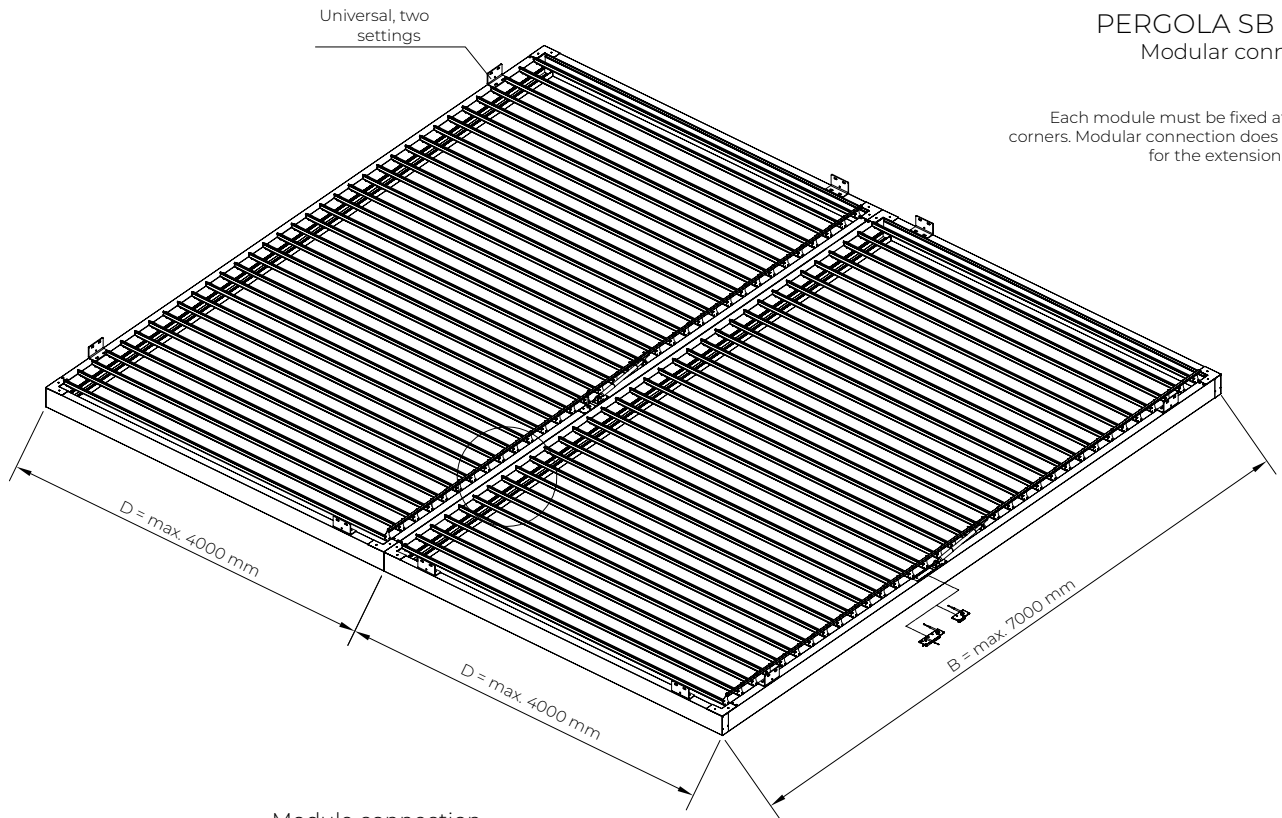
Note:
Insert the separately supplied gasket into the groove of the
front sealing tongue. The opposite end has no gasket.



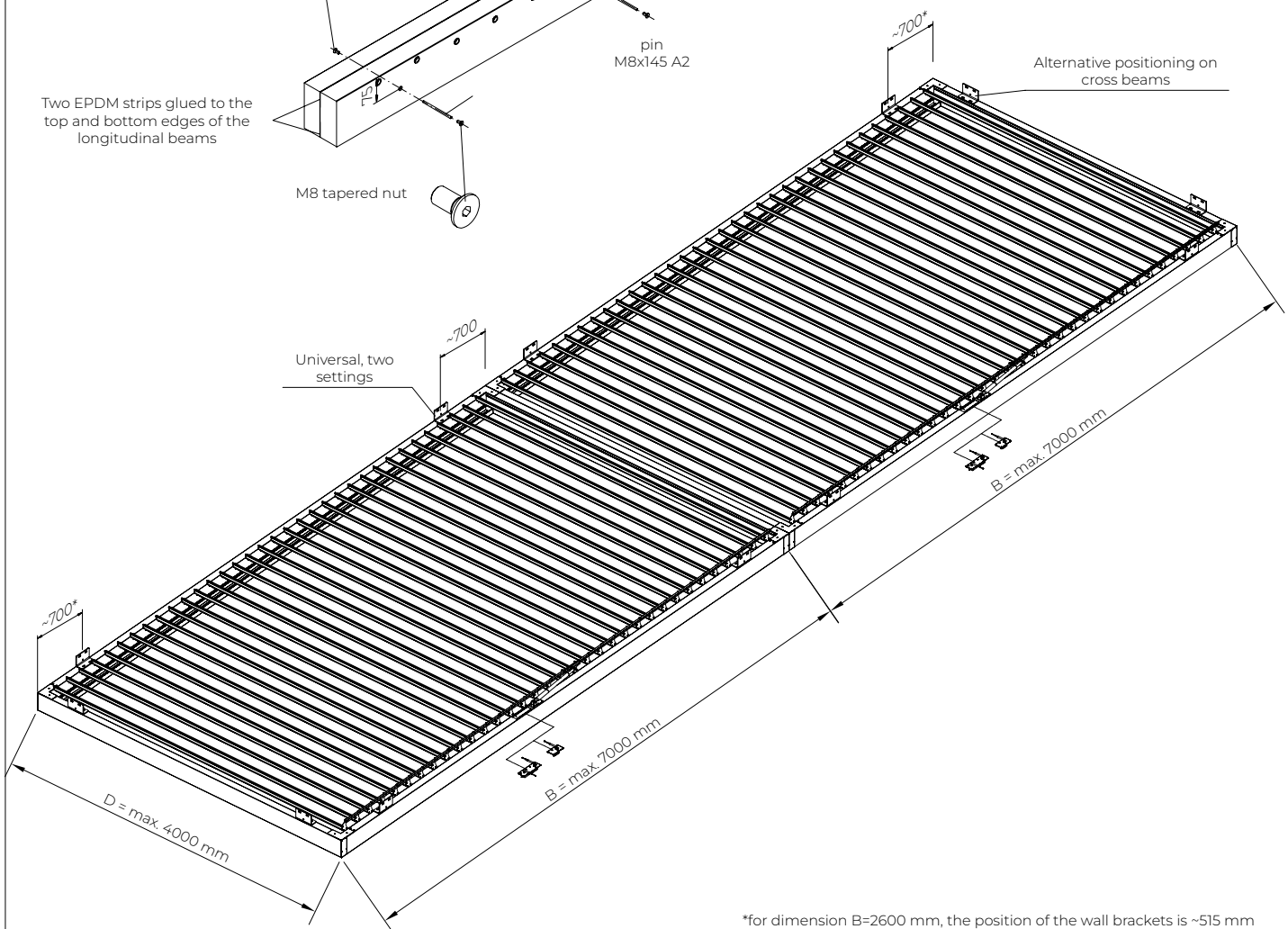
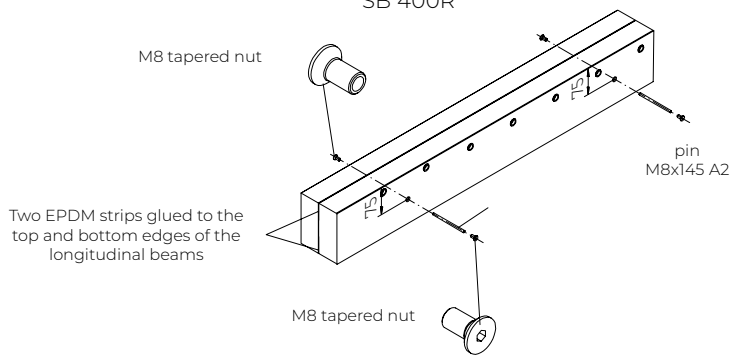
- 1. Motor
- 2. Longitudinal gutter
- 3. Roof slat
- 4. End cap with centre plug

PERGOLA SB 400R
Modular connection

Note:
Each module must be fixed at the four corners. Modular connection does not allow for the extension of spans.



Module connection
SB 400R



*for dimension B=2600 mm, the position of the wall brackets is ~515 mm

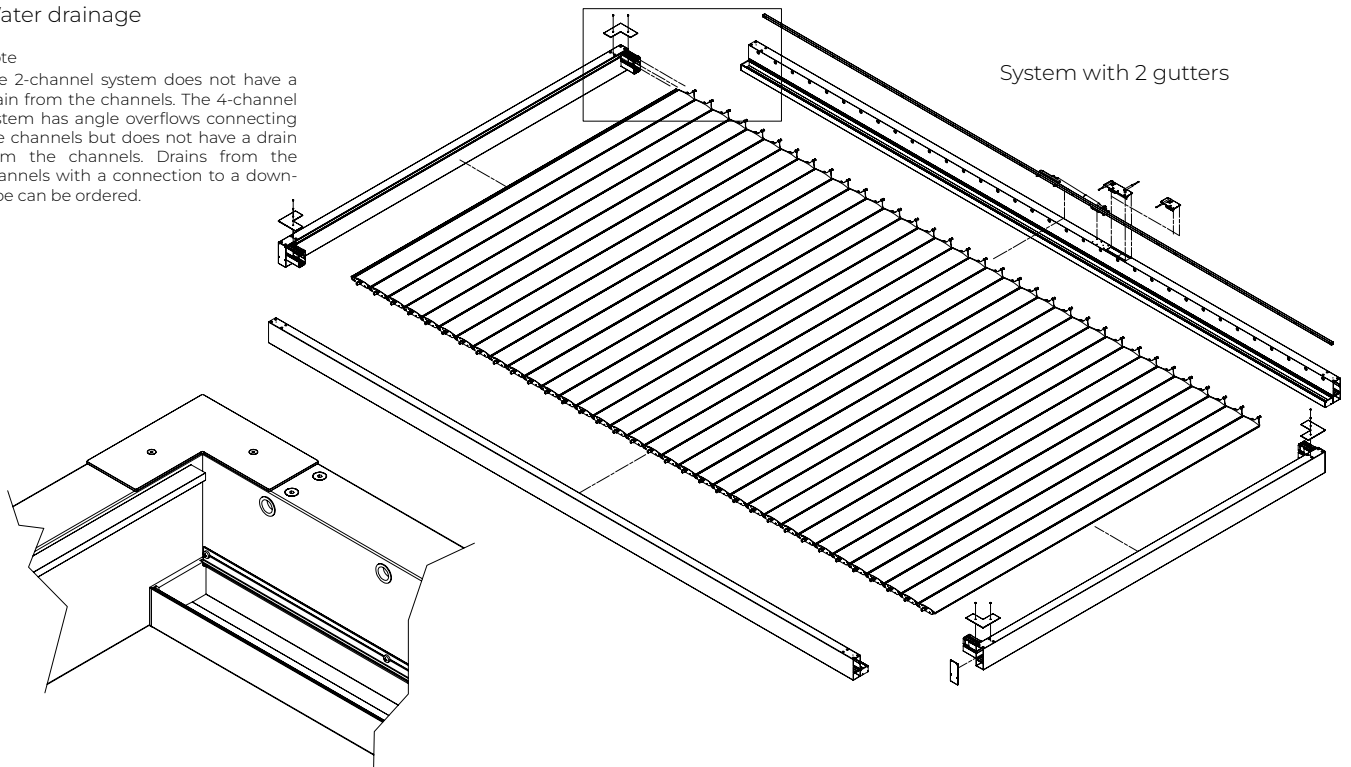
PERGOLA SB 400R

Water drainage

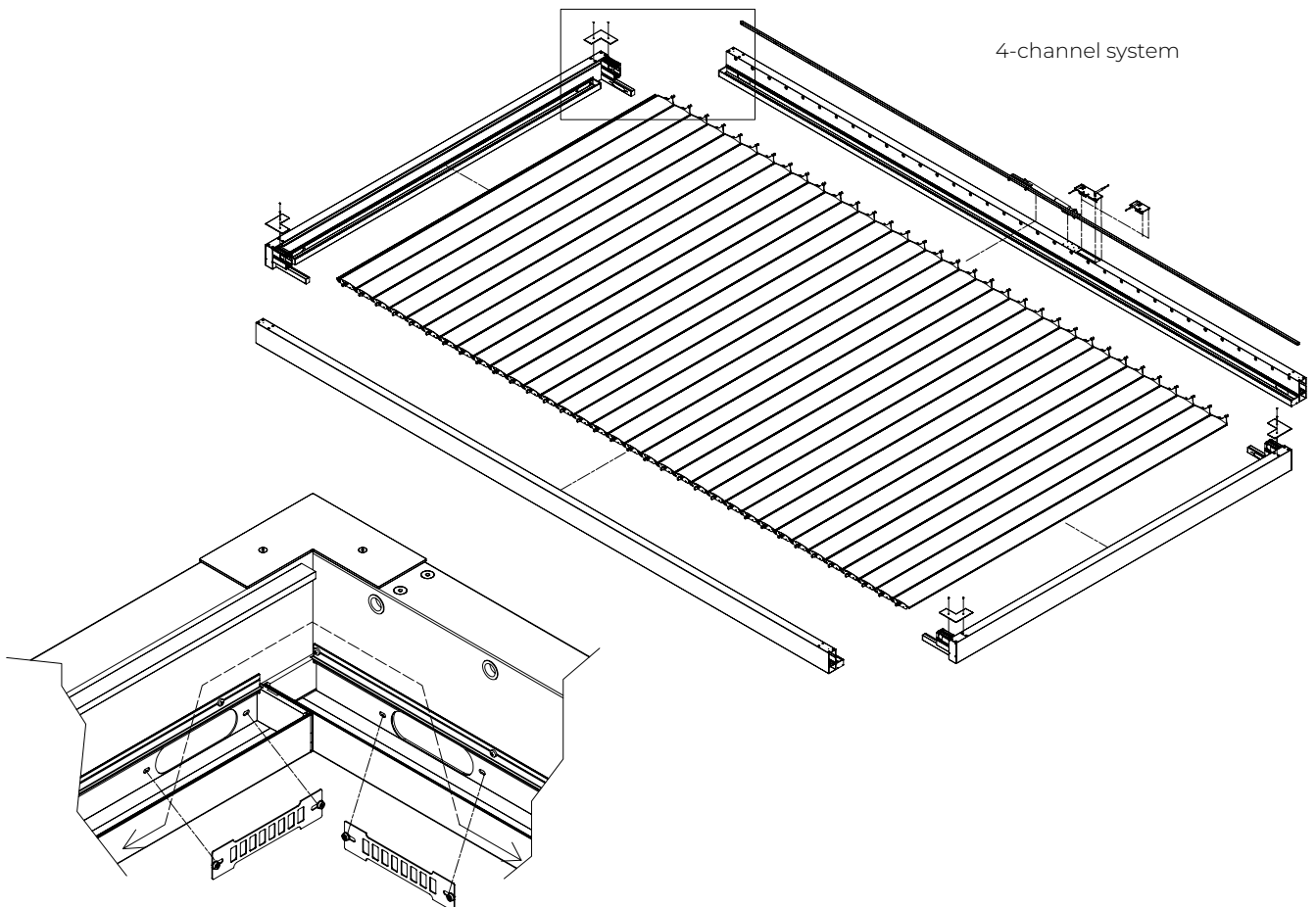
Note

The 2-channel system does not have a drain from the channels. The 4-channel system has angle overflows connecting the channels but does not have a drain from the channels. Drains from the channels with a connection to a down-pipe can be ordered.

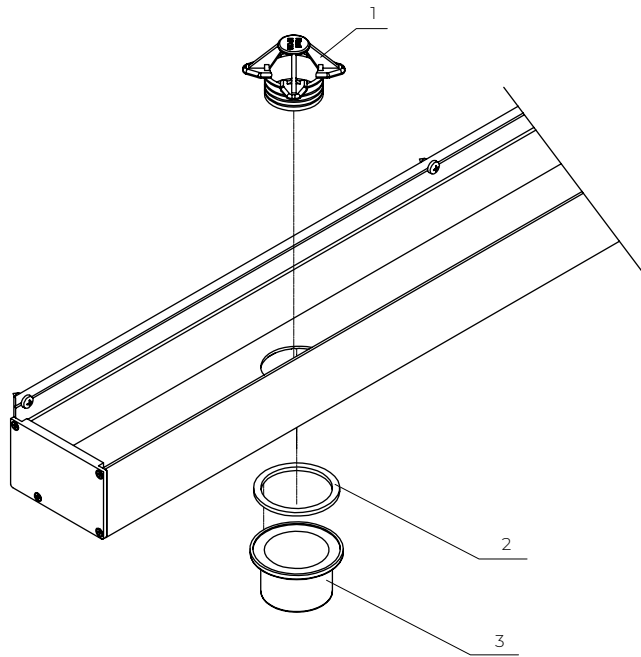
System with 2 gutters



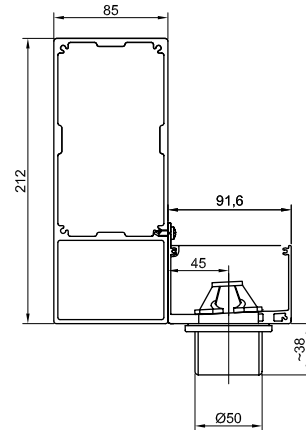
4-channel system



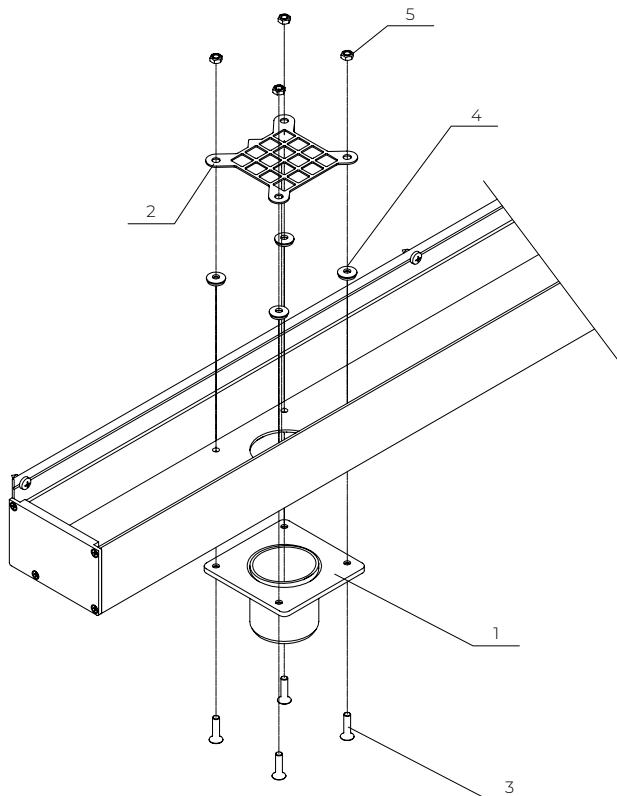
PERGOLA SB 400R
Gutter drain for: SB 400R



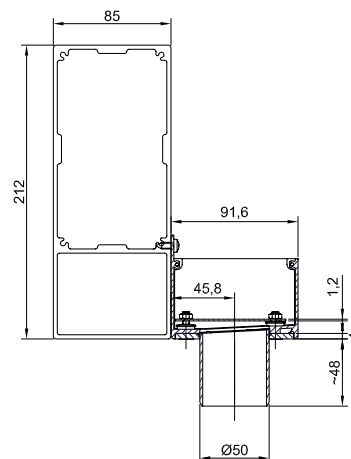
- Plastic drain (standard solution)
1. Plastic drainage (basket)
 2. 3 mm thick rubber seal
 3. Plastic spigot (external Ø 50 mm)



44 mm diameter hole in the gutter bottom

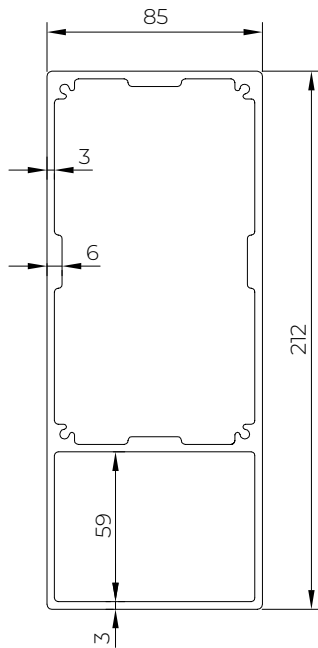


- Water Flow (optional solution – on request)
1. Drainage (painted)
 2. Protective grille
 3. Screw M5x20 A2
 4. Washer A2 5,2x14 z gumą EPDM
 5. Hex nut M5 A2



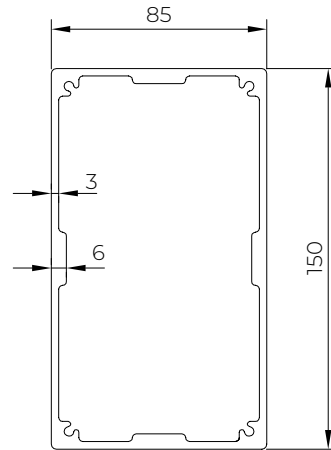
PERGOLA SB 400
Profile cross-section

Beam cross-section
(85x212)



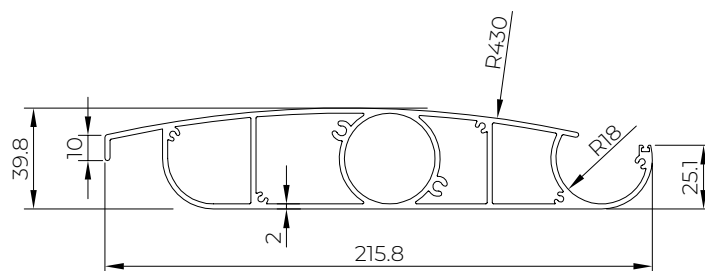
Material: EN AW6060 T66
Static characteristics:
Ground: 6.48 kg/m
Country: 24.01 cm²
J1 291.31 cm⁴
J2 1216.58 cm⁴

Cross-section of a post
(85x150)



Material: EN AW6060 T66
Static characteristics:
Ground: 4.83 kg/m
Country: 17.89 cm²
J1 215.9 cm⁴
J2 564.44 cm⁴

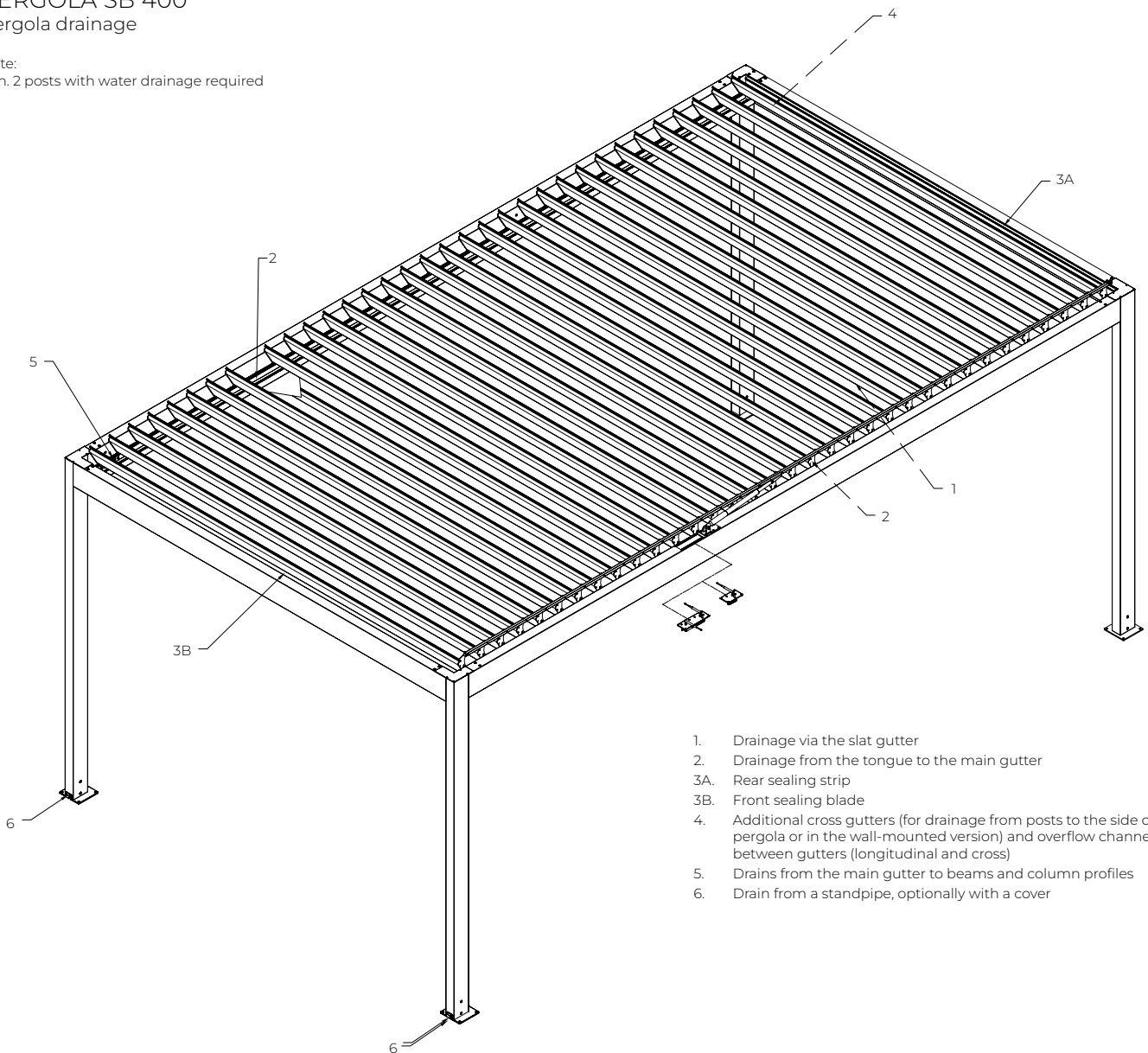
Tongue cross-section
(216x40)



Material: EN AW6063 T66
Static characteristics:
Ground: 3.66 kg/m
Country: 13.57 cm²
J1 4391 cm⁴
J2 27.16 cm⁴

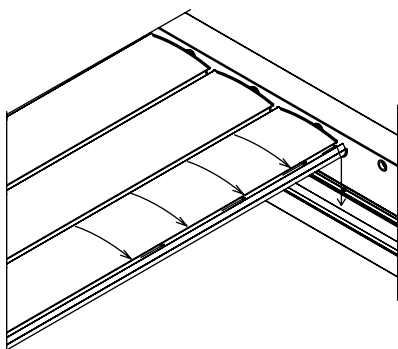
PERGOLA SB 400
Pergola drainage

Note:
Min. 2 posts with water drainage required



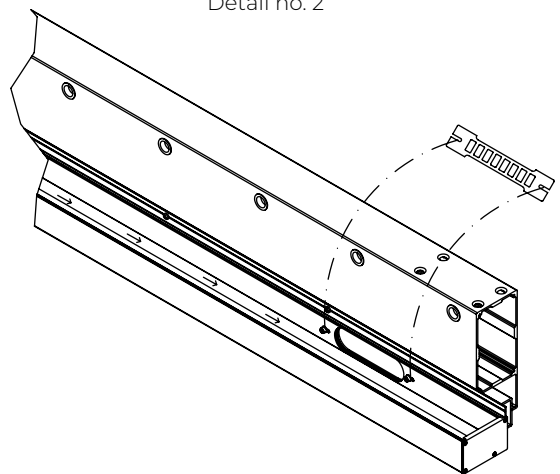
1. Drainage via the slat gutter
2. Drainage from the tongue to the main gutter
- 3A. Rear sealing strip
- 3B. Front sealing blade
4. Additional cross gutters (for drainage from posts to the side of the pergola or in the wall-mounted version) and overflow channels between gutters (longitudinal and cross)
5. Drains from the main gutter to beams and column profiles
6. Drain from a standpipe, optionally with a cover

Detail no. 1



Drainage via the tongue gutter (constant longitudinal slope of the tongue: 20 mm). Gutter diameter: 36 mm

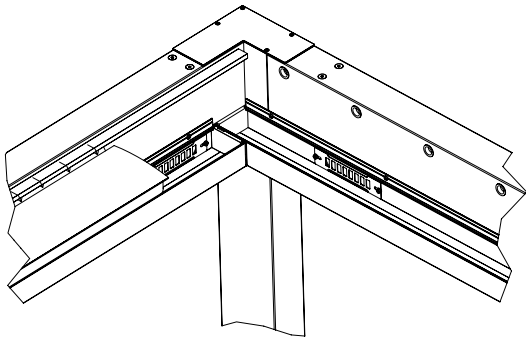
Detail no. 2



Drainage via a collector gutter (has a transverse gradient, no longitudinal gradient) Clear cross-section 87x48 mm. A safety grate can be fitted over the drain opening.

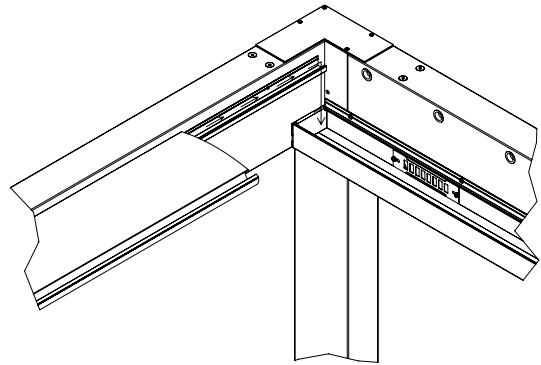
PERGOLA SB 400
Pergola drainage

Detail no. 3A



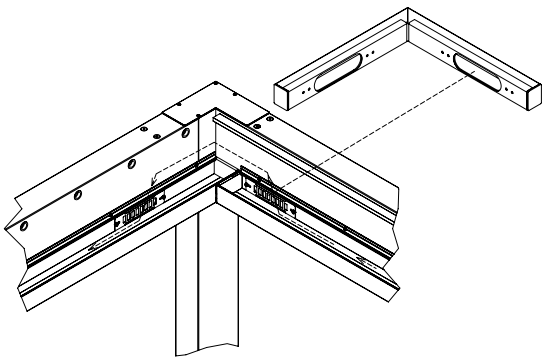
Drainage from the rear sealing tongue to the channel in the tongue. Channel without a slope.
NOTE: Extruded gutter as a single segment.

Detail no. 3B



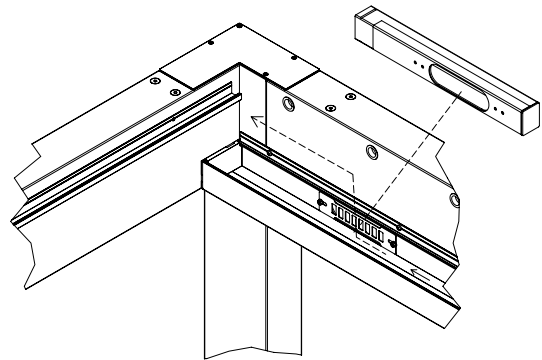
Drainage from the front tongue to the front sealing tongue. Gutter without a slope. Drainage from the gutter at the ends to the main gutter. Insert the loose-fit gasket into the gutter groove.
NOTE: Extruded gutter as a single segment.

Detail no. 4



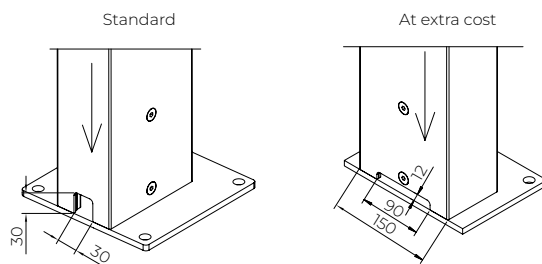
Cross-channel (has a cross-slope, no longitudinal slope). Clear cross-section 87x47 mm. Connects to the longitudinal channel via side oval overflows 144x42 mm, together with an angular drain concealed within the beams, with an internal cross-section of 34x44 mm.

Detail no. 5



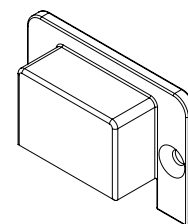
Bean-shaped gutter outlet 144x42 mm
Straight drain (in the beam) 34x44 mm

Detail no. 6



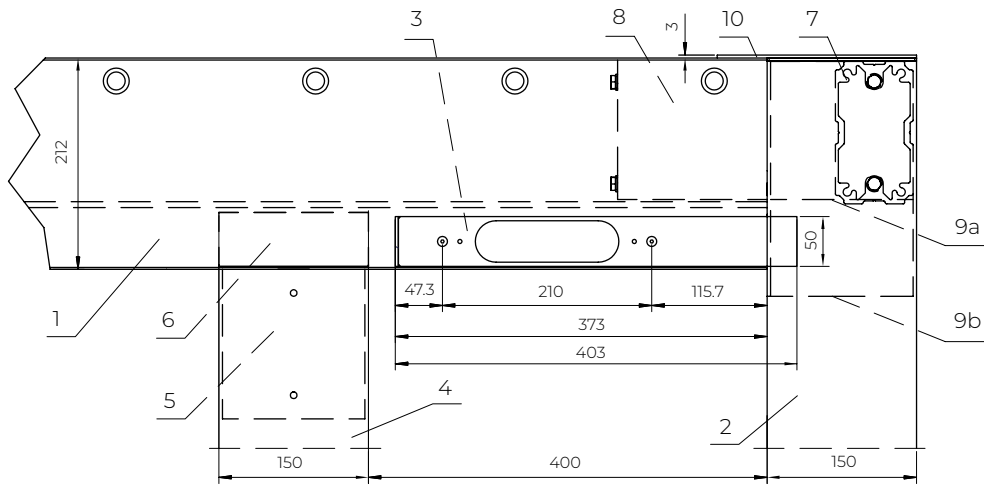
Drainage along the post profile. Drainage through a hole in the post wall.
A cover can be fitted over the drainage hole.
No pre-drilled holes for the cover plate screws

Drain cover



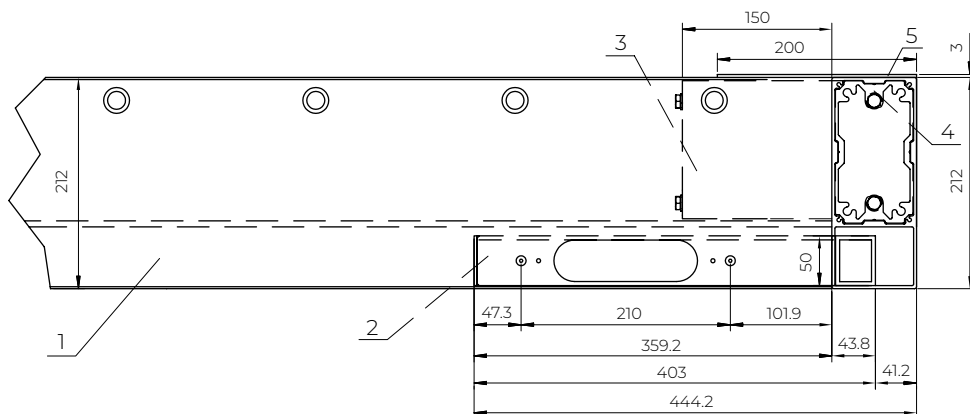
The set includes 2 stainless steel screws (A2).

Location of water drainage



1. Longitudinal beam 85x212 mm
2. Pergola post 85x150 mm
3. Water drainage 40x50 mm
4. Intermediate post 85x150 mm
5. Rear post connector
6. Reinforcing connector
7. Cross linear connector
8. Longitudinal connector
- 9A. Short angle connector (for water drainage)
- 9B. Long angle connector (for angled overflow)
10. Corner post cover

Location of the corner overflow

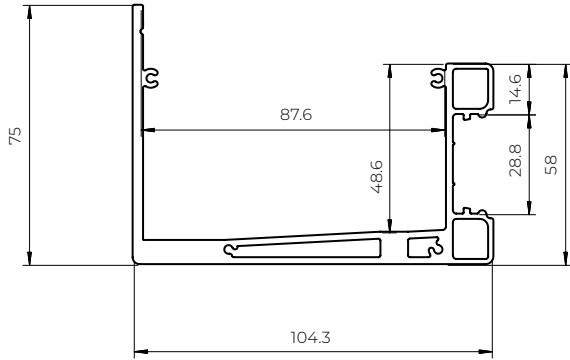


1. Longitudinal beam 85x212 mm
2. Angled water drainage 40x50 mm
3. Longitudinal connector
4. Cross linear connector
5. Wall-mounted corner cap

PERGOLA SB 400

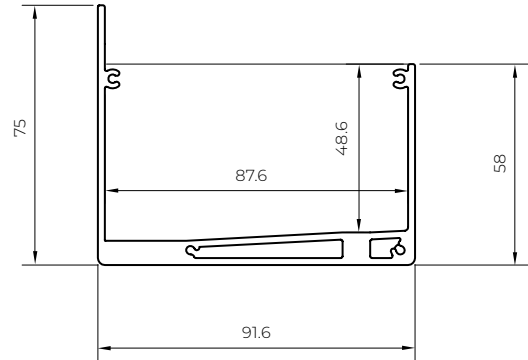
Cross-sections of drainage gutters

Cross-section of an LED gutter
(104.3x75)



Material: EN AW6060 T66
Ground: 2.61 kg/m

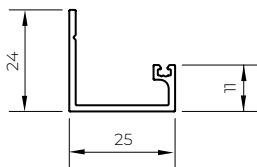
Cross-section of the gutter
(91.6x75)



Material: EN AW6060 T66
Ground: 2.10 kg/m

Front tongue cross-section

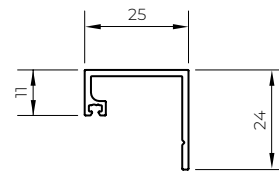
Insert the separately supplied gasket into the groove of the front sealing tongue.



Material: EN AW6060 T66
Ground: 0.25 kg/m

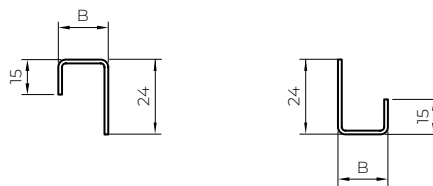
Rear tongue cross-section

For this position of the sealing slat – no seal.



Material: EN AW6060 T66
Ground: 0.25 kg/m

NON-STANDARD CANTILEVERS SB 400

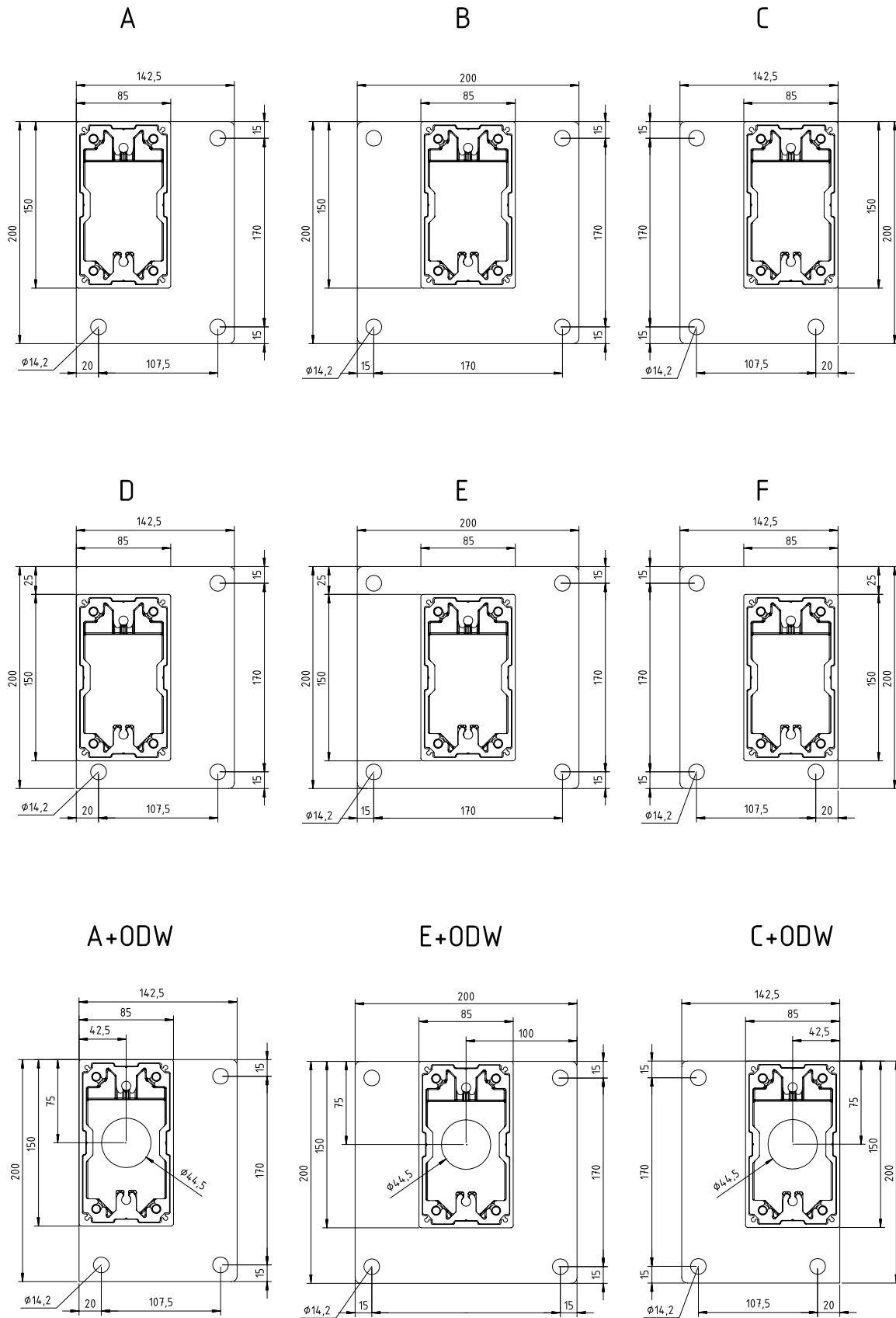


It is possible to manufacture pergolas with non-standard overhangs by replacing the extruded extension slats (see figure above) with bent slats made from 1.5 mm thick aluminium sheet. In this case, dimension B (25 mm) is modified individually.

NOTE: The length of the extension slat is: pergola width – 210 mm. If the dimension exceeds 3000 mm, the slat is made of 2 segments joined in the middle.

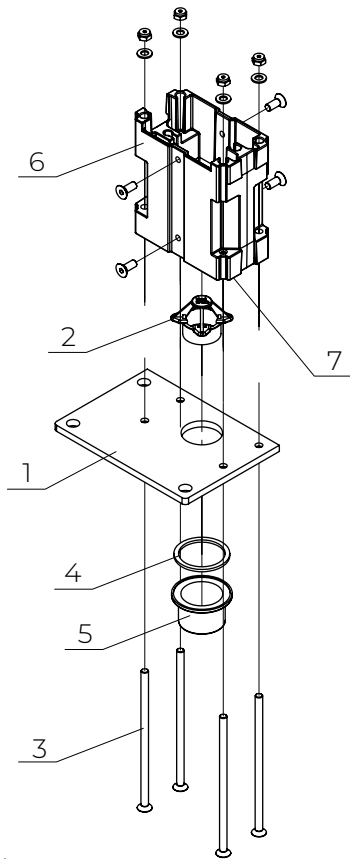
Each type of base can be manufactured in a version with a drain.
 Additional types (A+ODW, C+ODW, E+ODW and Z, and flush with the extension) – on the following pages.

PERGOLA SB 400
 Pergola feet



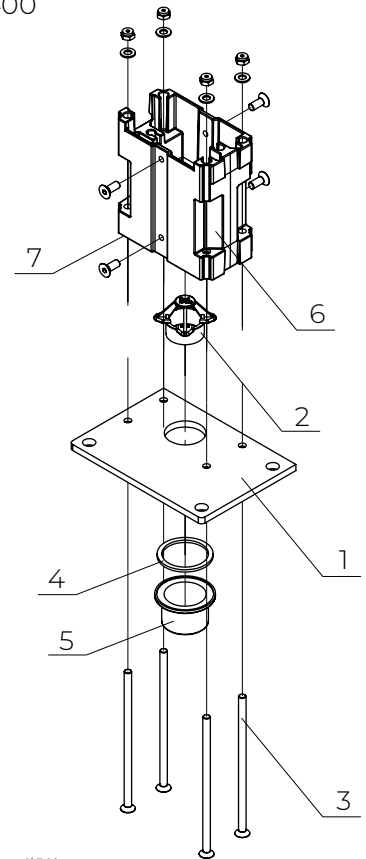
Feet made of 8 mm thick EN AW-5754 aluminium sheet, powder-coated

PERGOLA SB 400
Type A+ODW



1. Foot A with Ø44.5 mm hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Cast connector
7. Apply sealant around the perimeter (before tightening the connector)

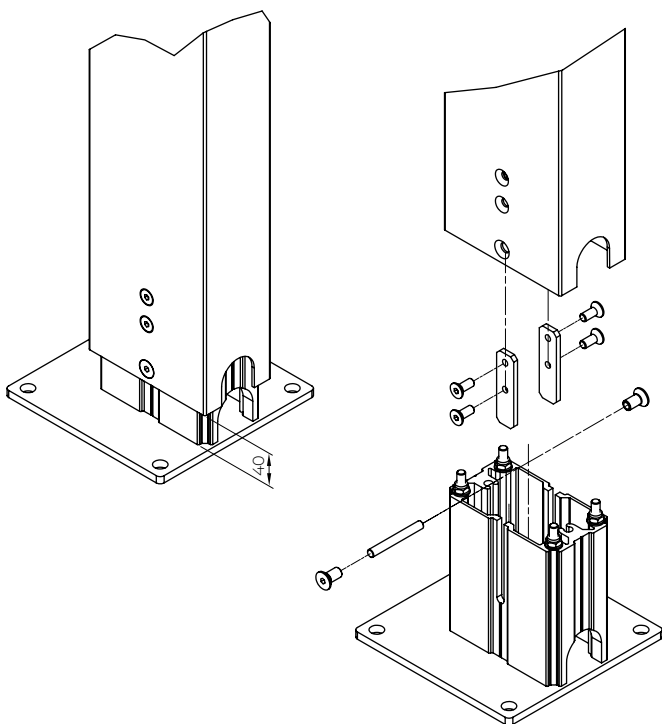
PERGOLA SB 400
Type C+ODW



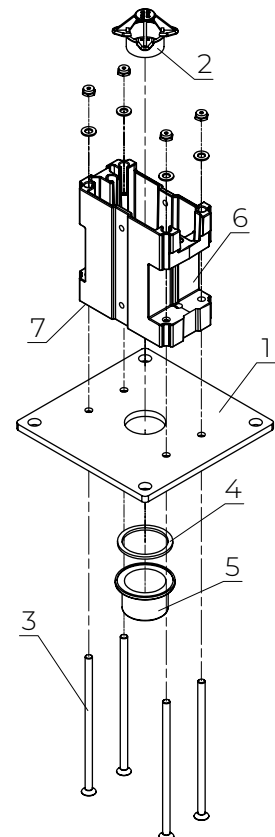
1. Foot C with Ø44.5 hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Cast connector
7. Apply sealant around the perimeter (before tightening the connector)

PERGOLA SB 400
Type R-Adjustable post

Note:
Height adjustment up to 40 mm.
Can be manufactured with A to F type feet,
as well as A+ODW, C+ODW and E+ODW.



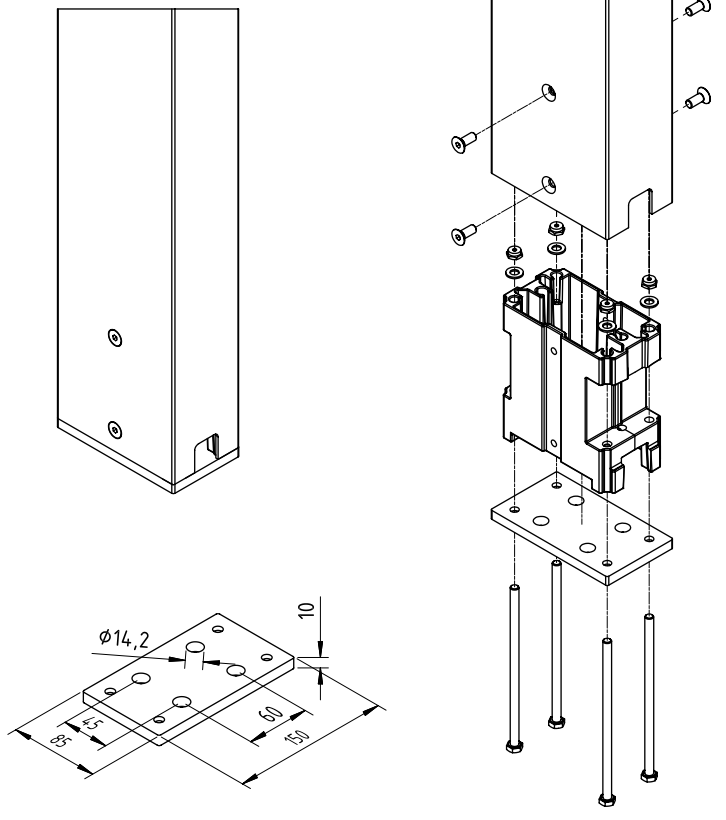
PERGOLA SB 400
Type E+ODW



1. Foot E with Ø44.5 hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Connector (cast)
7. Apply sealant around the perimeter (before tightening the connector)

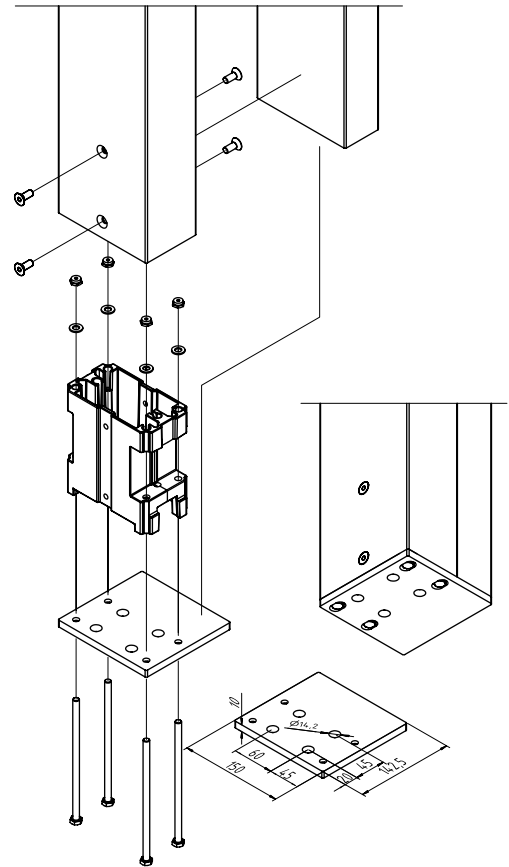
PERGOLA SB 400
Type Z - base within the column outline.

Note:
10 mm thick steel base. Requires 2 M12 bolts diagonally (in two of the 4 holes)



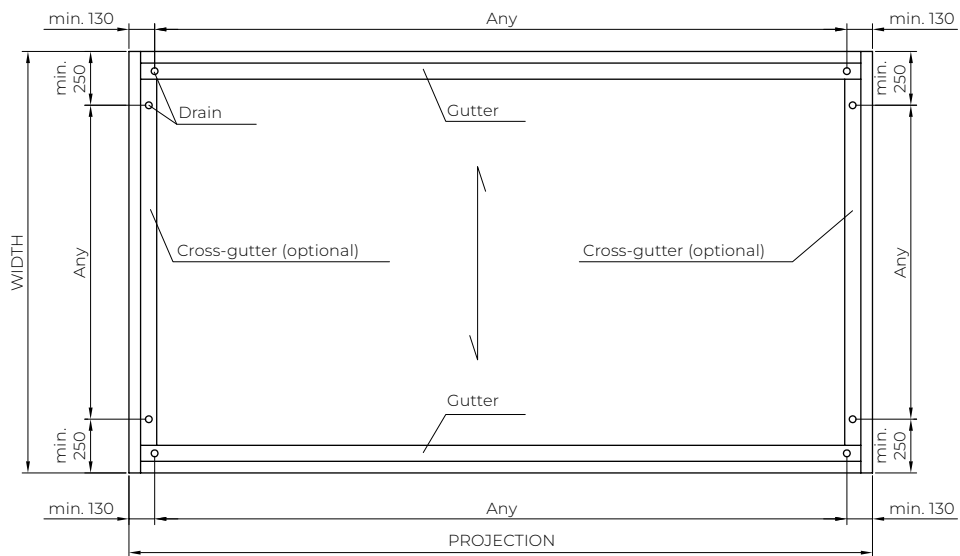
PERGOLA SB 400
Base flush with column extension

Note:
10 mm thick steel base. Requires 2 anchors diagonally (in two of the 4 holes)



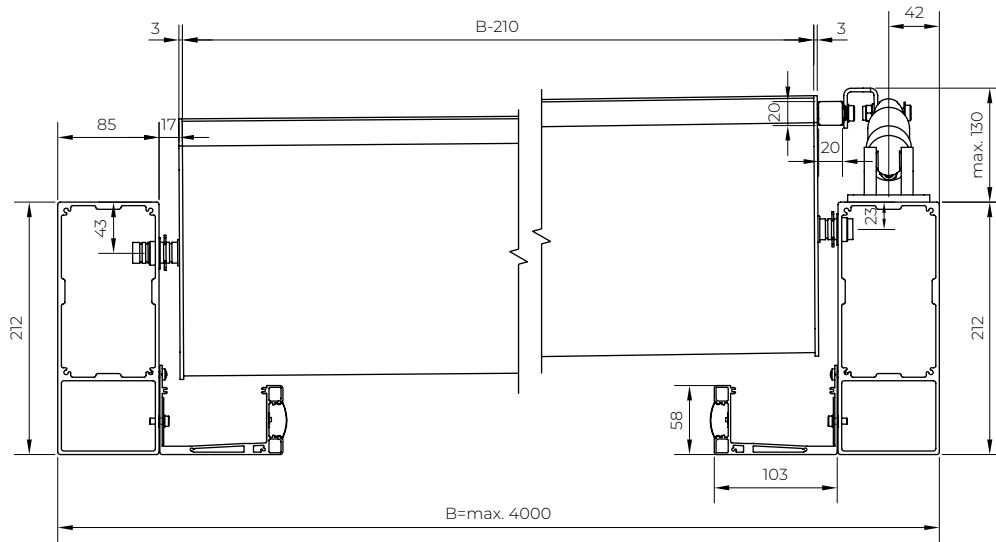
Note:
For the 4-channel version, overflow channels are fitted between the channels.
A minimum of 2 drainage points is required.

PERGOLA SB 400R
Location of drains



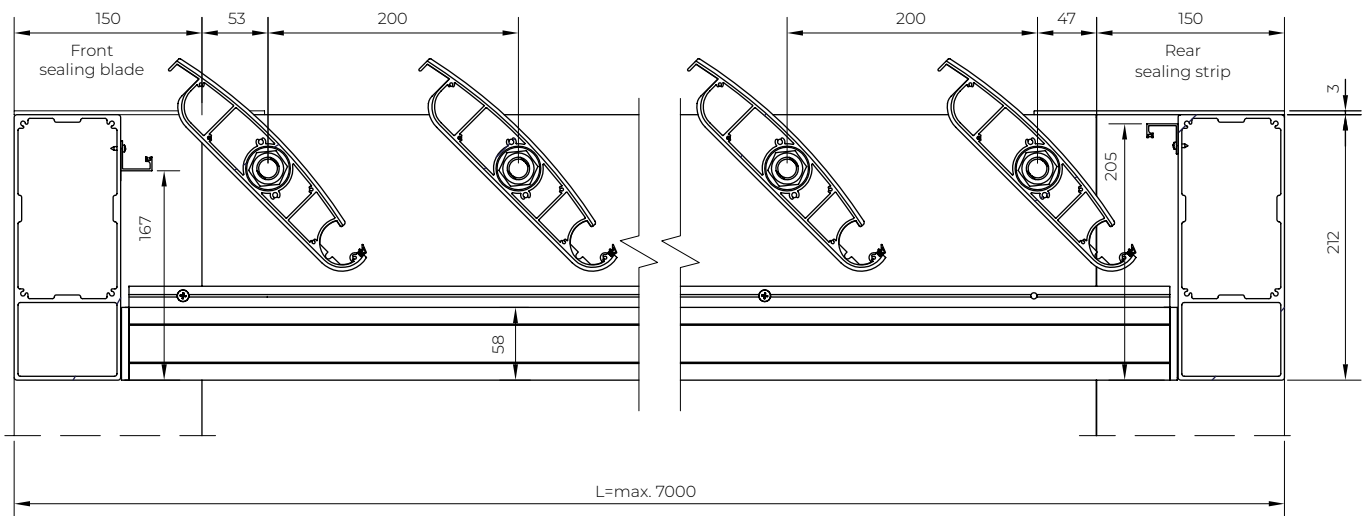
PERGOLA SB 400
CROSS-SECTION

Note:
On the bearing side, there are elongated shafts for securing the blades.
Reverse blade pitch (motor-driven) or horizontal blades 43 mm from the top of the beam is possible.



PERGOLA SB 400
Longitudinal section (bearing side)

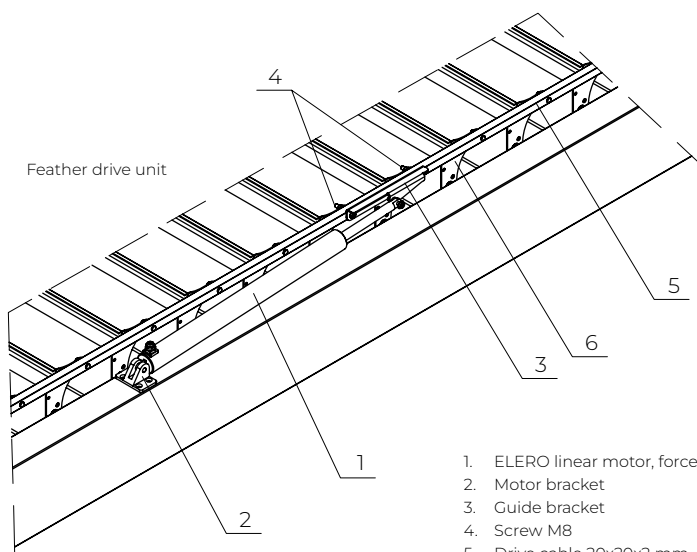
Insert the separately supplied gasket into the groove of the front sealing tongue. The opposite end has no gasket.



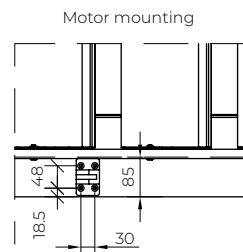
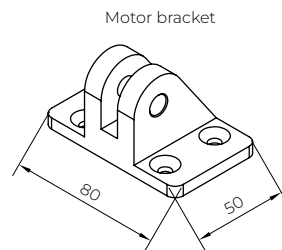
PERGOLA SB 400

Drive unit, blade rotation range - Motor Picolo XL

Note: The guide bracket is available in left-hand or right-hand versions

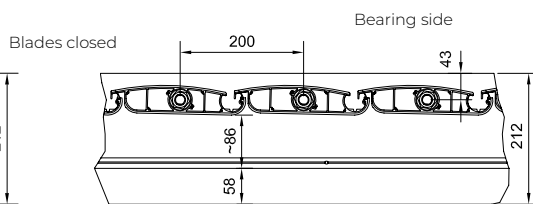
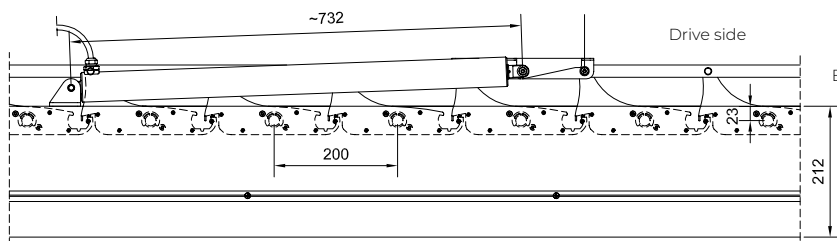


1. ELERO linear motor, force 1200N
2. Motor bracket
3. Guide bracket
4. Screw M8
5. Drive cable 20x20x2 mm
6. Feather cap (drive)

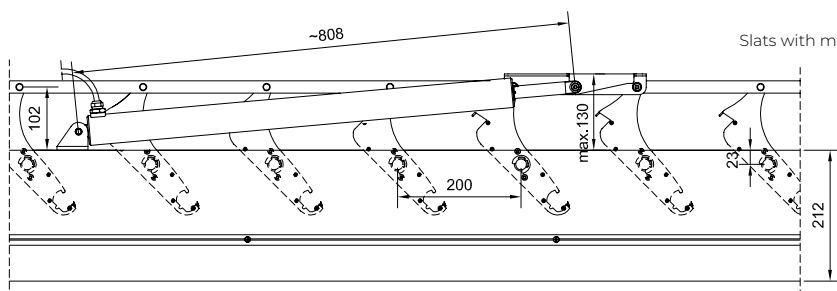


Mechanism and range of louvre rotation (Motor Picolo XL)

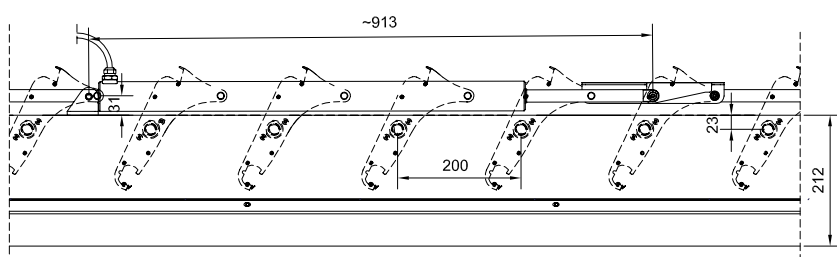
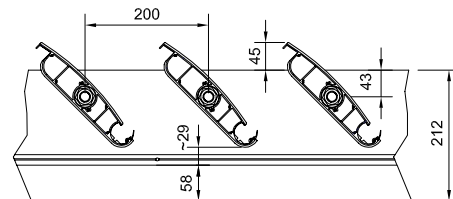
NOTE: The new Picolo XL motor model, with a body 100 mm longer, allows the blades to open to approximately 110±5 degrees.



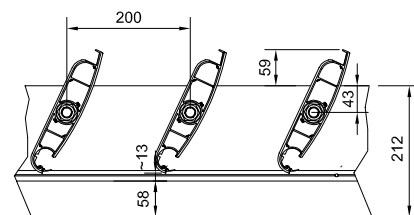
See note above regarding the opening angle



Slats with maximum motor drive height



Open



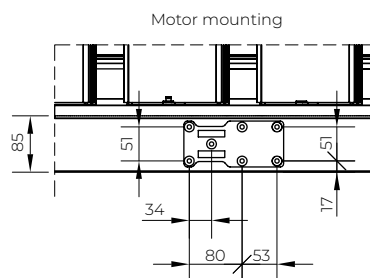
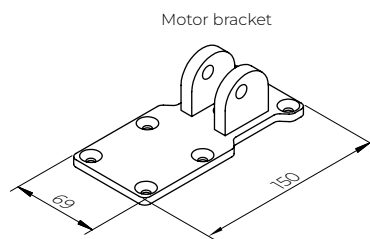
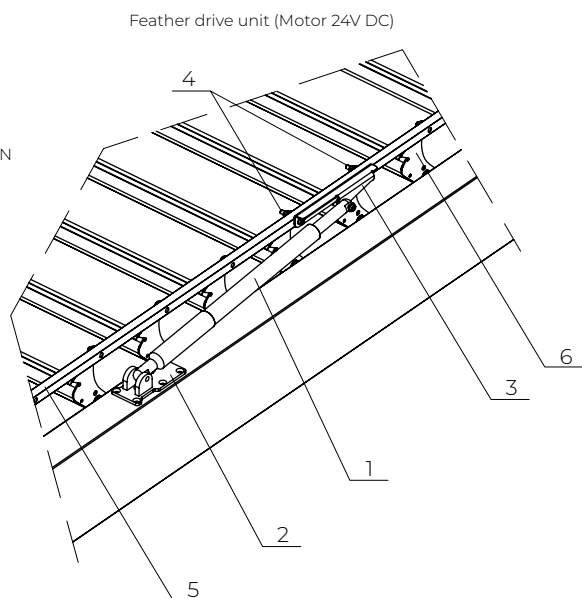
See note above regarding the opening angle

PERGOLA SB 400

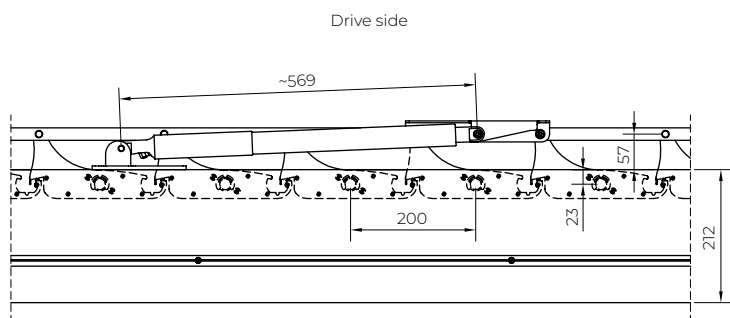
Drive unit, blade rotation range - Motor 24V DC

Note:
The guide bracket is available in left-hand or right-hand versions

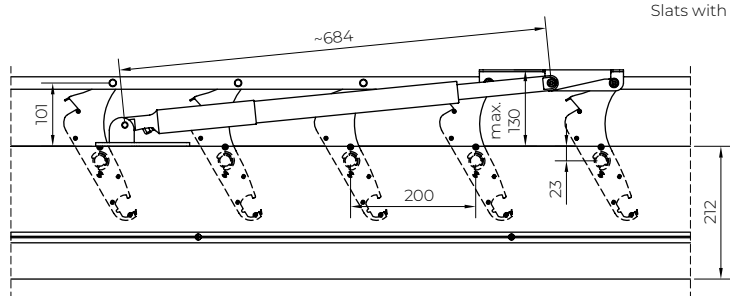
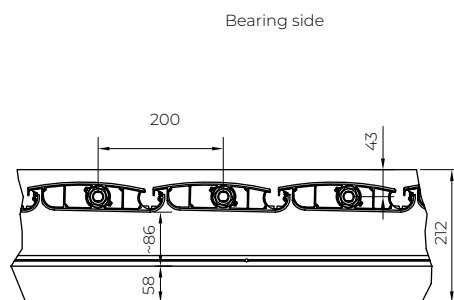
1. Linear motor 24V DC force 600N
2. Motor bracket
3. Guide bracket (left)
4. Screw M8
5. 20x20x2 mm tie rod
6. Feather cap (drive)



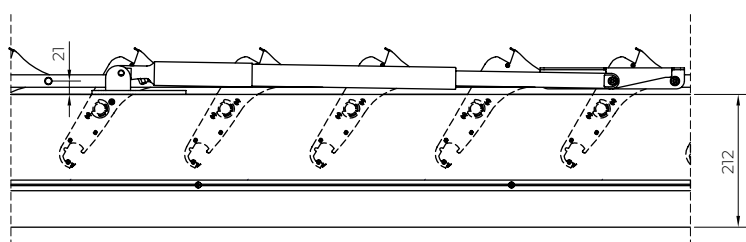
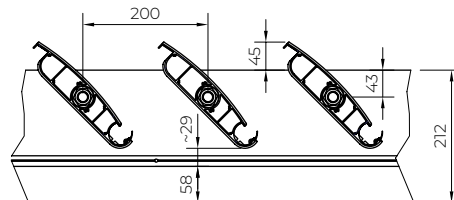
Slats rotation mechanism (Motor 24V DC)



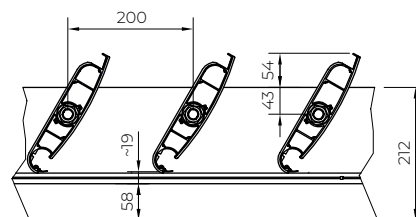
Blades closed



Slats with maximum motor drive height

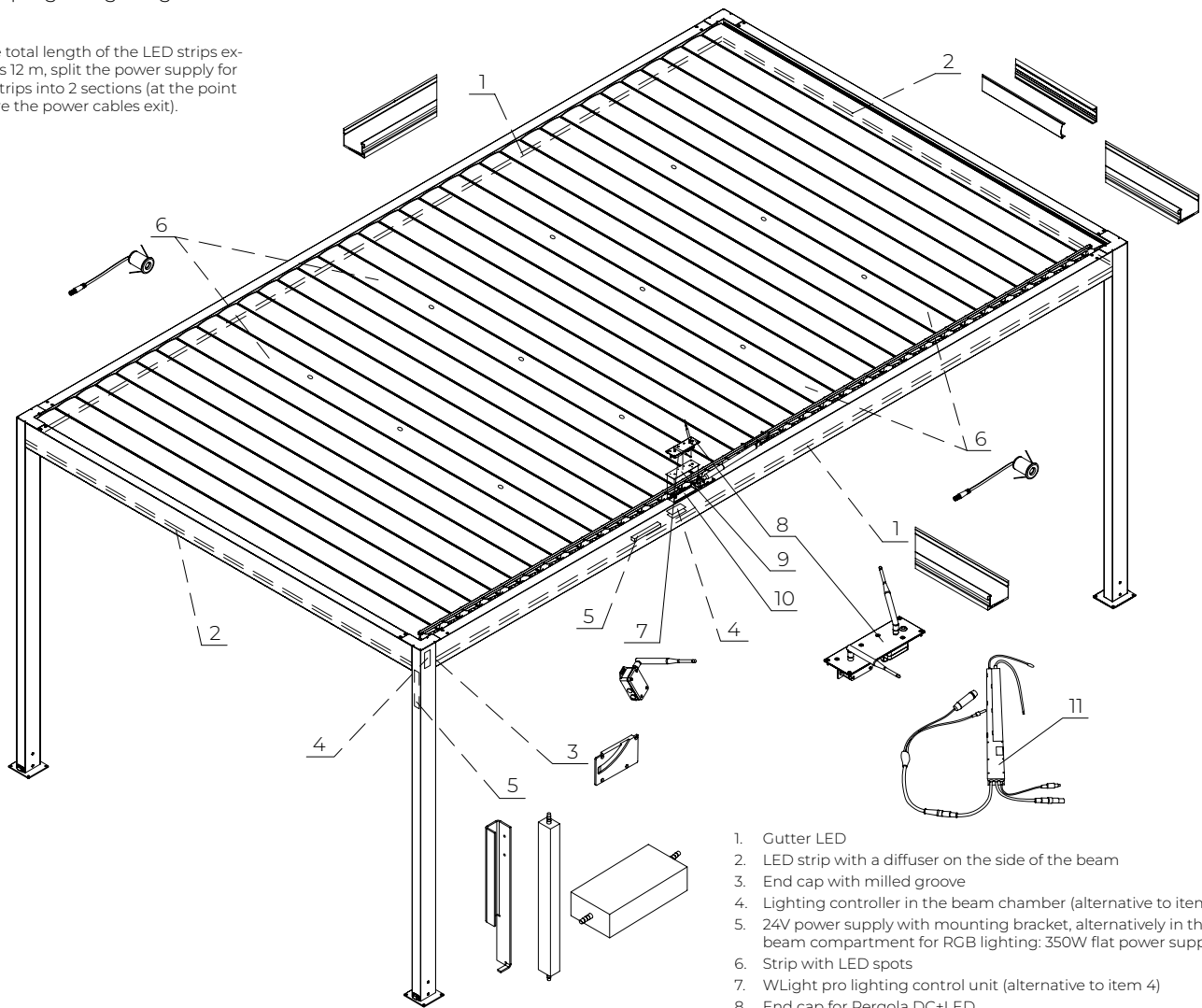


Open



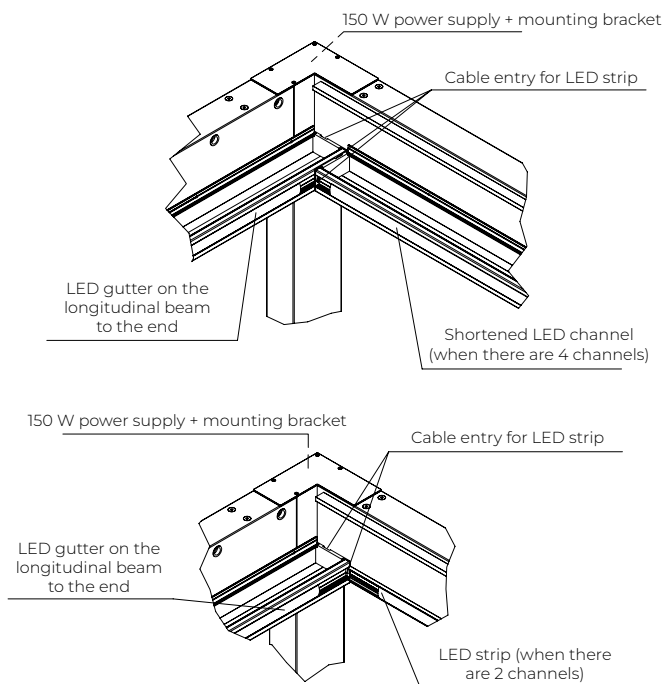
PERGOLA SB 400
LED pergola lighting

Note
If the total length of the LED strips exceeds 12 m, split the power supply for the strips into 2 sections (at the point where the power cables exit).

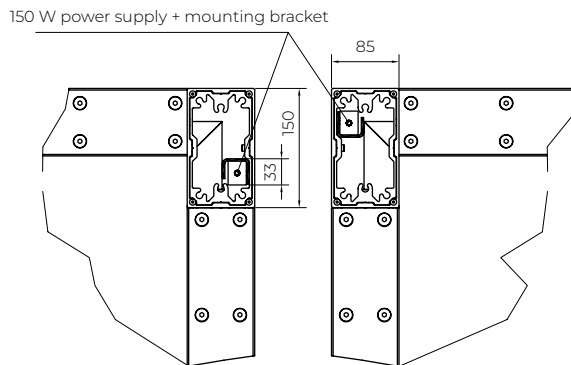


1. Gutter LED
2. LED strip with a diffuser on the side of the beam
3. End cap with milled groove
4. Lighting controller in the beam chamber (alternative to item 7)
5. 24V power supply with mounting bracket, alternatively in the beam compartment for RGB lighting: 350W flat power supply
6. Strip with LED spots
7. WLight pro lighting control unit (alternative to item 4)
8. End cap for Pergola DC+LED
9. seal EPDM
10. Service opening 62x226 mm in the beam
11. IOALL868 control unit (white LED control + built-in power supply)

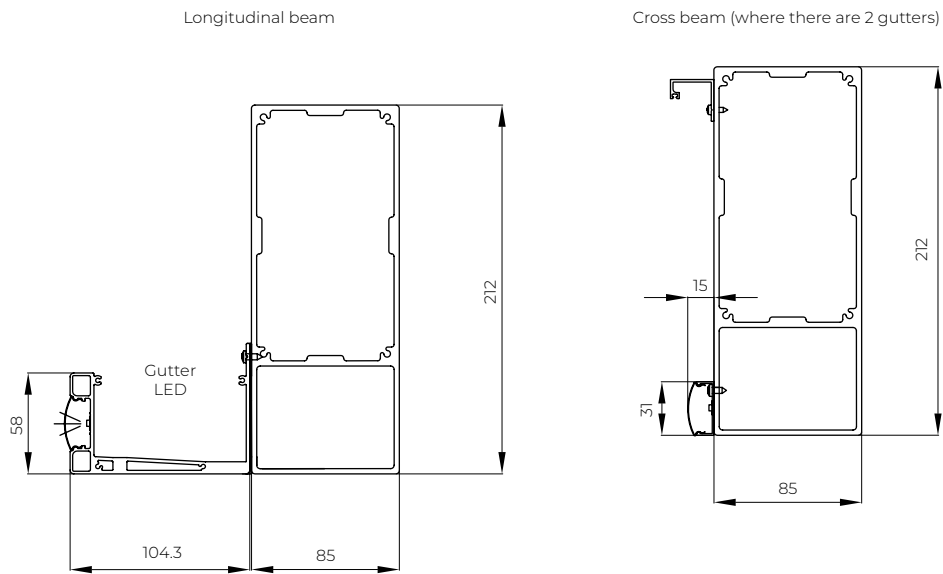
Detail of LED strip power supply



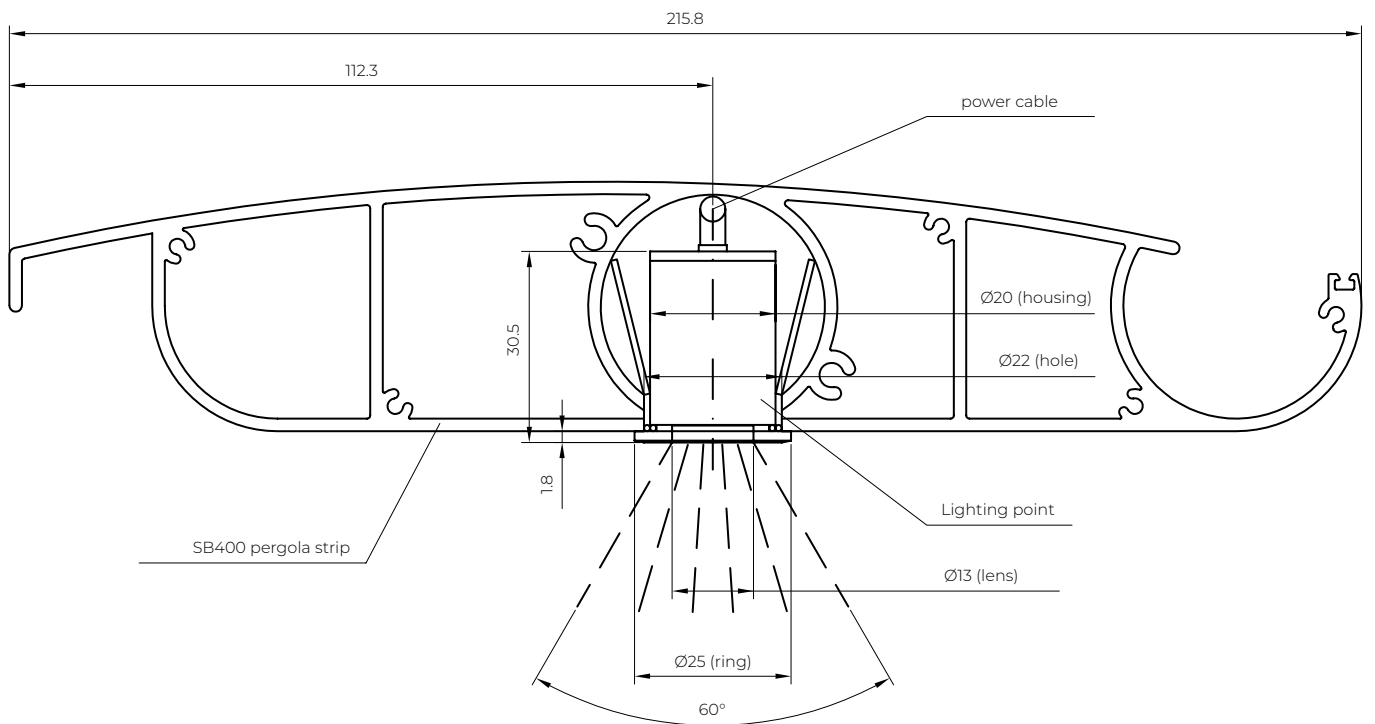
Location of the LED power supply
(alternatively, possible location within the beam – the blanking area behind the motor)



PERGOLA SB 400
Cross-sections of LED strip mounting



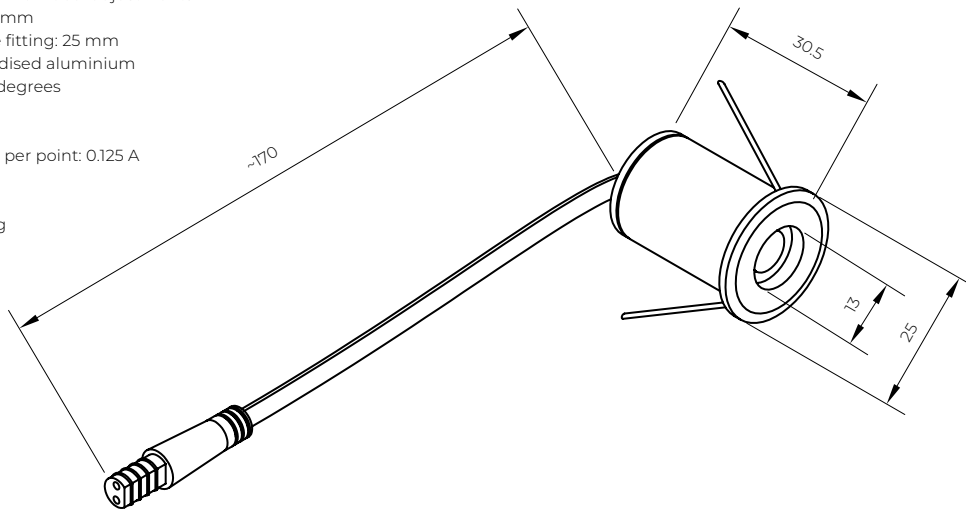
PERGOLA SB 400
Lighting point detail



PERGOLA SB 400
LED light point in the slat

LED light points in the slats of the SB400 pergola:

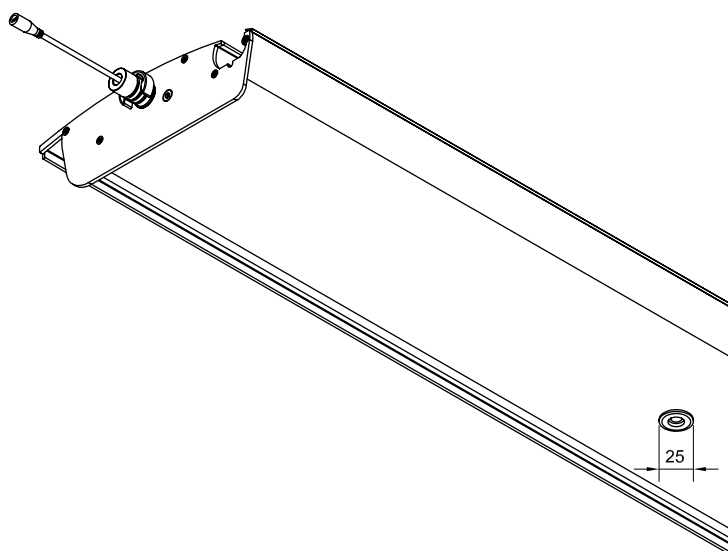
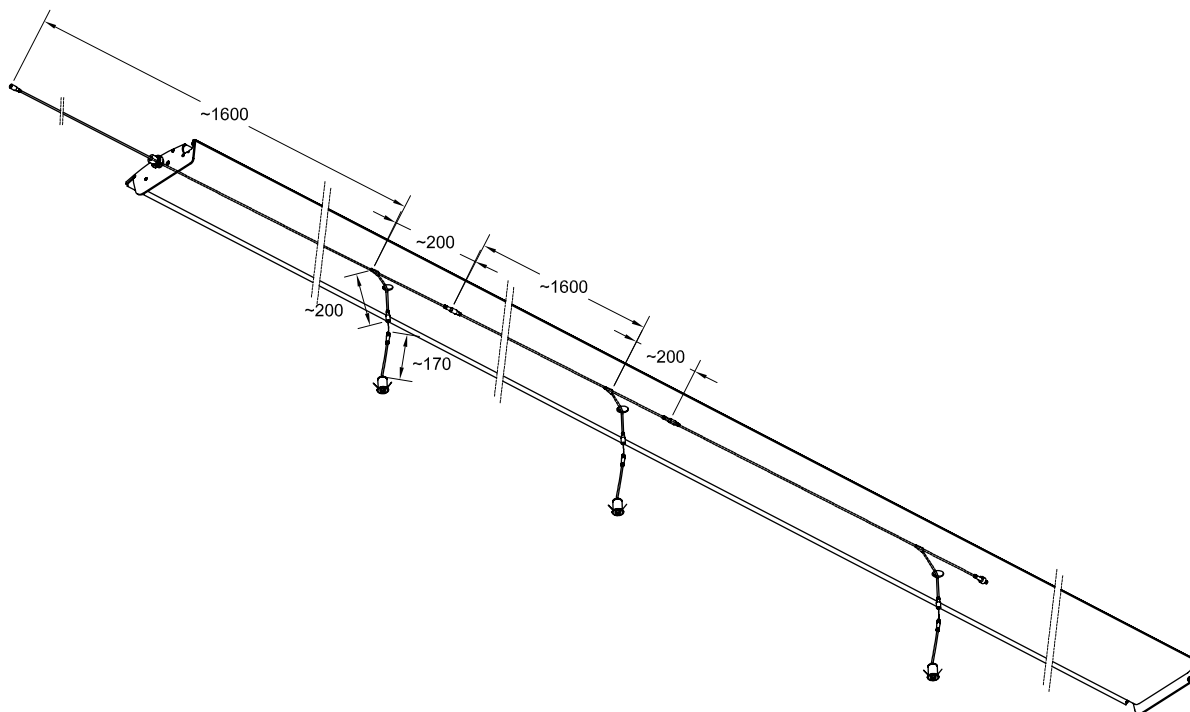
- Number of points: 4 to 12
- Number of points in the blade: 2 to 3
- The number and spacing of points are selected automatically without the option for individual adjustments
- Reflector diameter 13 mm
- Outer diameter of the fitting: 25 mm
- Enclosure colour: anodised aluminium
- LED beam angle -60 degrees
- light colour - 3300 K
- 24V DC power supply
- Current consumption per point: 0.125 A
- Point load - 3.1 W
- light intensity 215 lm
- IP 54 protection rating



LED point layout in the SB400 pergola

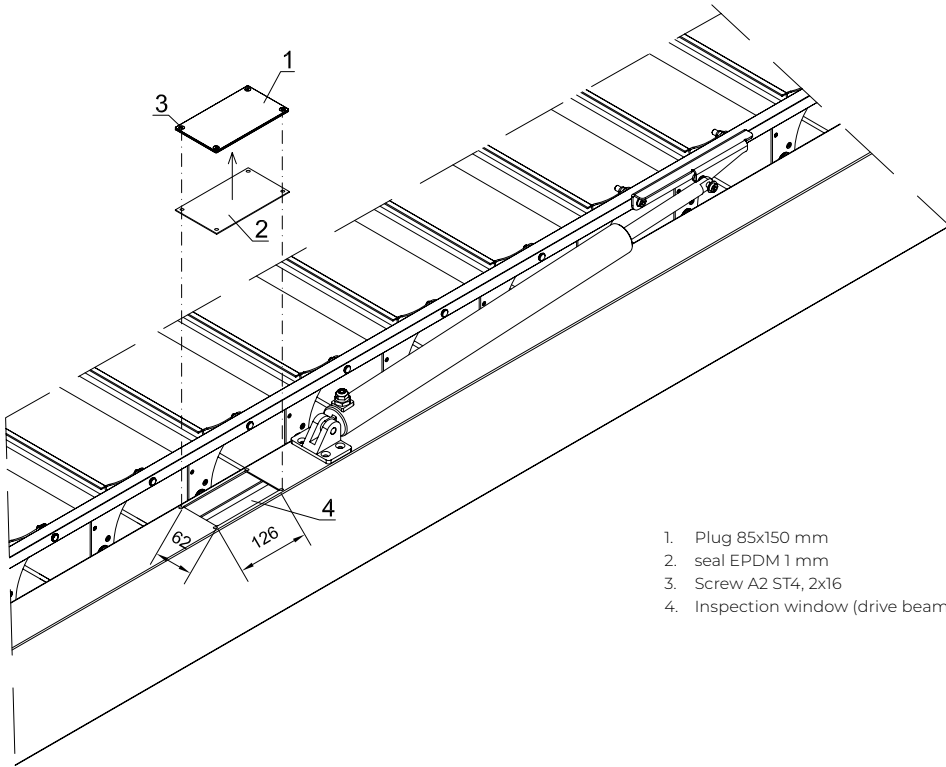
Pergola projection [mm]	Total number of fins with LED points	Blade number with LED dots from the front of the pergola	Number of LED points in the pen			
			Pergola width [mm]			
			this 2750	2751 this 4000		
1400	2	2, 5	2	(the LED axes result from dividing the external width of the pergola into 3 equal parts)		
1600 and 1800		3, 6				
2000 and 2200		3, 7				
2400		4, 8				
2600 and 2800		4, 9				
3000		5, 10				
3200 and 3400		5, 11				
3600	3	4, 9, 14			3	(one in the centre; the axes of the outer LEDs are determined by dividing the external width of the pergola into 4 equal parts)
3800		5, 10, 15				
4000 and 4200		4, 10, 16				
4400 and 4600		5, 11, 17				
4800 and 5000		6, 12, 18				
5200	7, 13, 19					
5400	4	4, 10, 16, 22	2	(the LED axes result from dividing the external width of the pergola into 3 equal parts)		
5600 and 5800		5, 11, 17, 23				
6000 and 6200		6, 12, 18, 24				
6400 and 6600		7, 13, 19, 25				
6800 and 7000		8, 14, 20, 26				

PERGOLA SB 400
Light points in slats



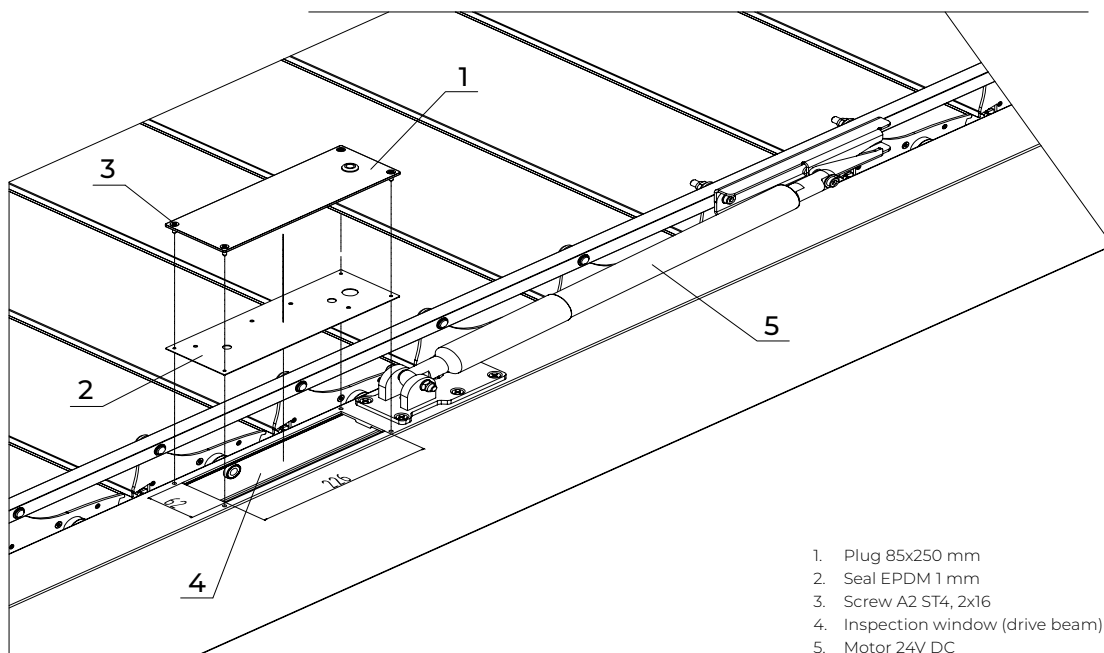
PERGOLA SB 400/SB 400R
Standard inspection window

Note:
Inspection window made to order. By default, on the longitudinal drive beam behind the motor (on the cable side). Other locations possible after consultation with a technician. EPDM seal supplied in the accessories for self-application.



1. Plug 85x150 mm
2. seal EPDM 1 mm
3. Screw A2 ST4, 2x16
4. Inspection window (drive beam)

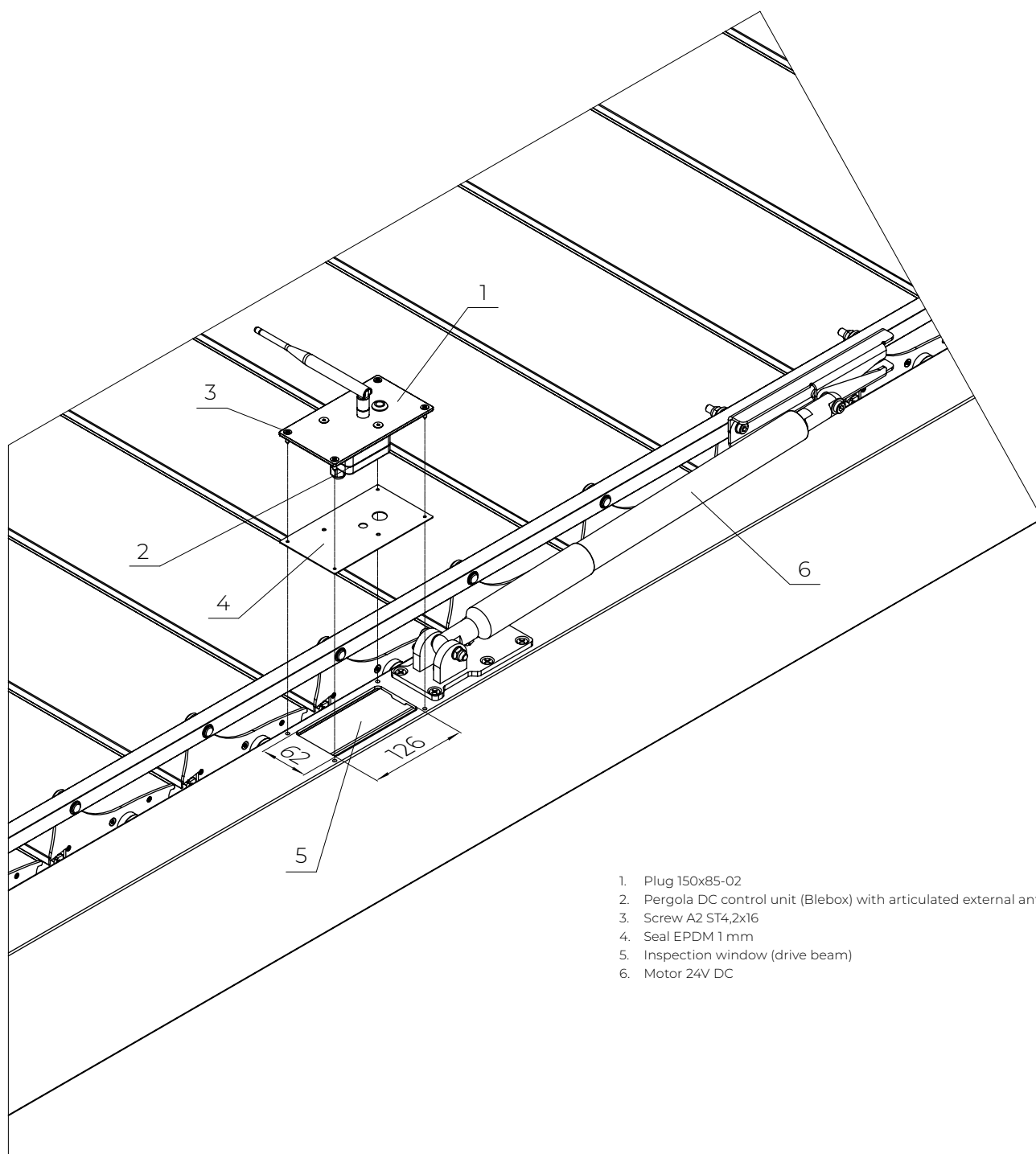
PERGOLA SB 400/SB 400R
Inspection window - Teleco



1. Plug 85x250 mm
2. Seal EPDM 1 mm
3. Screw A2 ST4, 2x16
4. Inspection window (drive beam)
5. Motor 24V DC

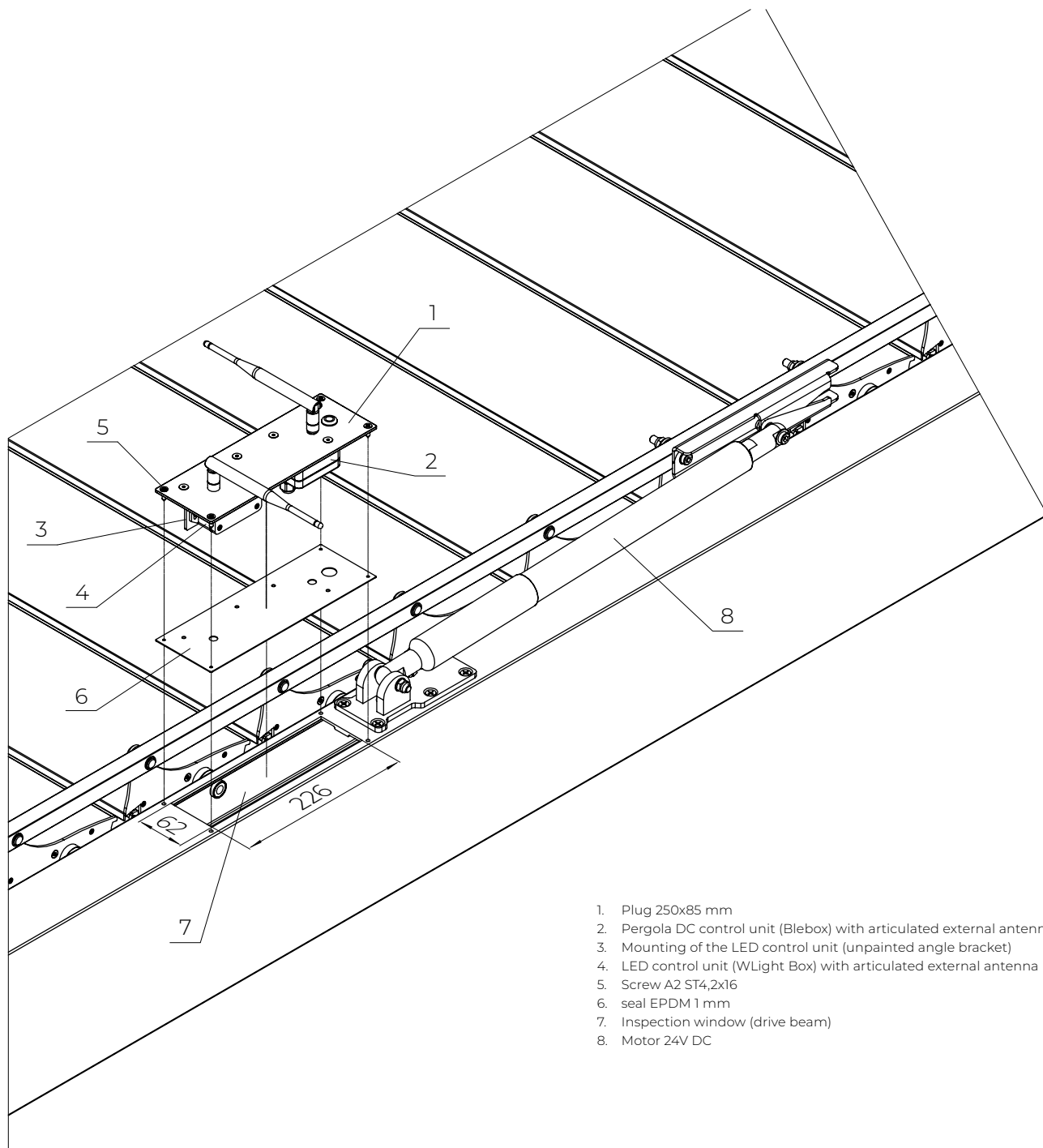
PERGOLA SB 400/400R

Inspection window for Pergola DC (Blebox)



1. Plug 150x85-02
2. Pergola DC control unit (Blebox) with articulated external antenna
3. Screw A2 ST4,2x16
4. Seal EPDM 1 mm
5. Inspection window (drive beam)
6. Motor 24V DC

PERGOLA SB 400/400R
 Inspection window for Pergola DC+LED
 (Blebox+WLight Box)



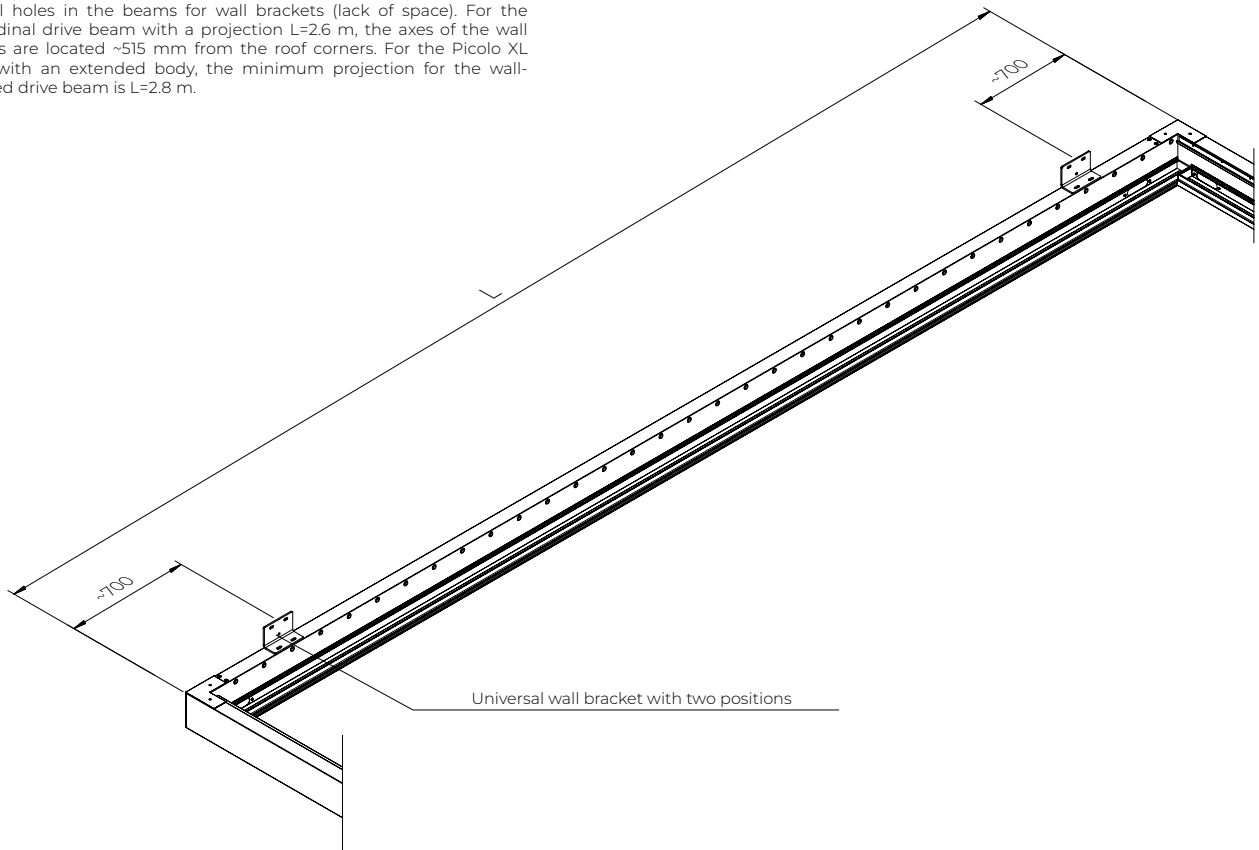
1. Plug 250x85 mm
2. Pergola DC control unit (Blebox) with articulated external antenna
3. Mounting of the LED control unit (unpainted angle bracket)
4. LED control unit (WLight Box) with articulated external antenna
5. Screw A2 ST4,2x16
6. seal EPDM 1 mm
7. Inspection window (drive beam)
8. Motor 24V DC

PERGOLA SB 400

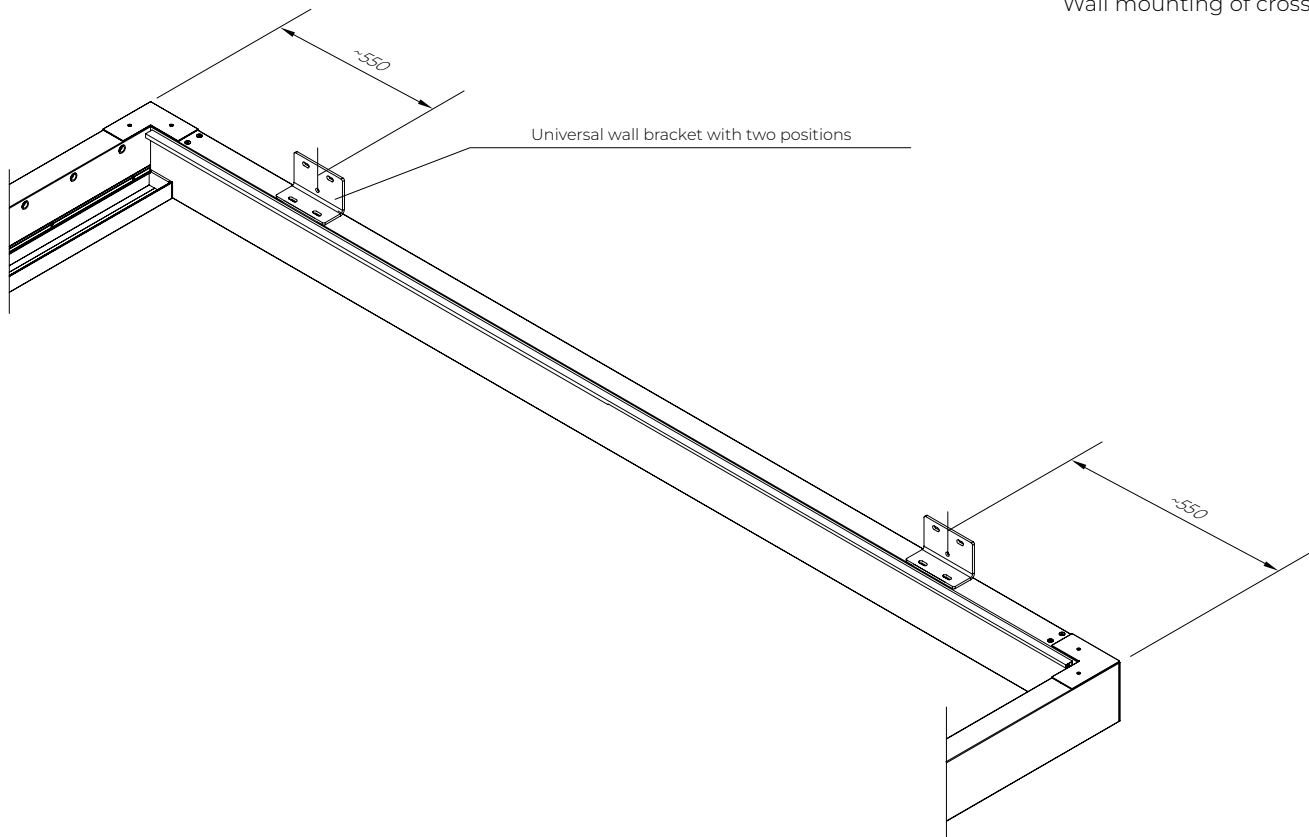
Wall mounting of longitudinal beams

Note

For a projection L of up to 2.6 m and where a motor is present, we do not drill holes in the beams for wall brackets (lack of space). For the longitudinal drive beam with a projection L=2.6 m, the axes of the wall brackets are located ~515 mm from the roof corners. For the Pico XL motor with an extended body, the minimum projection for the wall-mounted drive beam is L=2.8 m.

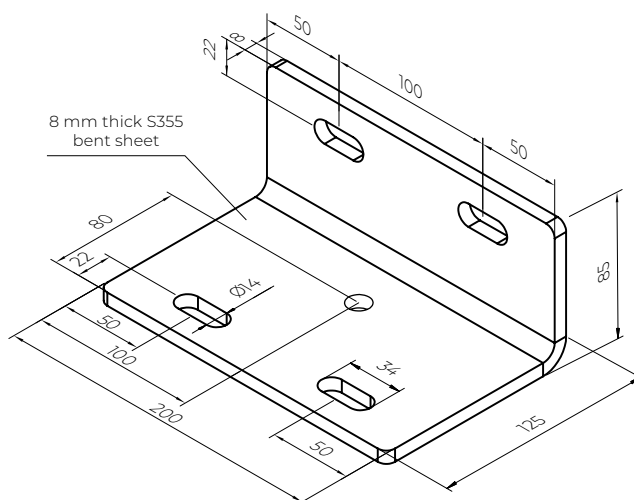
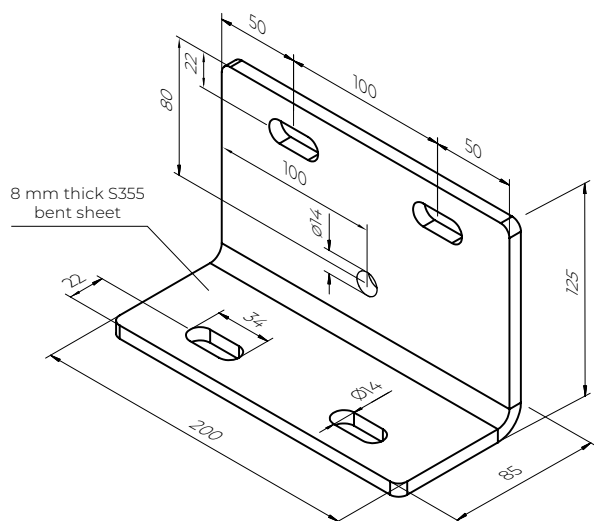


PERGOLA SB 400
Wall mounting of cross beams



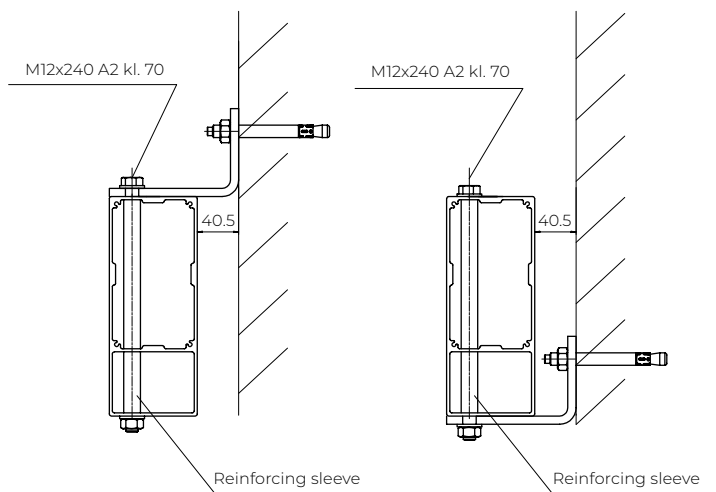
PERGOLA SB 400
Universal wall brackets

Note:
ALUPROF accepts no liability for the selection of anchors and the fixing of the bracket to the substrate. This may significantly reduce the load-bearing capacity of the bracket (particularly in substrates with an insulation layer and/or perforated ceramic tiles).

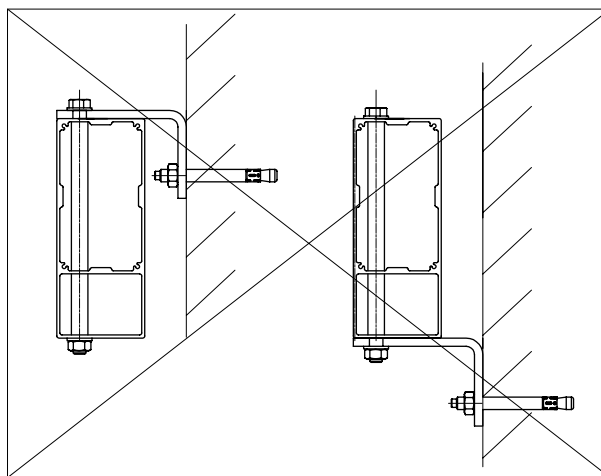


PERGOLA SB 400
Mounting methods with spacers

Note
ALUPROF accepts no liability for the selection of anchors and the fixing of the bracket to the substrate. This may significantly reduce the load-bearing capacity of the bracket (particularly in substrates with an insulation layer and/or perforated ceramic tiles).

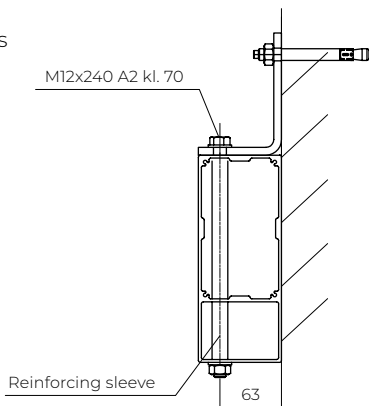


PROHIBITED

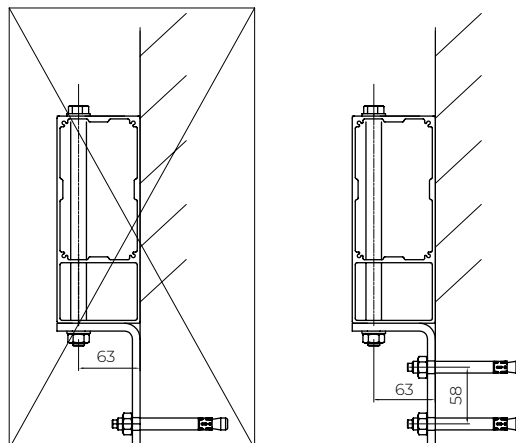


PERGOLA SB 400
Installation methods without spacers

Note:
ALUPROF accepts no liability for the selection of anchors and the fixing of the bracket to the substrate. This may significantly reduce the load-bearing capacity of the bracket (particularly in substrates with an insulation layer and/or perforated ceramic tiles).



PROHIBITED

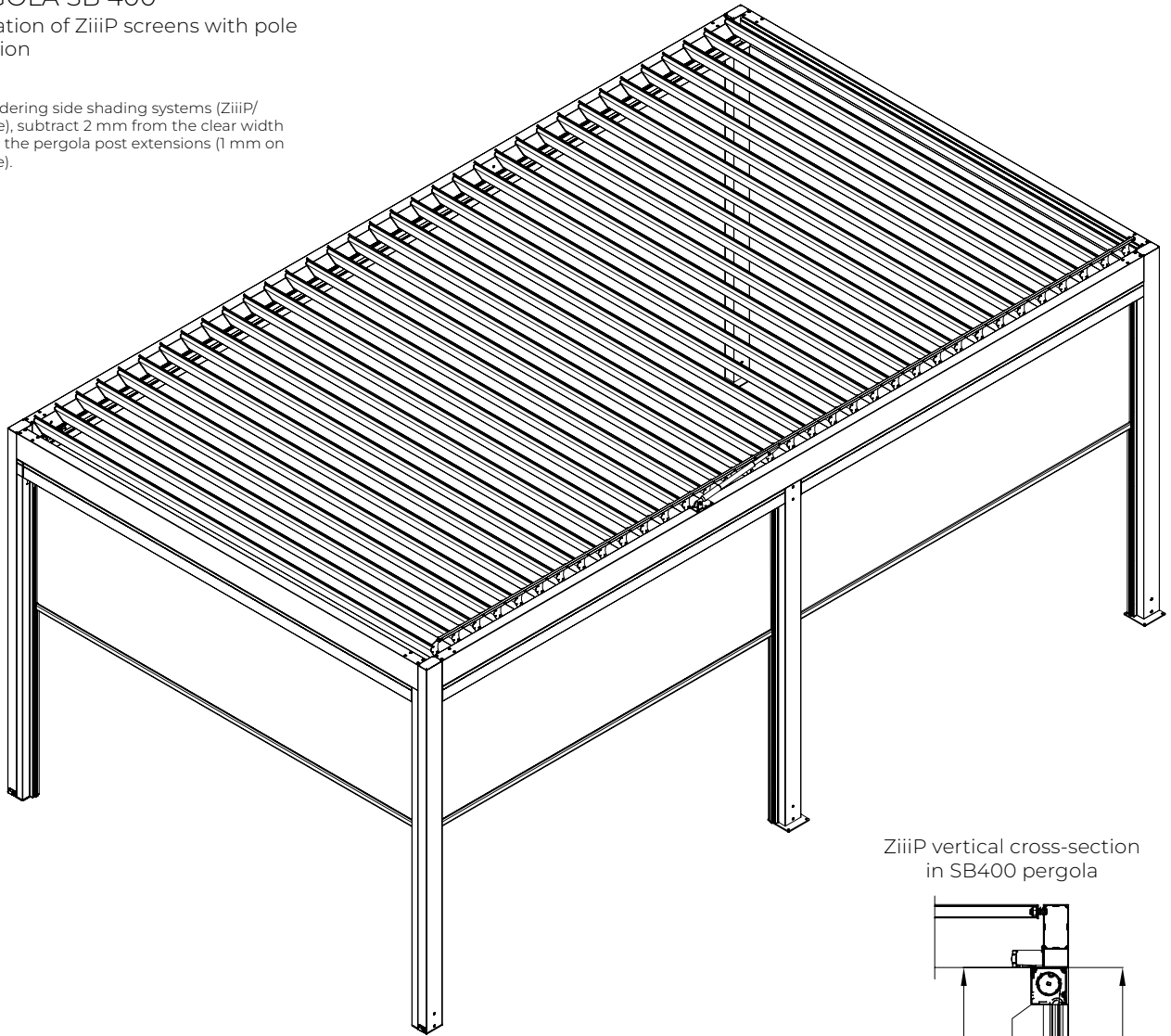


PERGOLA SB 400

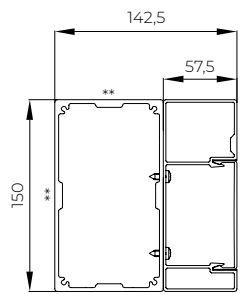
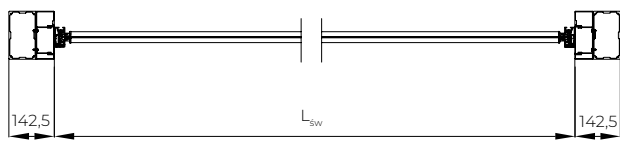
Installation of ZiiiP screens with pole extension

Note:

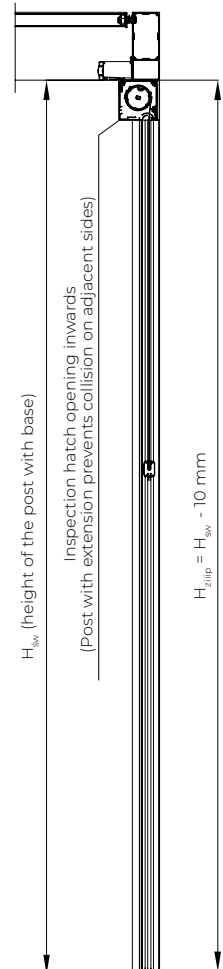
When ordering side shading systems (ZiiiP/ refleksle), subtract 2 mm from the clear width between the pergola post extensions (1 mm on each side).



ZiiiP vertical cross-section in SB400 pergola



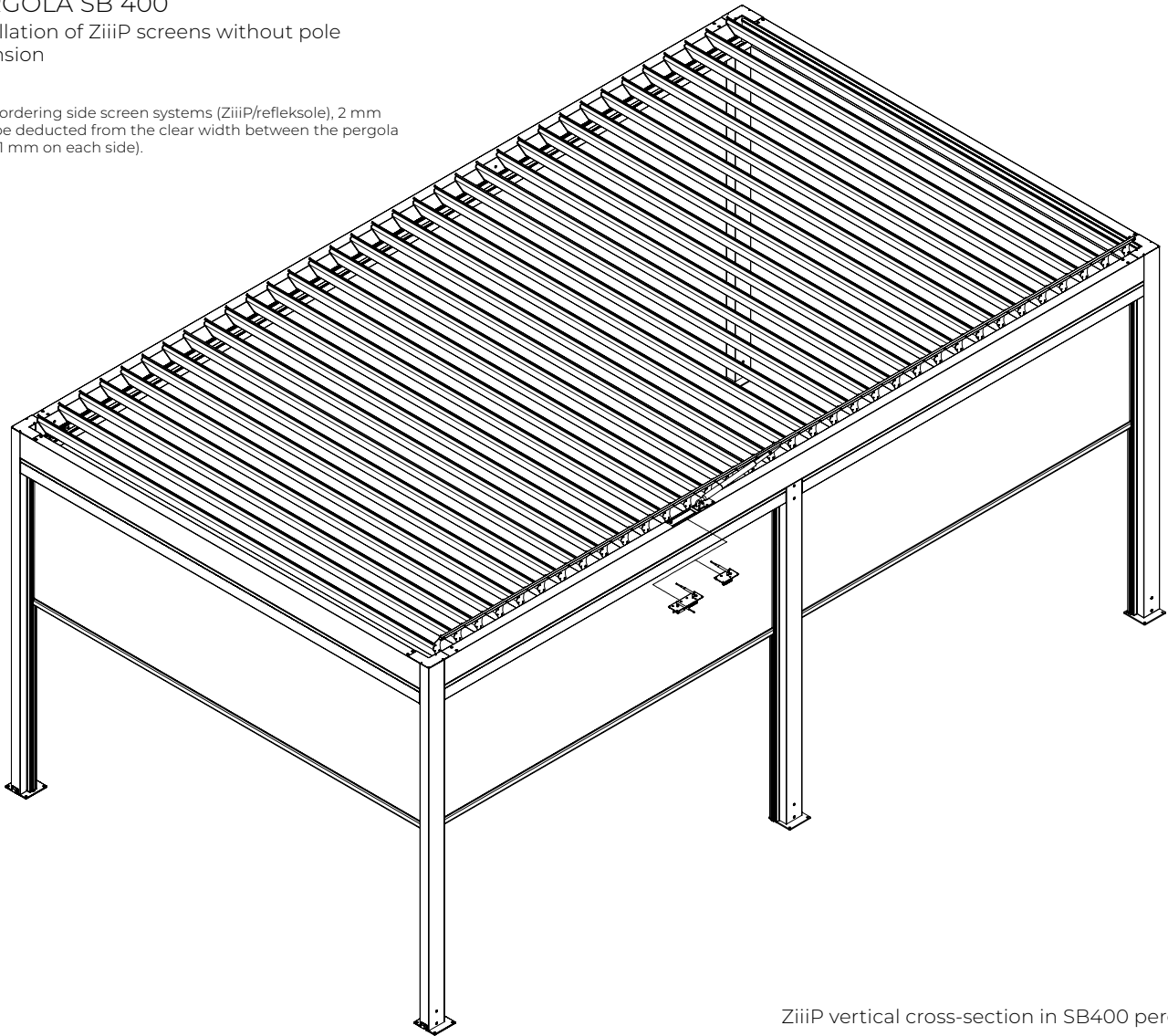
** - side facing the outside of the pergola



PERGOLA SB 400

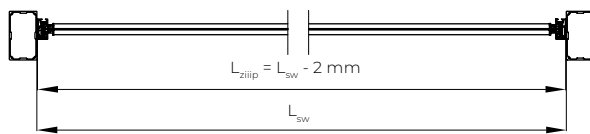
Installation of ZiiiP screens without pole extension

Note:
When ordering side screen systems (ZiiiP/reflekssole), 2 mm must be deducted from the clear width between the pergola posts (1 mm on each side).

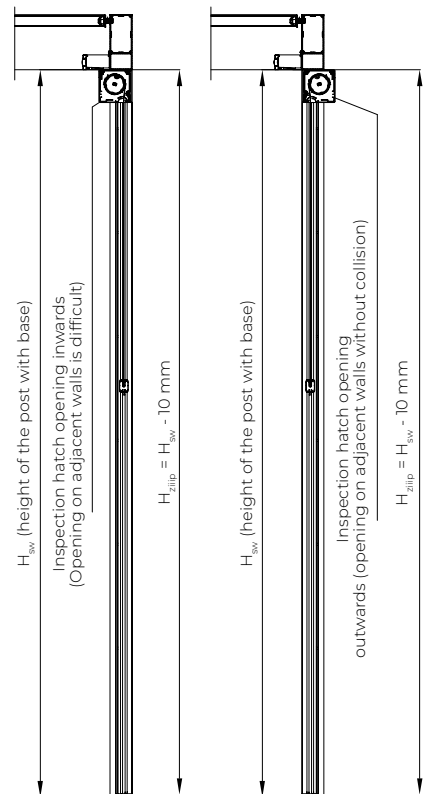
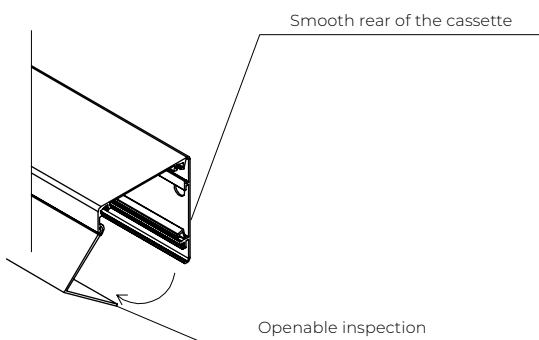


ZiiiP vertical cross-section in SB400 pergola

Horizontal section of ZIIIP in SB400 pergola

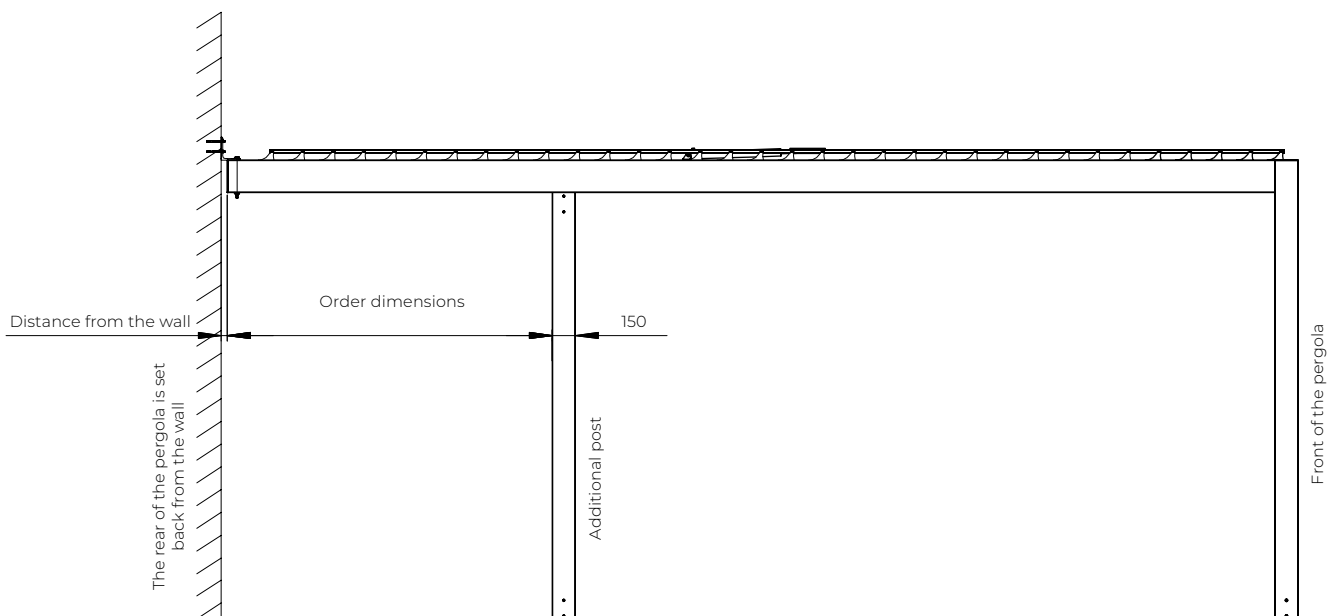
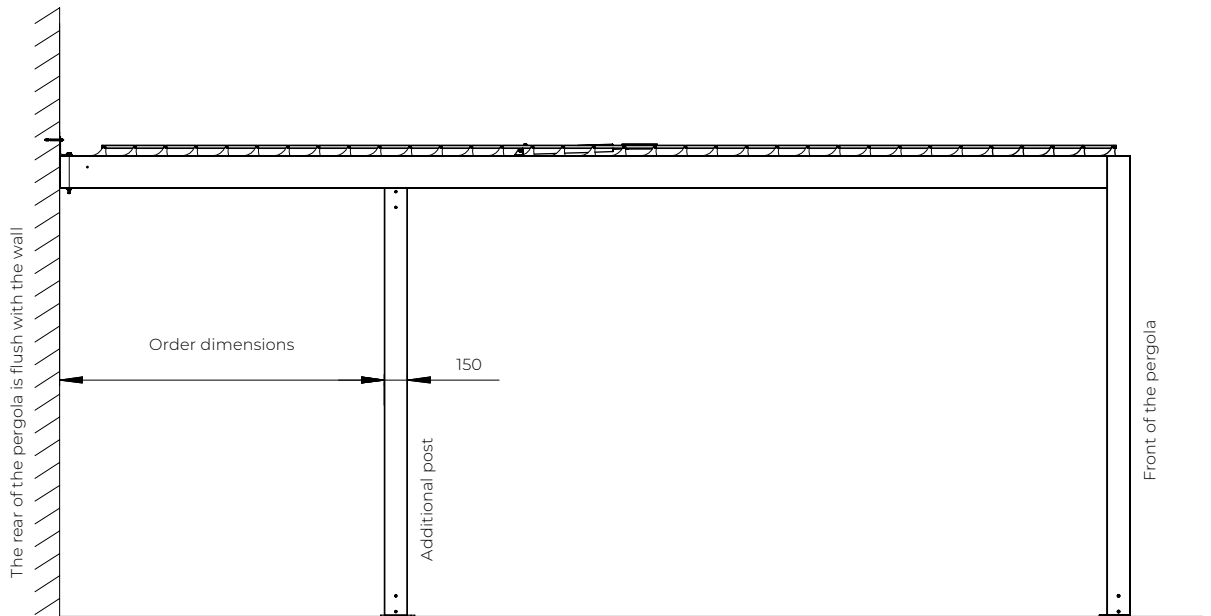
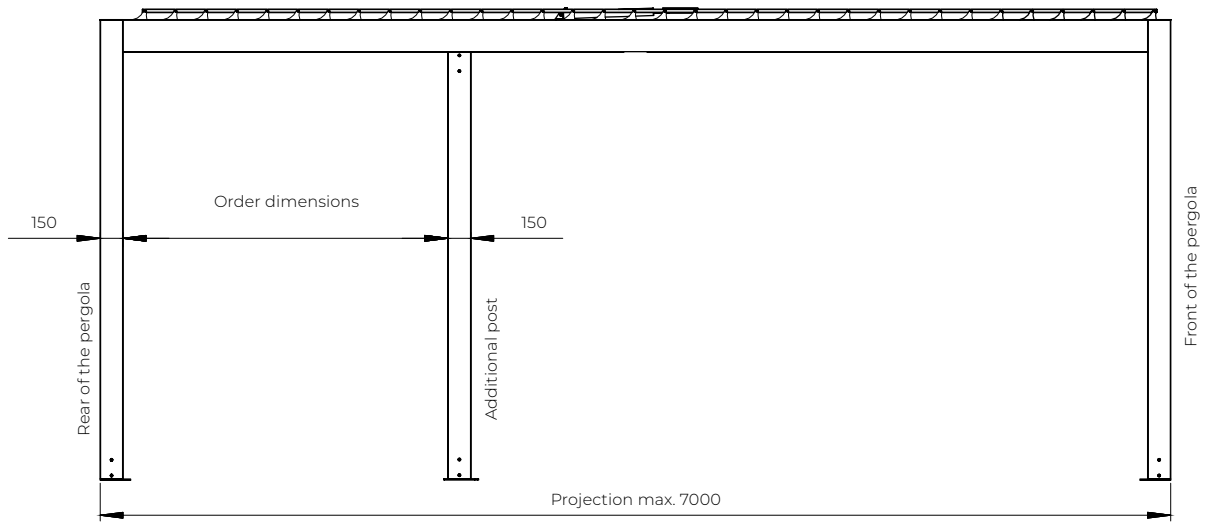


ZIIIP cassette



PERGOLA SB 400

Measurements for an intermediate post

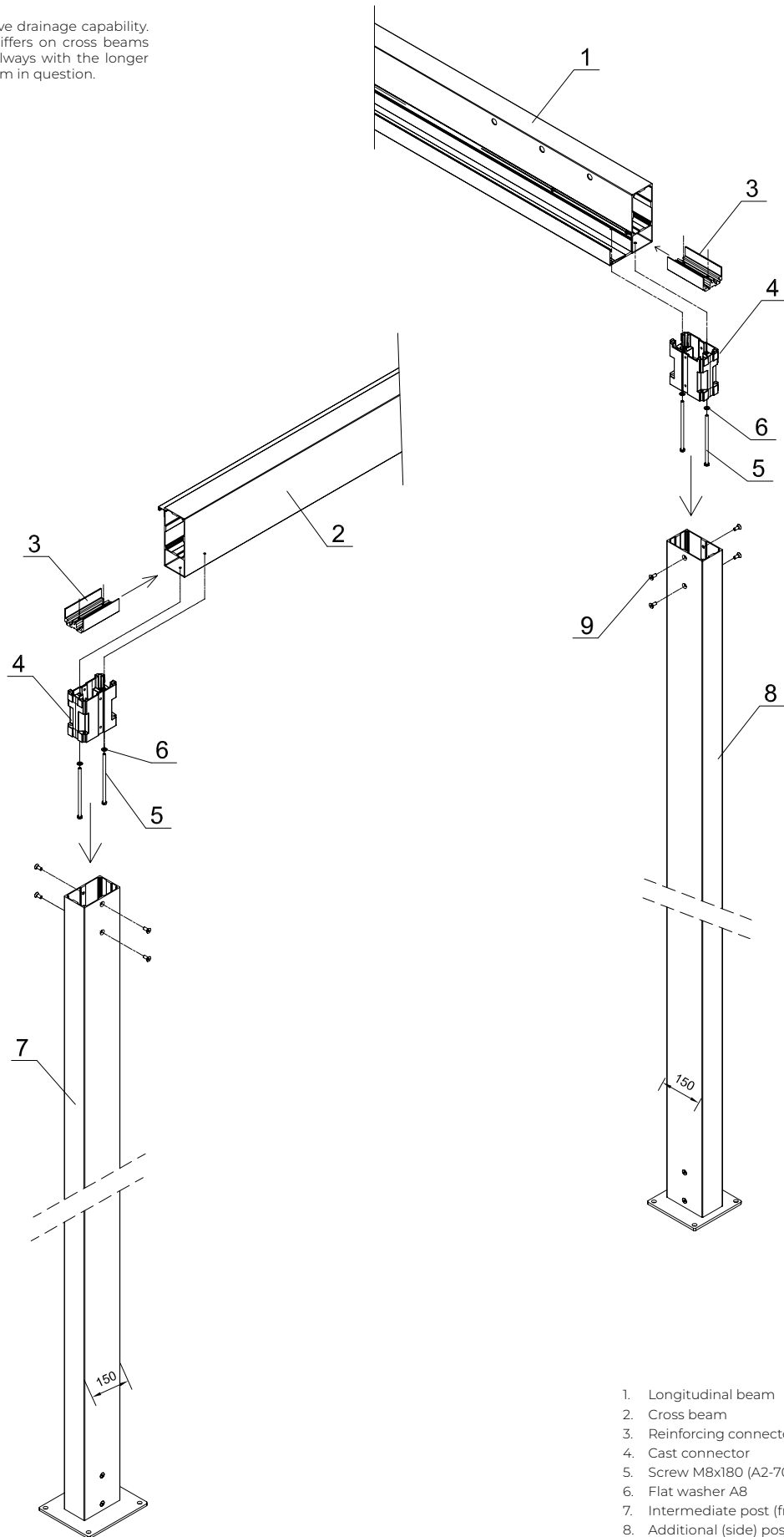


PERGOLA SB 400

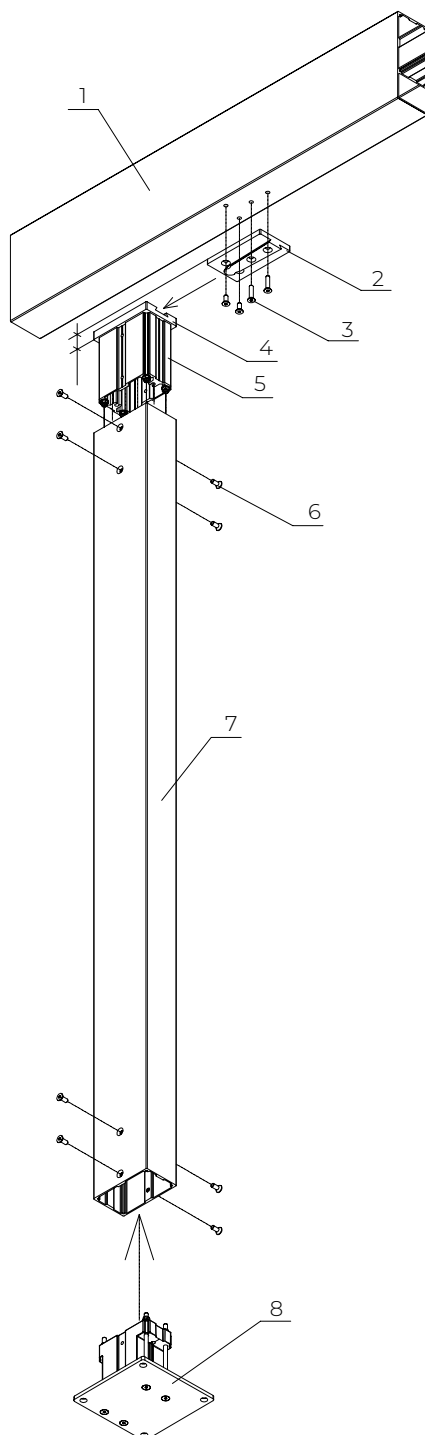
Additional posts

Note:

Additional posts do not have drainage capability. The positioning of posts differs on cross beams and longitudinal beams. Always with the longer side running along the beam in question.

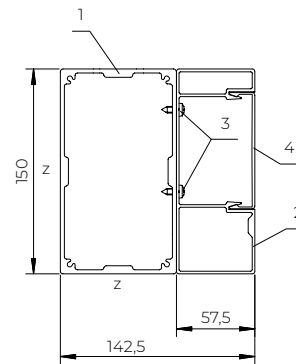
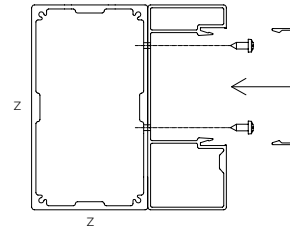
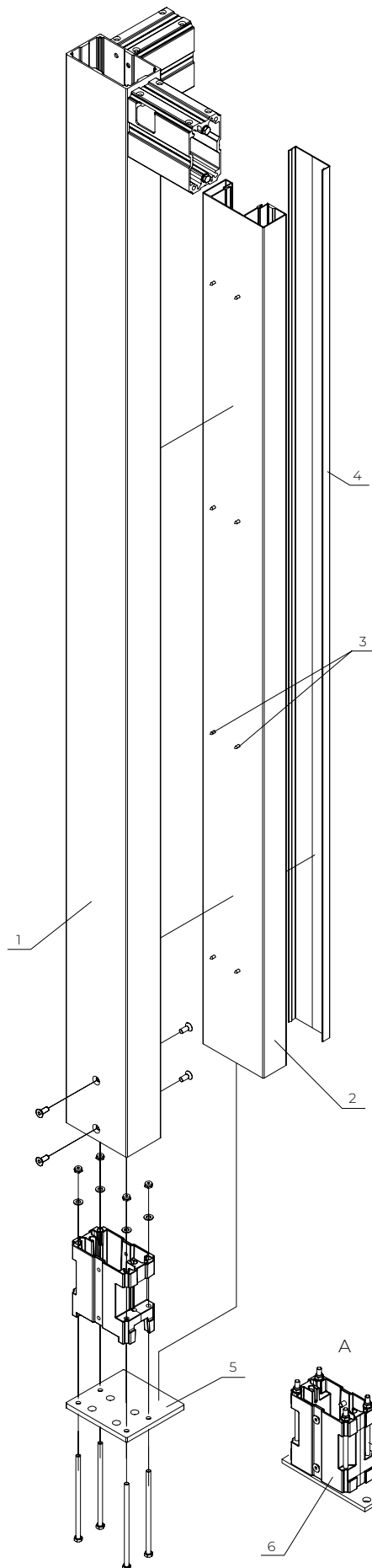


1. Longitudinal beam
2. Cross beam
3. Reinforcing connector
4. Cast connector
5. Screw M8x180 (A2-70)
6. Flat washer A8
7. Intermediate post (front/rear)
8. Additional (side) post
9. Screw M8x20 (A2-70)

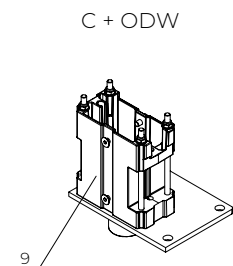
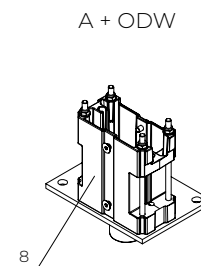
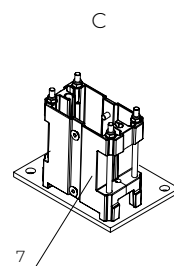
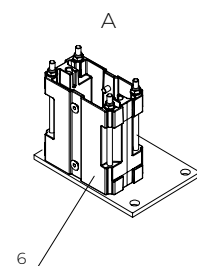


1. Pergola beam (longitudinal/transverse)
2. Sherpa
3. Screw M8x35 (A2-70)
4. Sherpa pocket
5. Linear connector
6. Screw M8x20 (A2-70)
7. Intermediate post
8. Pole base

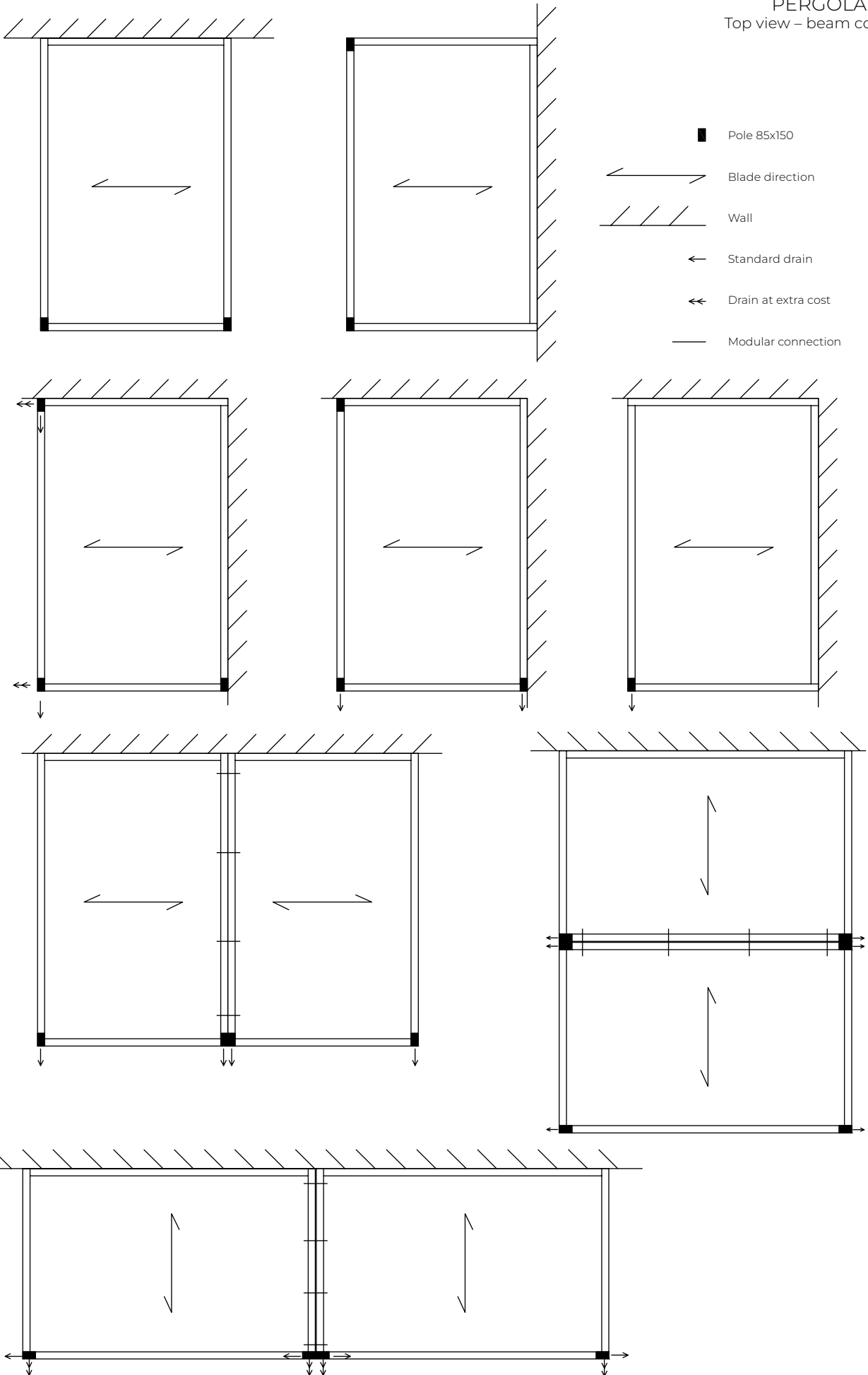
PERGOLA SB 400
Post extension



- 1. Pergola post 85x150 mm
- 2. Post extension – fixed part
- 3. screws ST4,8x13-C-H (ISO7049)
- 4. Inspection hatch (component from SB400PRO)
- 5. Base flush with the (steel) extension 10x142.5x150 mm
- 6. Base A
- 7. Base C
- 8. Base A with downward drainage
- 9. Base C with downward drainage
- z Outside of the pergola



PERGOLA SB 400
Top view – beam connection



PERGOLA SB 400 with concealed motor

THE SB 400 pergola is a functional, attractive construction kit with a fixed roof consisting of rotating slats, which provides protection from both sun and rain. The system is available in a single-module version and a multi-module version by connecting individual modules.

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and stainless steel components
- Structure equipped with a drainage system
- New louvre cross-section with flat surfaces and a version featuring an integrated LED strip groove
- The closing system features double tie rods
- A dual sealing system (silicone and brush) ensures high light blackout
- Drive and lower link concealed within the beam profile
- No roof pitch
- Electrically controlled rotation of roof slats
- Option to use weather-dependent automation
- Waterproofing of the retractable roof and aesthetic water drainage via integrated side gutters and posts
- Limits sunlight depending on requirements
- Protects against the effects of weather conditions: rain and wind
- Protects against snow loads of up to 50 kg/m² (uniform load, version without Open Slide glazing system)
- Does not emit toxic substances during operation
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort
- Roof louvre rotation can be operated via remote control
- Additional access chamber for cable routing
- Installation holes for cabling, located inside the corners, with access panels
- The window in the motor compartment also allows the control unit to be concealed
- Through-wall mounting using concealed reinforcement inserts
- Option to install Open Slide glazing (snow load reduction to 10 kg/m² required)

TECHNICAL PARAMETERS:

- Maximum module width: 4000 mm, minimum: 2000 mm
- Maximum overhang 7000 mm, minimum 2400 mm
- Maximum clear height between roof beams 2800 mm
- Max. structure height 3050 mm, including the blade rotation mechanism 3100 mm
- Free-standing or wall-mounted structure, single- or multi-module, created by joining individual modules, made of extruded aluminium profiles and stainless steel components, equipped with a drainage system
- Roof pitch 0°
- No cross-slope at the blade ends or optional with a 15 mm difference – slope from the motor
- 200 mm slat spacing
- Blade rotation range 0° to 120°±5° (For the Somfy Tilt 24V motor)
- Roof wind resistance class 6 (400 Pa ~41 kg/m²)
- The maximum drainage capacity handles rainfall with an intensity of up to 0.04 l/s/m² for a maximum duration of 5.3 minutes (depending on the configuration of the drainage holes)
- COB LED lighting in 4000K, 3200K or RGB (integrated into channels) or 3300K (spotlights in fins and light strips in fins, COB LED 4000K, 3200K or RGB)
- Arrangement of slats and LED points – identical to the SB 400 pergola (powered from the bearing beam)
- Drainage via 92 mm wide gutters (with angle overflows concealed in the beams only for 4 gutters) and drainage to the beams and posts, as well as drainage through holes at the bottom of the posts
- Arrangement of slats with LED strips – same quantity as slats with points in SB400

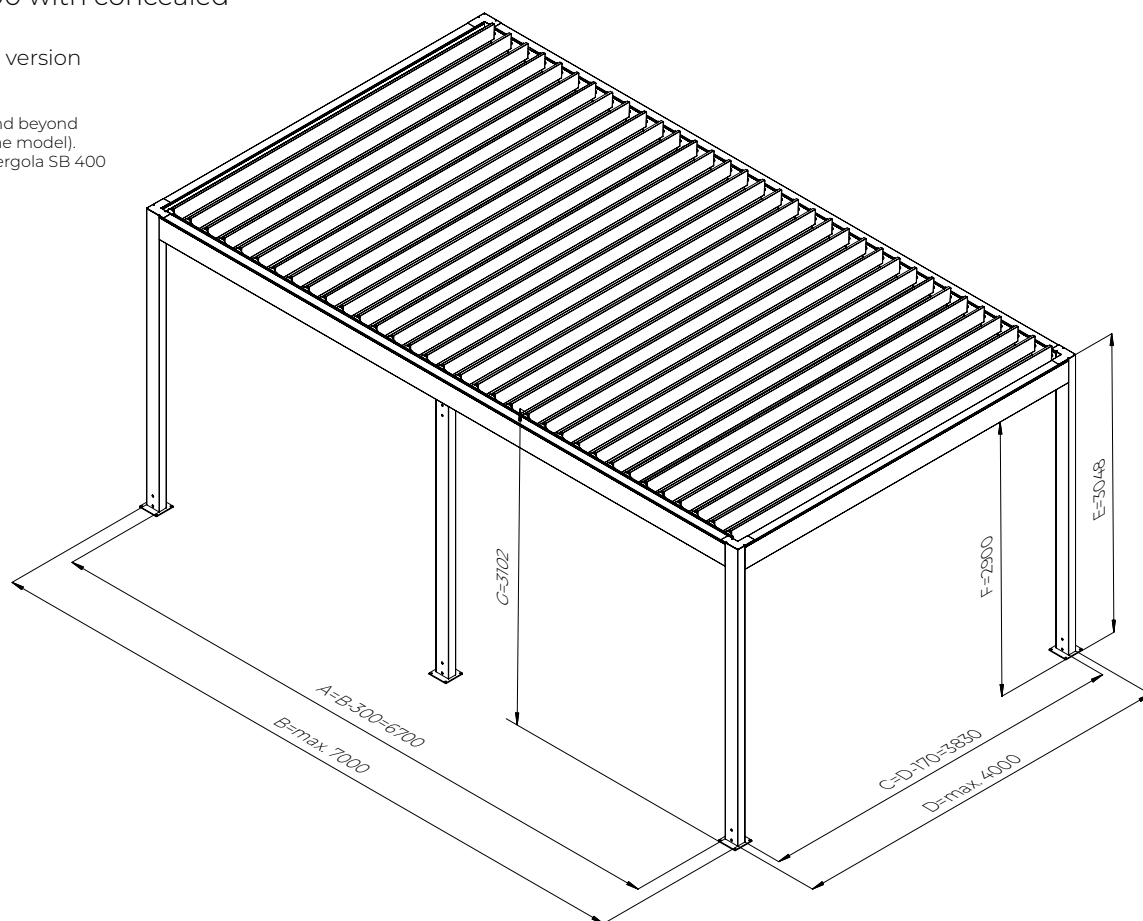
PERMISSIBLE MANUFACTURING TOLERANCES FOR THE EXTERNAL DIMENSIONS OF PERGOLAS ARE +/- 10 mm.

PERGOLA SB 400 with concealed motor

Single free-standing version

Note:

The base outline may extend beyond the posts (depending on the model).
Intermediate posts – see Pergola SB 400

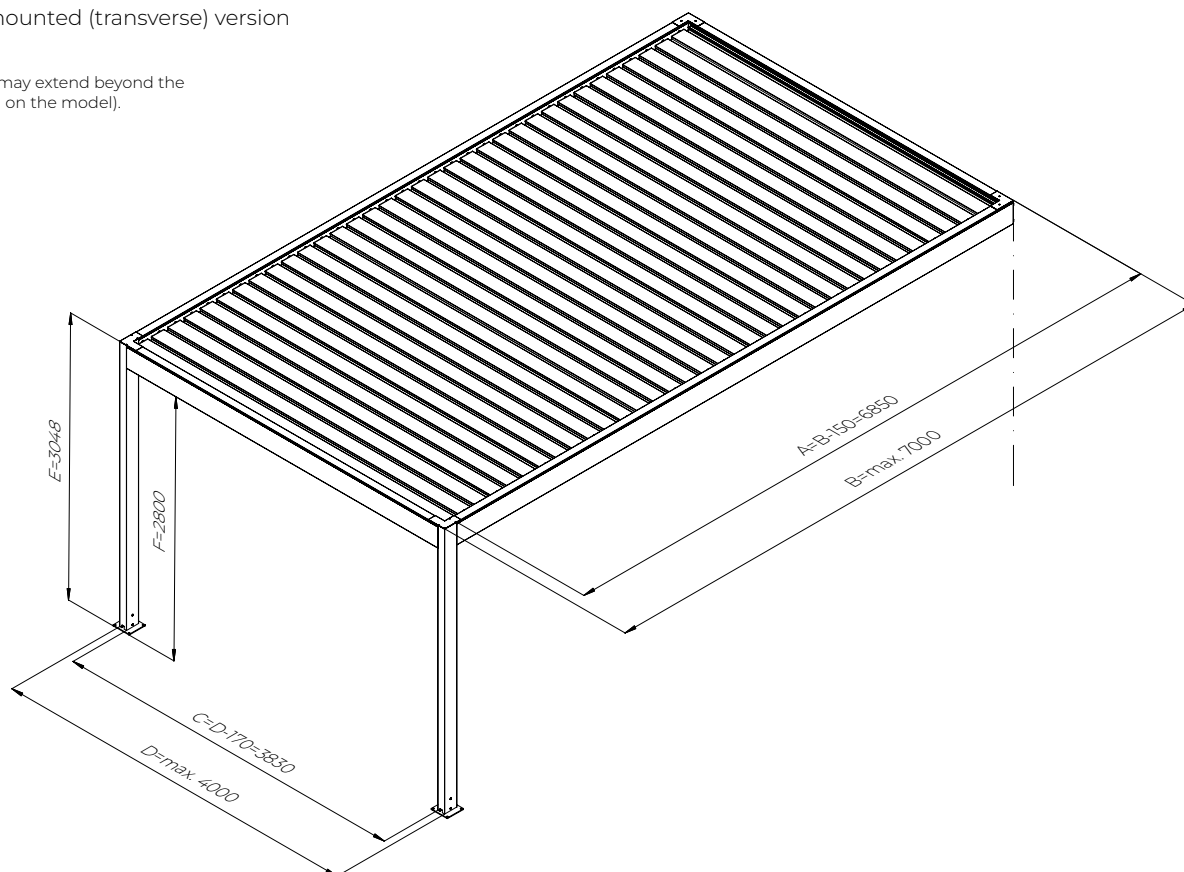


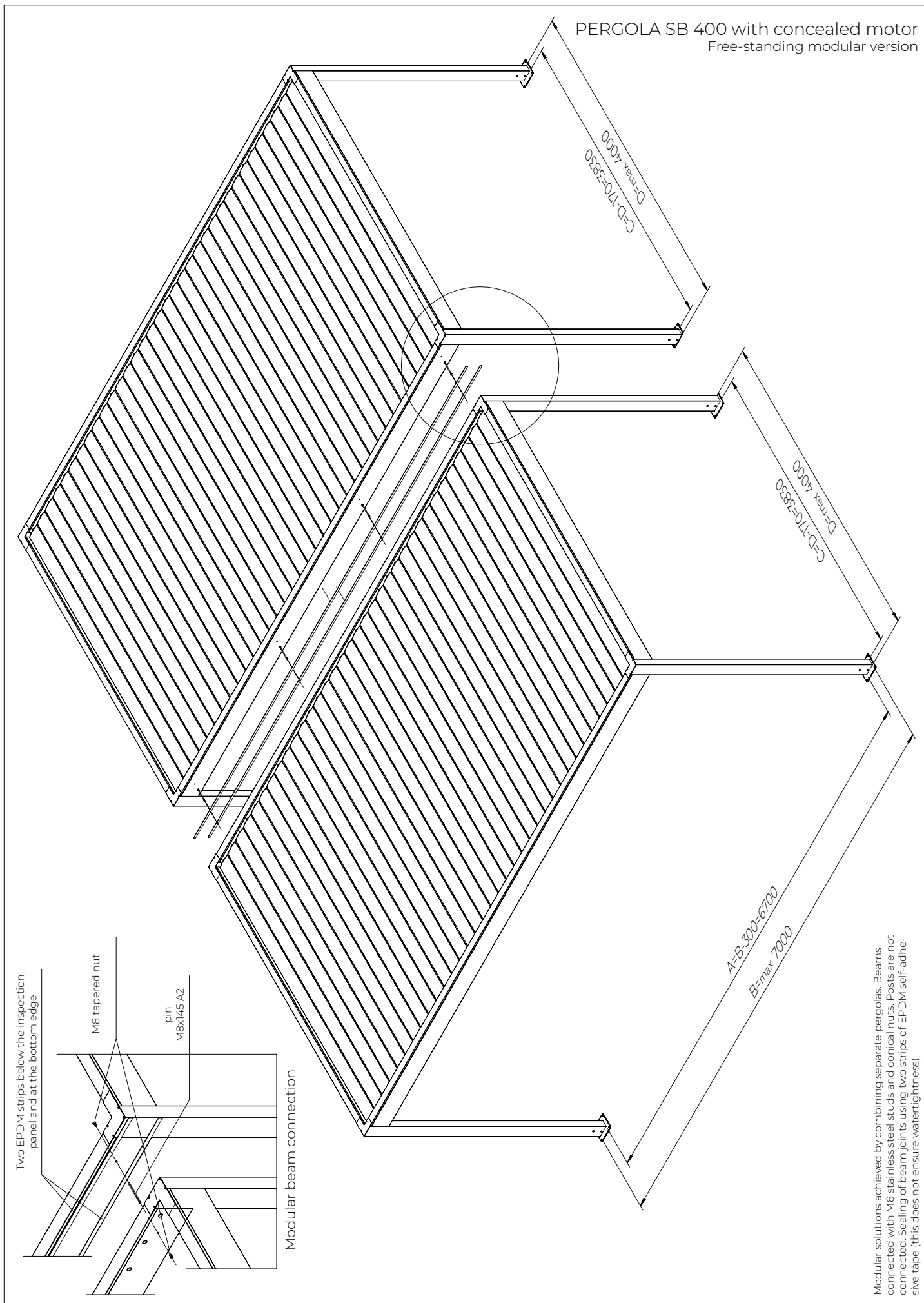
PERGOLA SB 400 with concealed motor

Single wall-mounted (transverse) version

Note:

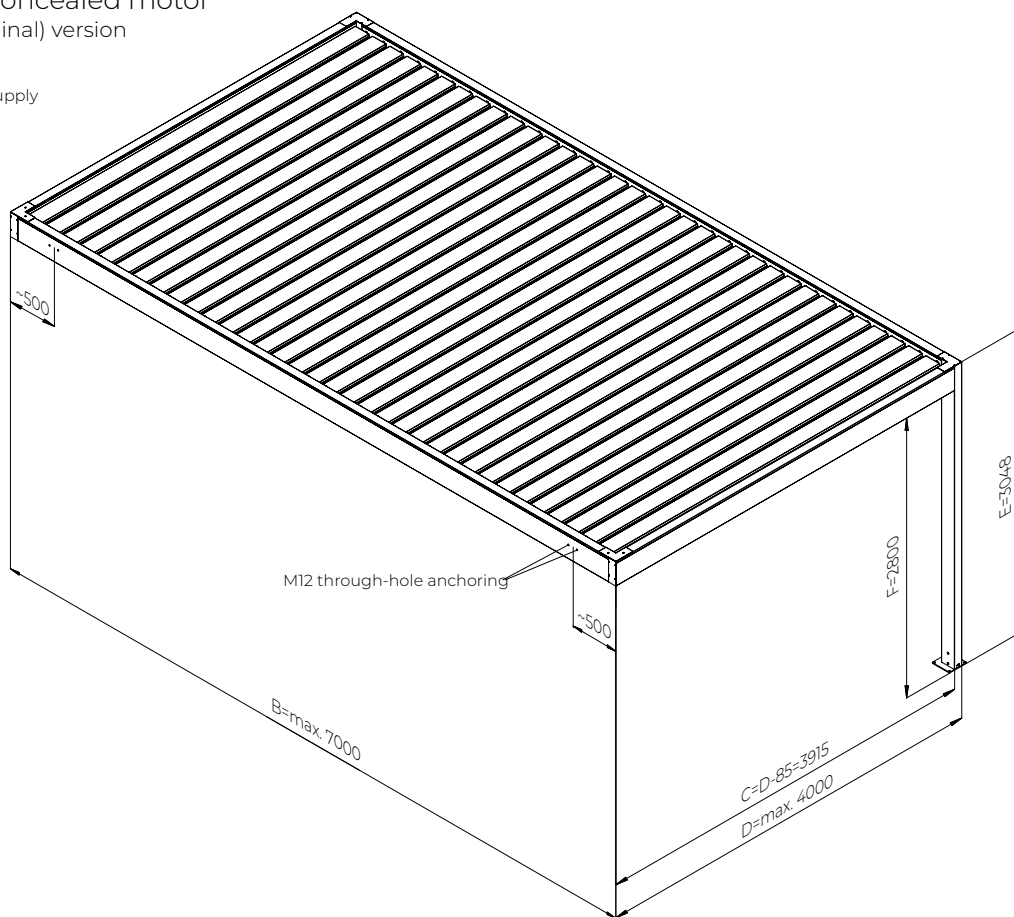
The base outline may extend beyond the posts (depending on the model).





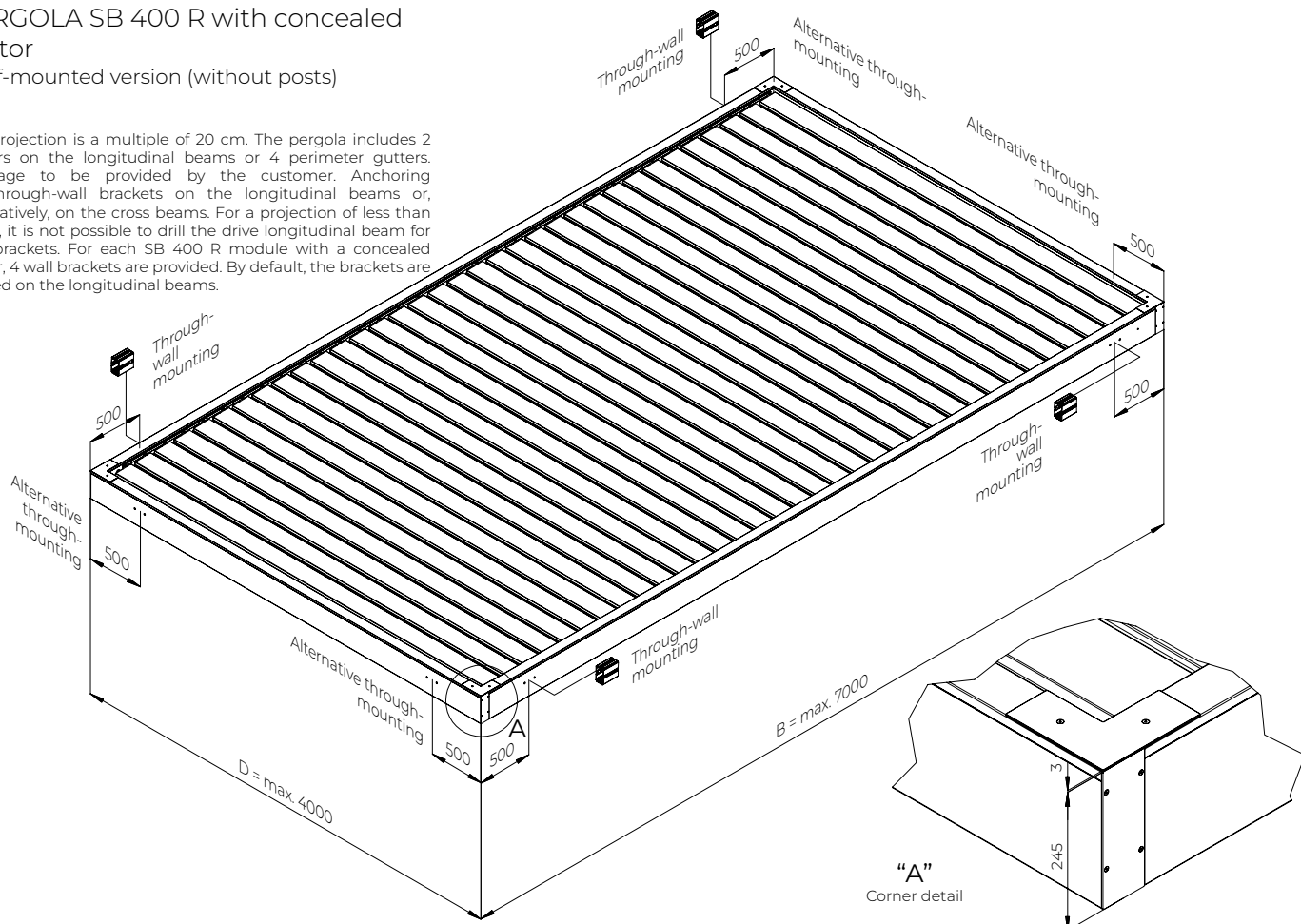
PERGOLA SB 400 with concealed motor
Single wall-mounted (longitudinal) version

Note:
Anchors not included in the ALUPROF supply



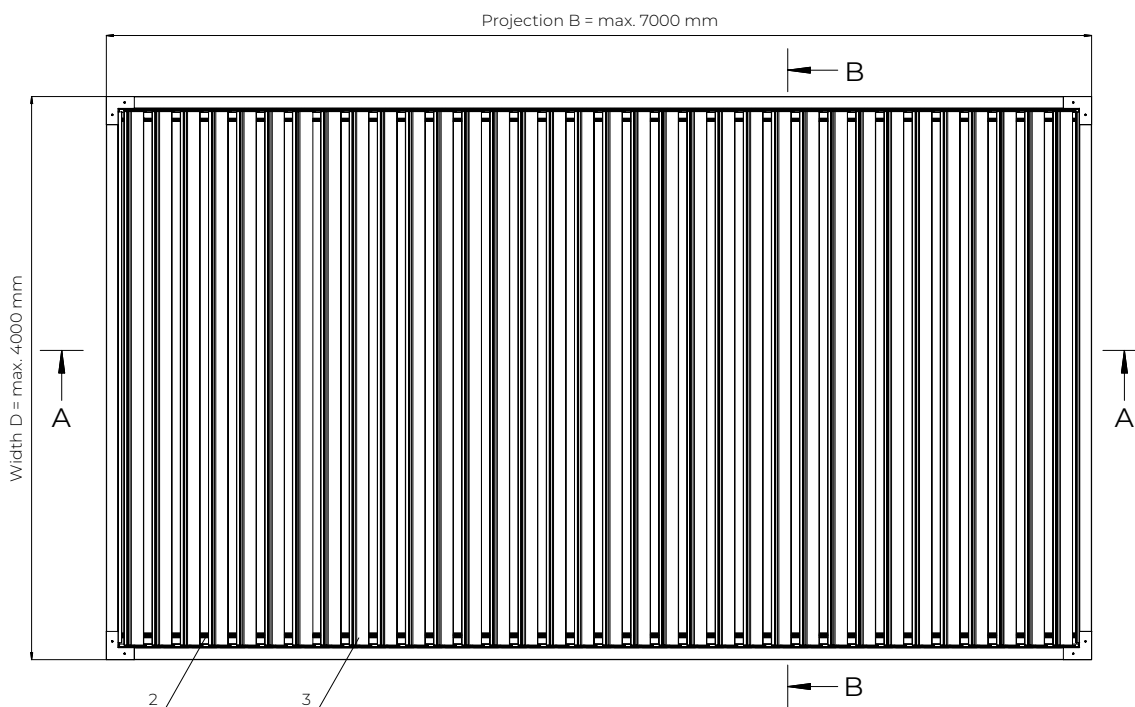
PERGOLA SB 400 R with concealed motor
Roof-mounted version (without posts)

Note:
The projection is a multiple of 20 cm. The pergola includes 2 gutters on the longitudinal beams or 4 perimeter gutters. Drainage to be provided by the customer. Anchoring via through-wall brackets on the longitudinal beams or, alternatively, on the cross beams. For a projection of less than 2.4 m, it is not possible to drill the drive longitudinal beam for wall brackets. For each SB 400 R module with a concealed motor, 4 wall brackets are provided. By default, the brackets are located on the longitudinal beams.

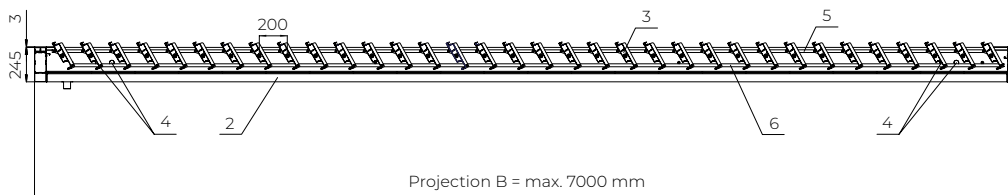


PERGOLA SB 400 R with concealed motor
Views and cross-sections

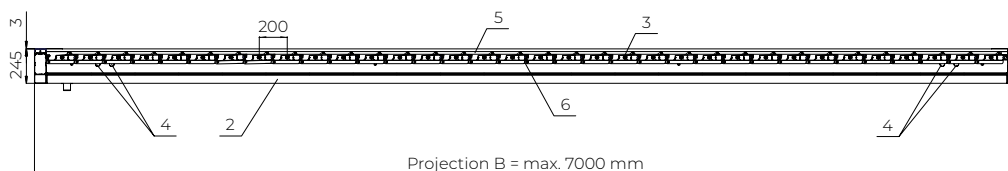
Note:
Insert the separately supplied gasket into the groove of the roof edge sealing strip. The opposite end has no gasket.



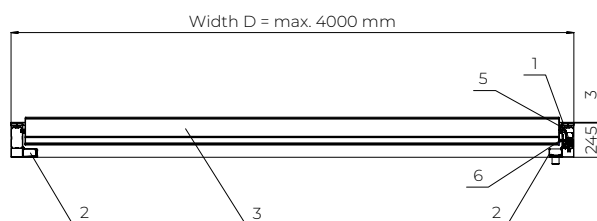
A-A Longitudinal section – open



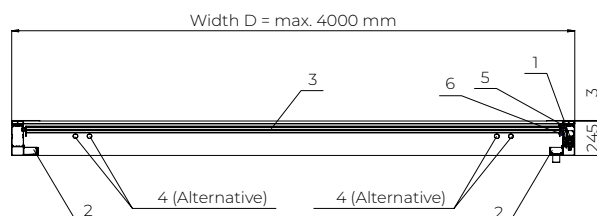
A-A Longitudinal section – closed



B-B Cross-section – open



B-B Cross-section – closed

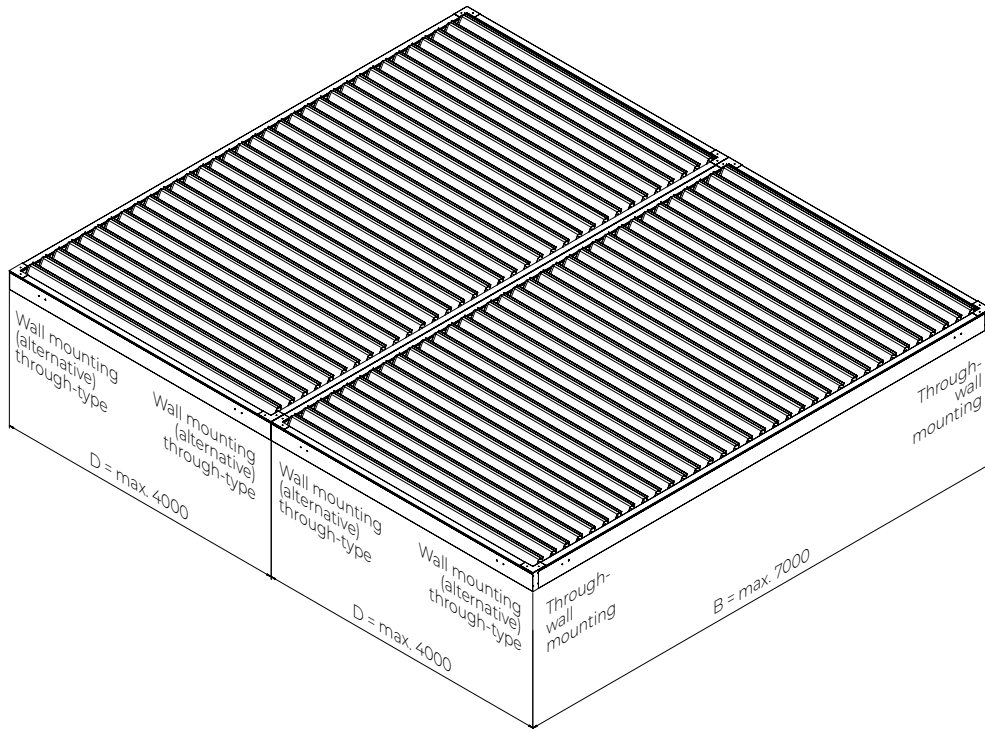


- 1. Motor
- 2. Longitudinal gutter
- 3. Roof slat
- 4. Holes for wall mounting
- 5. Upper tie rod 8x20 mm
- 6. Lower tie rod 8x20 mm

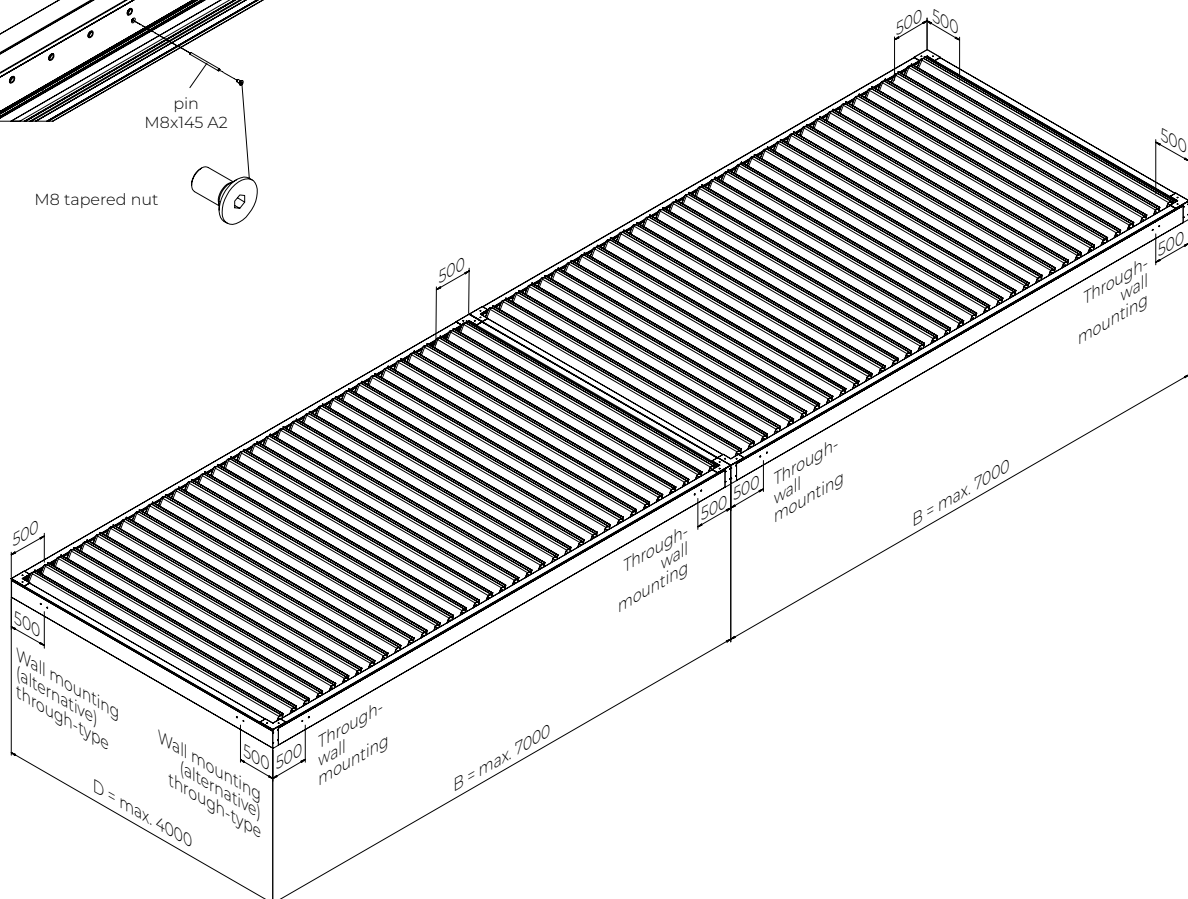
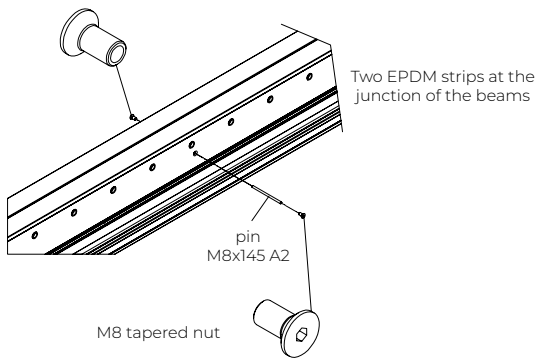
PERGOLA SB 400 R with concealed motor
Modular connection

Note:
Each module must be fixed at the four corners. Modular connection does not allow for the extension of spans.

* For the minimum outreach, the position of the wall mountings for the longitudinal beams is determined by the engineer



M8 tapered nut



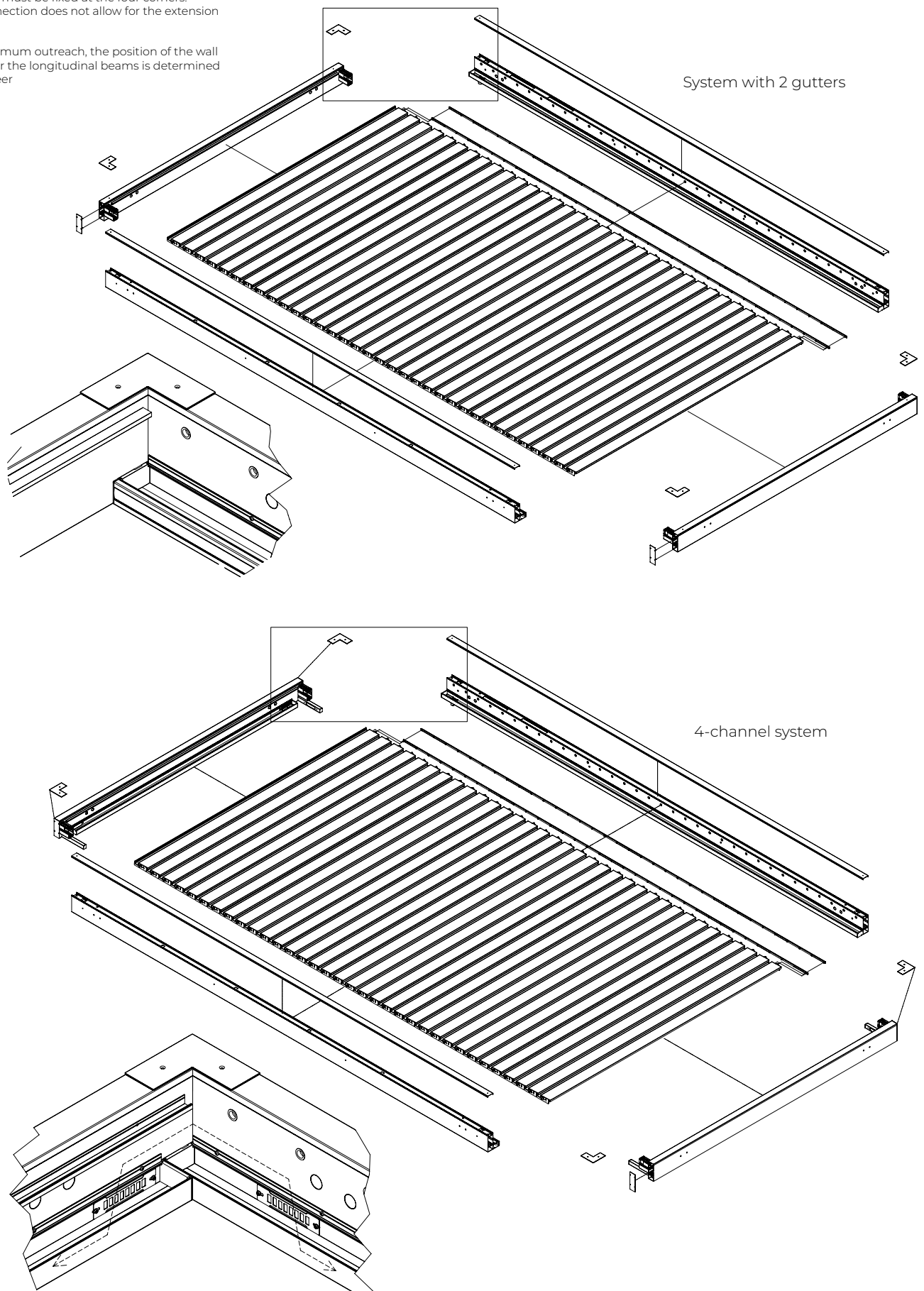
PERGOLA SB 400 R with concealed motor

Water drainage

Note:

Each module must be fixed at the four corners.
Modular connection does not allow for the extension of spans.

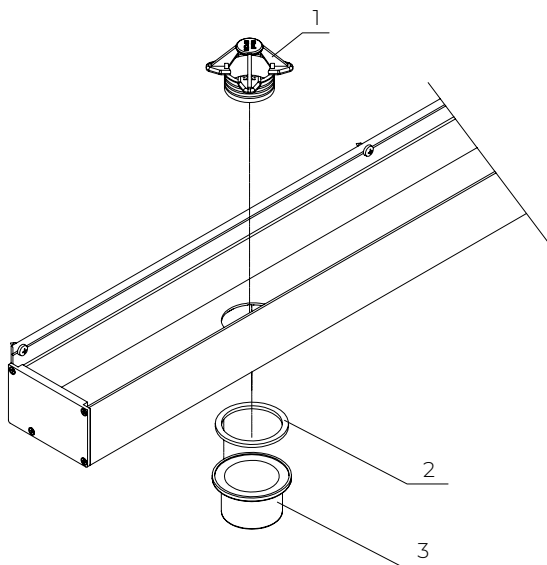
* For the minimum outreach, the position of the wall mountings for the longitudinal beams is determined by the engineer



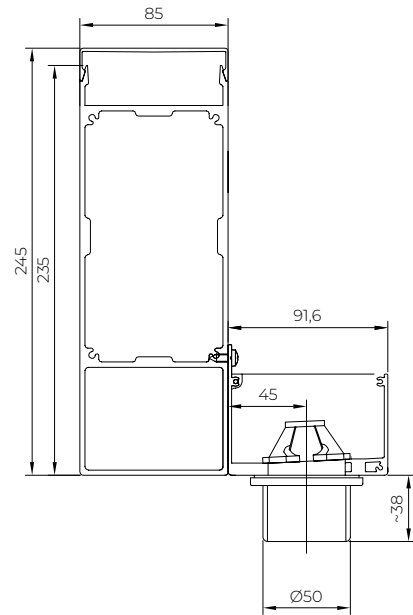
System with 2 gutters

4-channel system

PERGOLA SB 400 R with concealed motor
Gutter drain for: SB 400 R



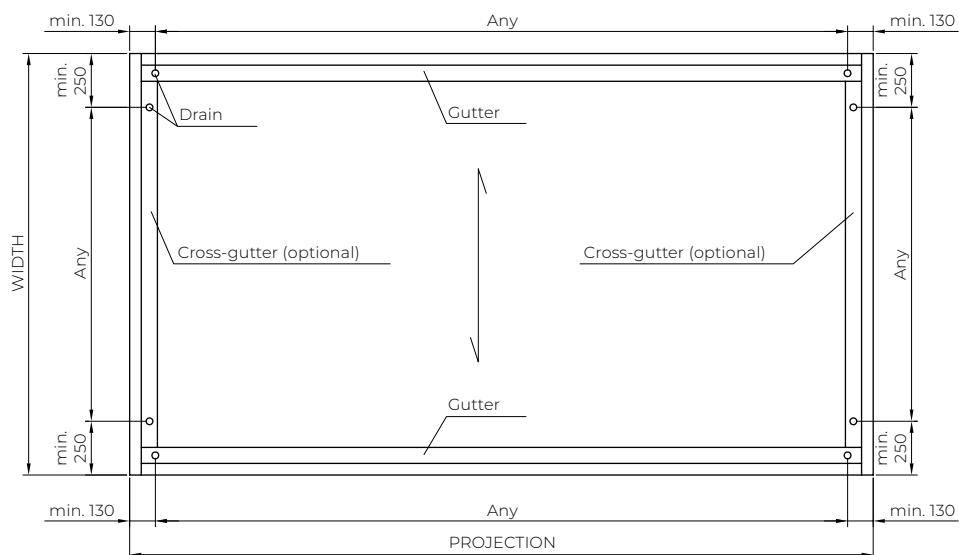
- 1. Plastic drainage (basket)
- 2. 3 mm thick rubber seal
- 3. Plastic spigot (external Ø 50 mm)



44 mm diameter hole in the gutter bottom

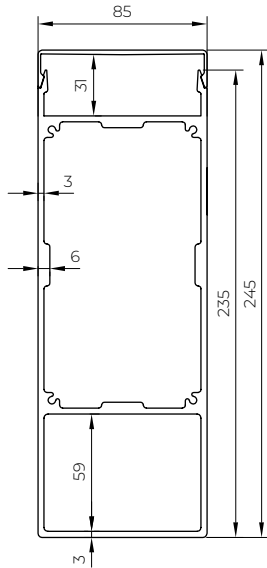
PERGOLA SB 400 R with concealed motor
Location of drains

Note:
For the 4-channel version, overflow channels are fitted between the channels. A minimum of 2 drainage points is required.



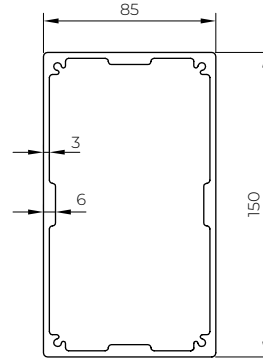
PERGOLA SB 400 R with concealed motor
Profile cross-section

Beam cross-section
(with access panel)
(85x245)



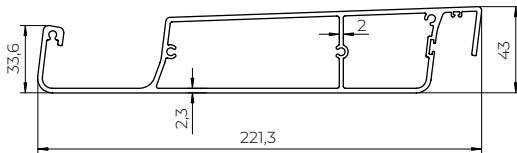
Material: EN AW6060 T66
Static characteristics (without inspection):
Ground: 6.84 kg/m
Inspection mass: 0.61 kg/m
Beam width 25,32 cm²
J1 312,62 cm⁴
J2 1382,15 cm⁴

Cross-section of a post
(85x150)



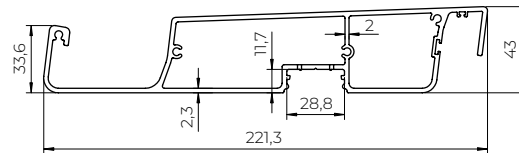
Material: EN AW6060 T66
Static characteristics:
Ground: 4.83 kg/m
Country: 17,89 cm²
J1 215,9 cm⁴
J2 564,44 cm⁴

Tongue cross-section (221x43)



Material: EN AW6060 T66
Static characteristics:
Ground: 3.40 kg/m
Country: 12,585 cm²
J1 558,1 cm⁴
J2 30,4 cm⁴

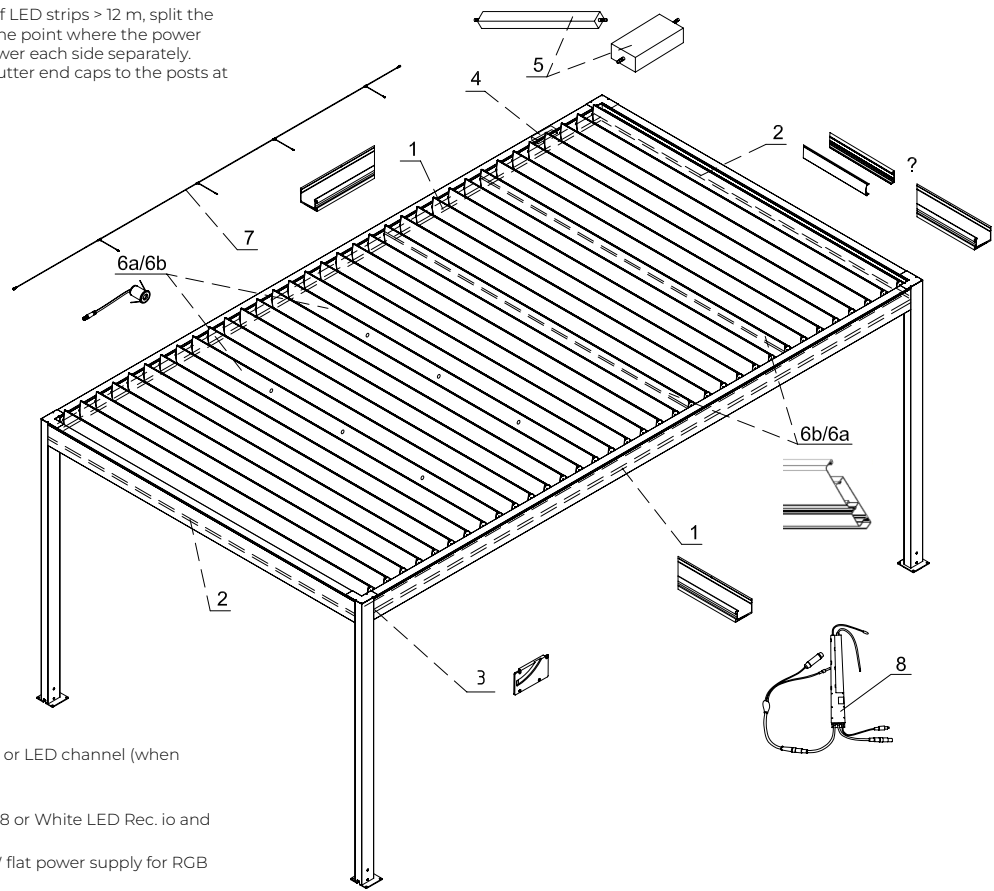
Cross-section of slat with LED groove
(221x43)



Material: EN AW6060 T66
Static characteristics:
Ground: 3.50 kg/m
Country: 12,965 cm²
J1 559,7 cm⁴
J2 28,7 cm⁴

PERGOLA SB 400 R with concealed motor
LED lighting

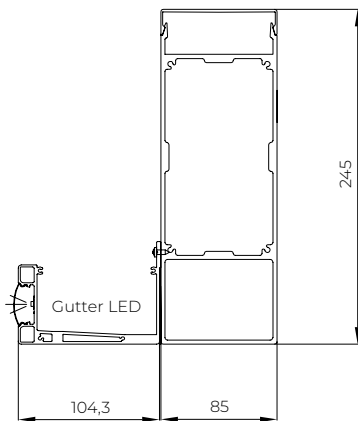
Note:
For white lighting, where the total length of LED strips > 12 m, split the LED strip power supply into 2 sections (at the point where the power cables exit). For RGB lighting in gutters, power each side separately. Route the power supply out through the gutter end caps to the posts at 2 opposite corners.



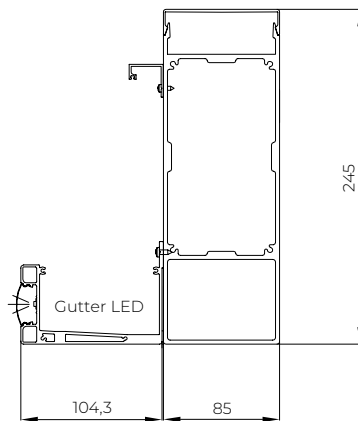
1. LED gutter with LED strip
2. LED strip (when there are 2 channels) or LED channel (when there are 4 channels)
3. LED gutter end caps
4. Lighting controller for white: IOALL868 or White LED Rec. io and for RGB: RGB LED Rec. io
5. 24 V DC 150 W power supply or 350 W flat power supply for RGB
- 6a. Fin with light dots
- 6b. Strip with LED strip (white or RGB) – for self-assembly
7. Cable for the beam + at opposite ends: plug and power cable
8. IOALL868 controller (white lighting + built-in power supply)

PERGOLA SB 400 with concealed motor
LED lighting - Beam cross-sections

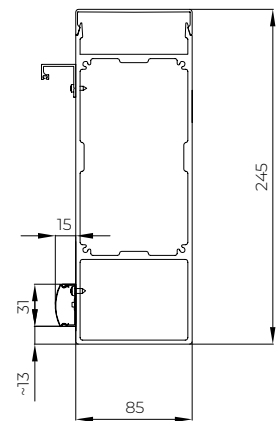
Longitudinal beam



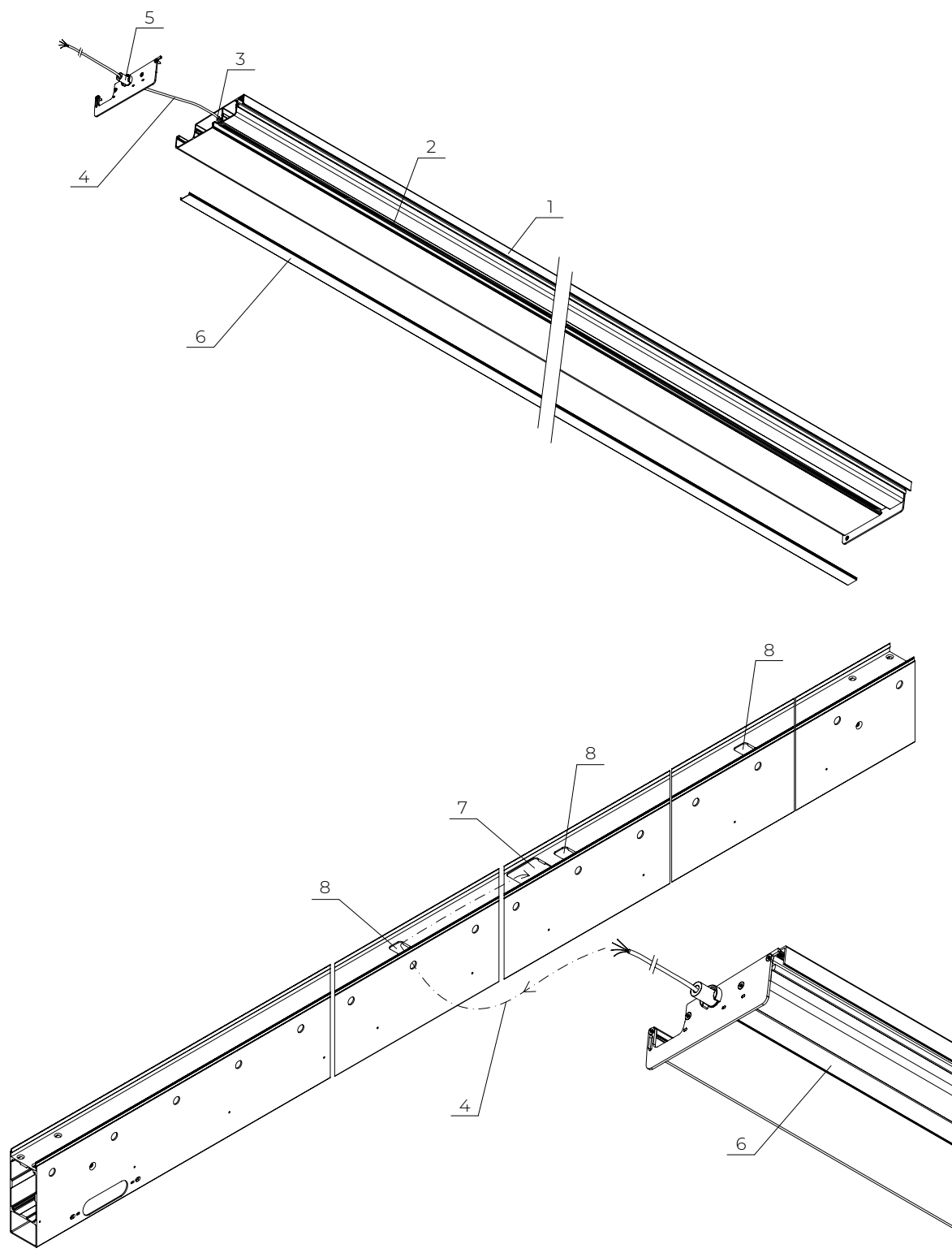
Cross beam
(4 Gutters)



Cross beam
(2 Gutters)
(LED strip supplied separately)



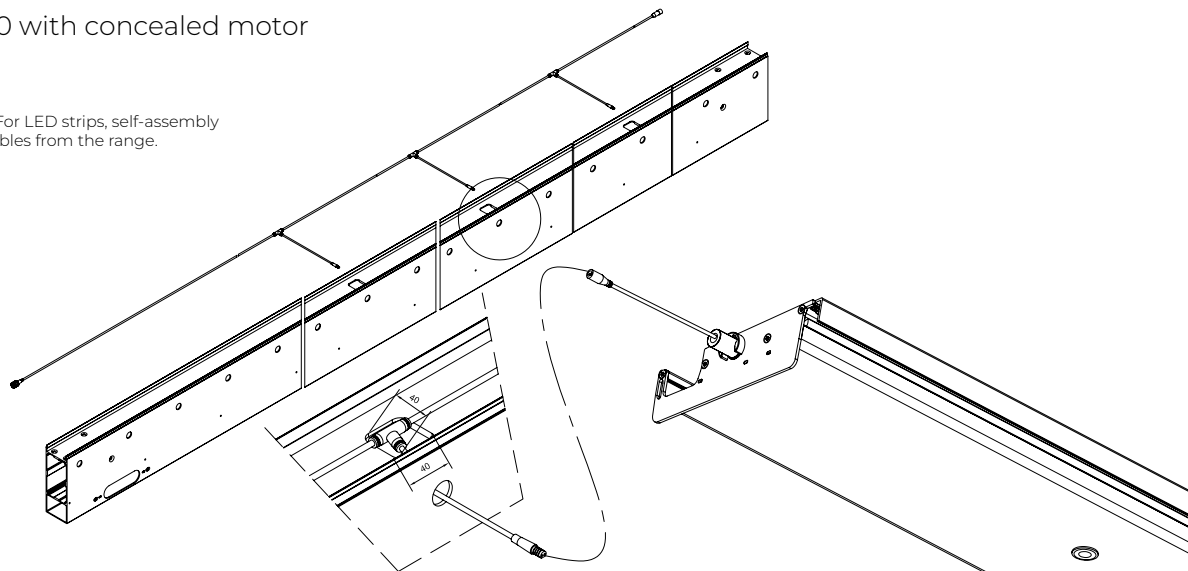
PERGOLA SB 400 with concealed motor
Lighting in the slats



1. Pen with LED groove
2. LED strip (white or RGB)
3. Groove cut-out 18x10 mm
4. LED strip cable L=2.4 m (2-core for white or 4-core for RGB)
5. Slot pin (bearing side)
6. Frosted cover
7. Inspection window for LED controller (inside the bearing beam)
8. Inspection window 40x40 mm

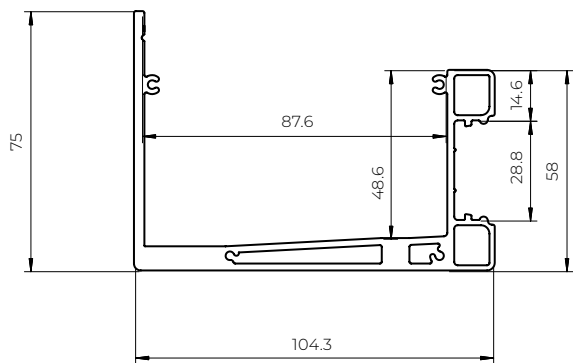
PERGOLA SB 400 with concealed motor
LED wiring for slats

Note:
Applies only to light points. For LED strips, self-assembly using extended LED strip cables from the range.



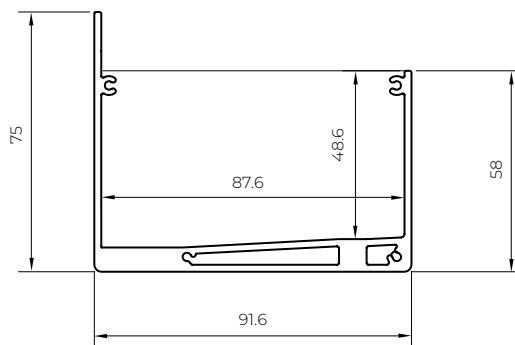
PERGOLA SB 400 with concealed motor
Cross-sections of drainage gutters

Cross-section of an LED gutter
(104.3x75)



Material: EN AW6060 T66
Ground: 2.61 kg/m

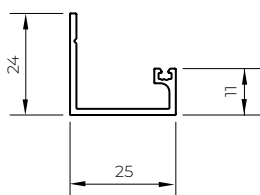
Cross-section of the gutter
(91.6x75)



Material: EN AW6060 T66
Ground: 2.10 kg/m

Front tongue cross-section

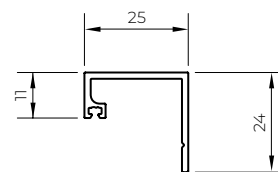
No seal is required for this position of the sealing strip



Material: EN AW6060 T66
Ground: 0.25 kg/m

Rear tongue cross-section

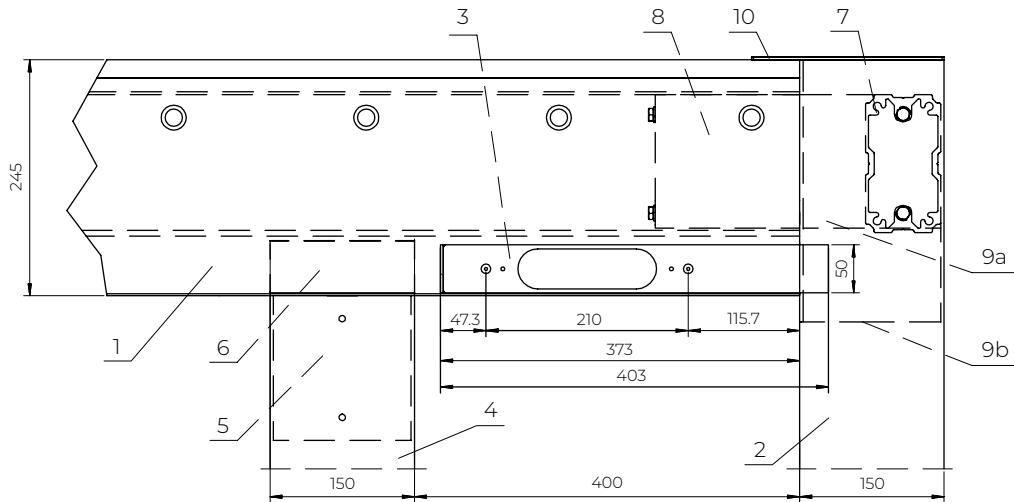
Insert the separately supplied seal into the groove of the rear sealing lip. The opposite end is without a seal.



Material: EN AW6060 T66
Ground: 0.25 kg/m

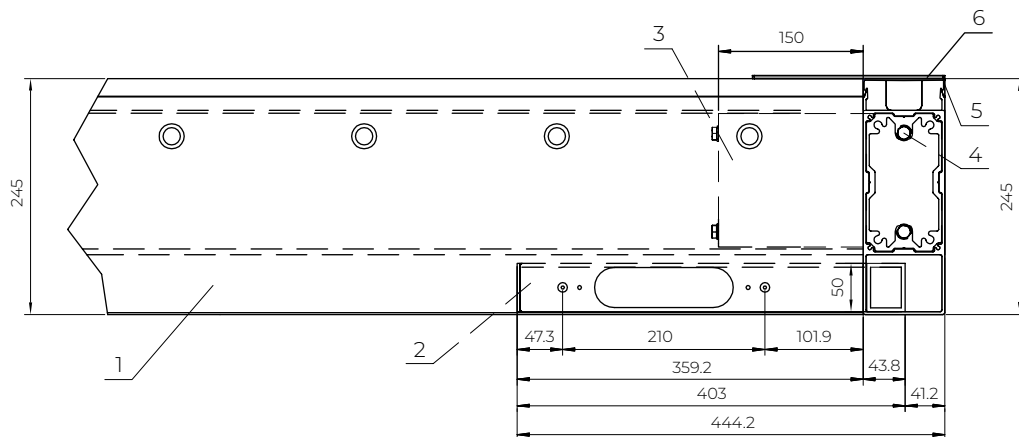
PERGOLA SB 400 with concealed motor
Overflows and drains in beams

Location of water drainage



1. Longitudinal beam 85x212 mm
2. Pergola post 85x150 mm
3. Water drainage 40x50 mm
4. Intermediate post 85x150 mm
5. Rear post connector
6. Reinforcing connector
7. Cross linear connector
8. Longitudinal connector
- 9A. Short angle connector (for water drainage)
- 9B. Long angle connector (for angled overflow)
10. Corner post cover

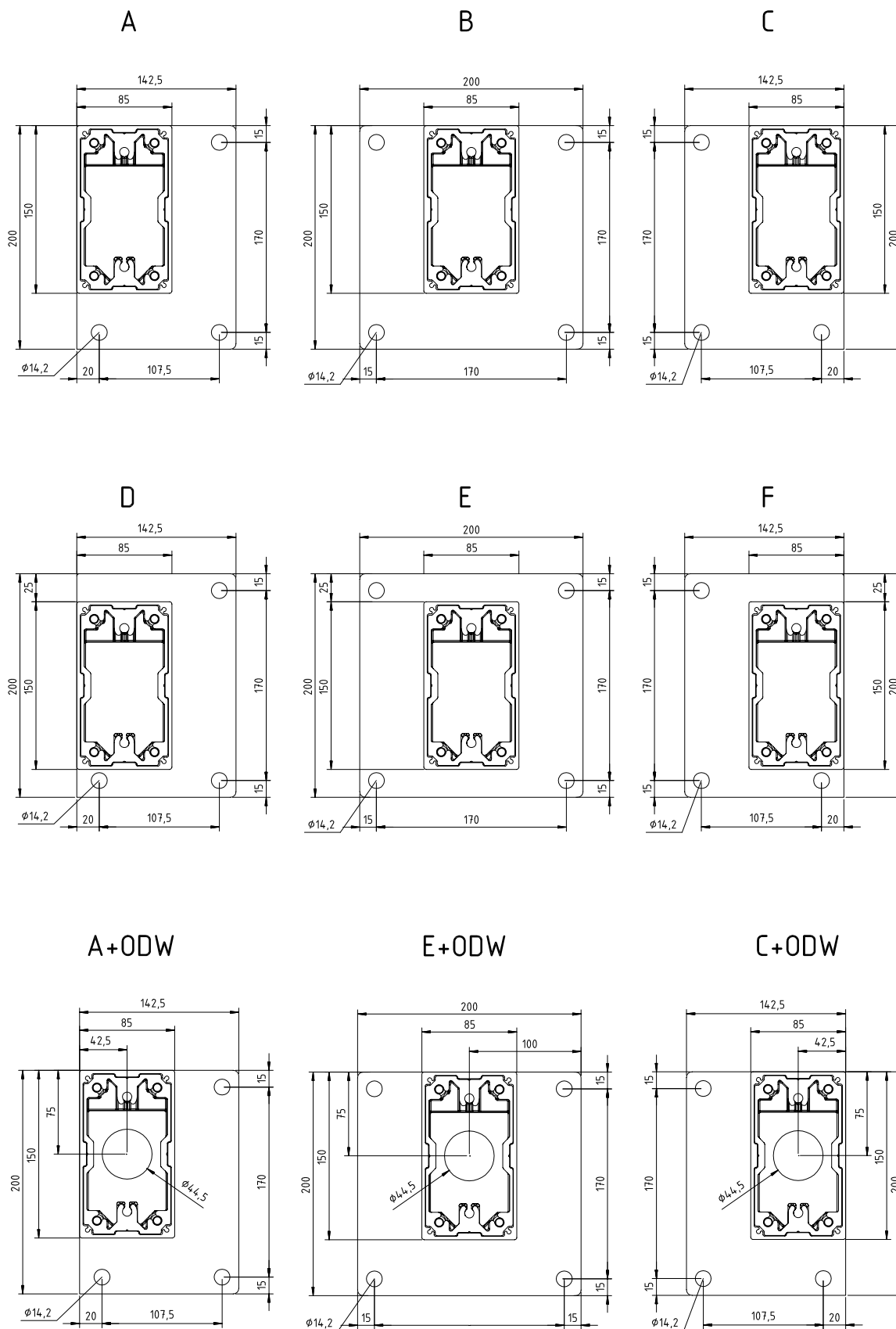
Location of the corner overflow



1. Longitudinal beam with inspection hatch 85x245 mm
2. Angled water drainage 40x50 mm
3. Linear connector PS
4. Cross linear connector
5. Inspection (cover)
6. Corner cover

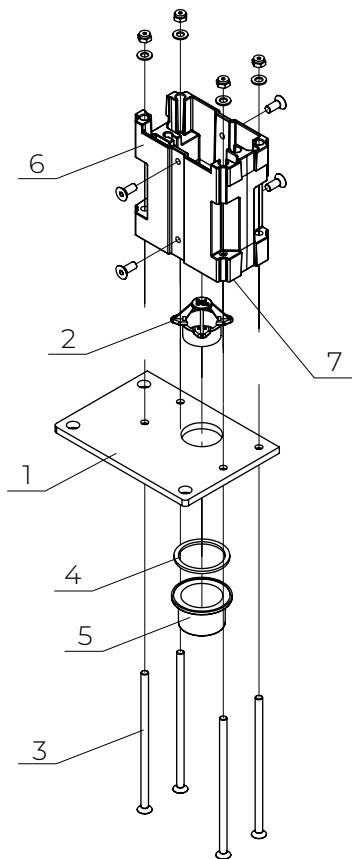
Each type of base can be manufactured in a version with a drain.
Additional types (A+ODW, C+ODW, E+ODW and Z, and flush with the extension) – on the following pages.

PERGOLA SB 400
Pergola feet



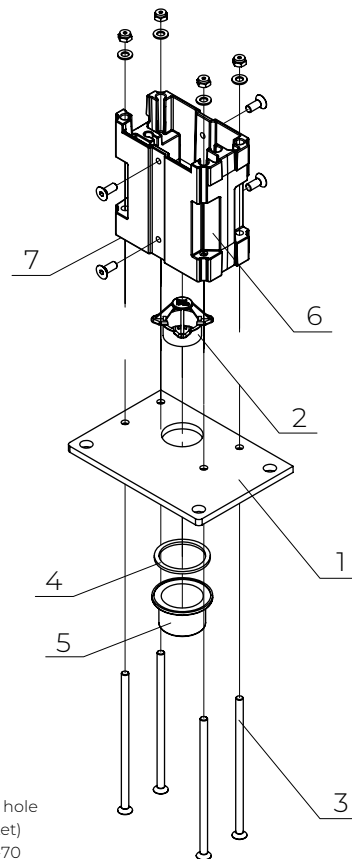
Feet made of 8 mm thick EN AW-5754 aluminium sheet, powder-coated

PERGOLA SB 400
Type A+ODW



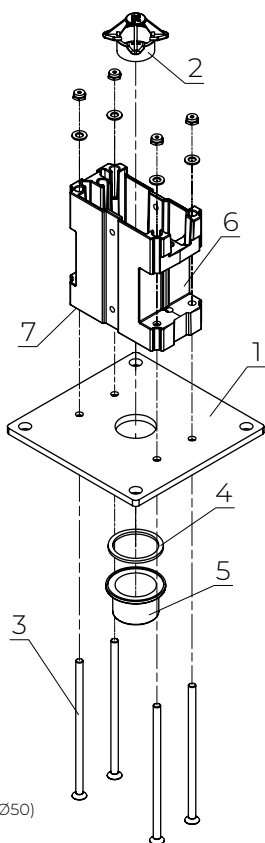
1. Foot A with Ø44.5 mm hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Cast connector
7. Apply sealant around the perimeter (before tightening the connector)

PERGOLA SB 400
Type C+ODW



1. Foot C with Ø44.5 hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Cast connector
7. Apply sealant around the perimeter (before tightening the connector)

PERGOLA SB 400
Type E+ODW

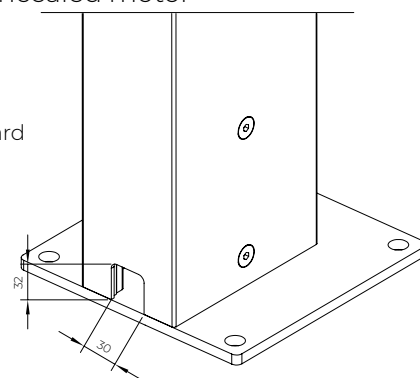


1. Foot E with Ø44.5 hole
2. Plastic drain (basket)
3. Screw M8x180-A2-70
4. Rubber seal
5. Plastic drain (external outlet Ø50)
6. Connector (cast)
7. Apply sealant around the perimeter (before tightening the connector)

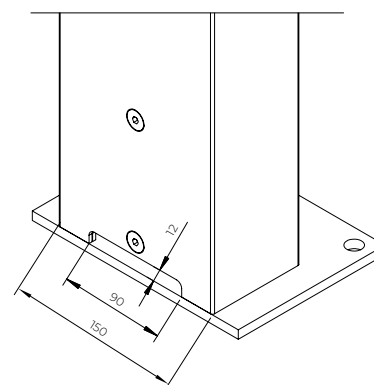
PERGOLA SB 400 with concealed motor

Drains at the base
Available for types A to F

Standard



At extra cost

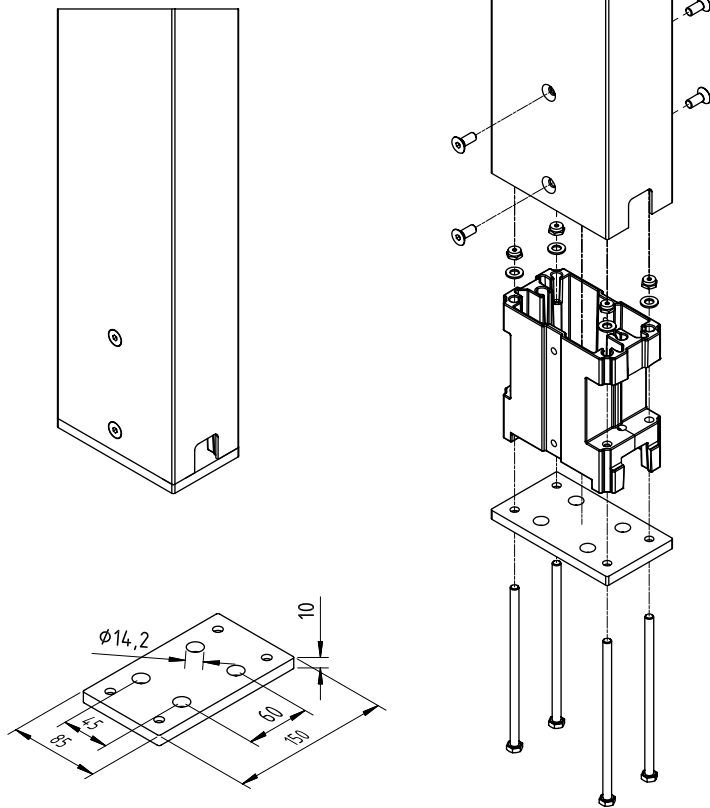


Feet made of 8 mm thick EN AW-5754 aluminium sheet, powder-coated

PERGOLA SB 400 with concealed motor

Type Z - base within the column outline.

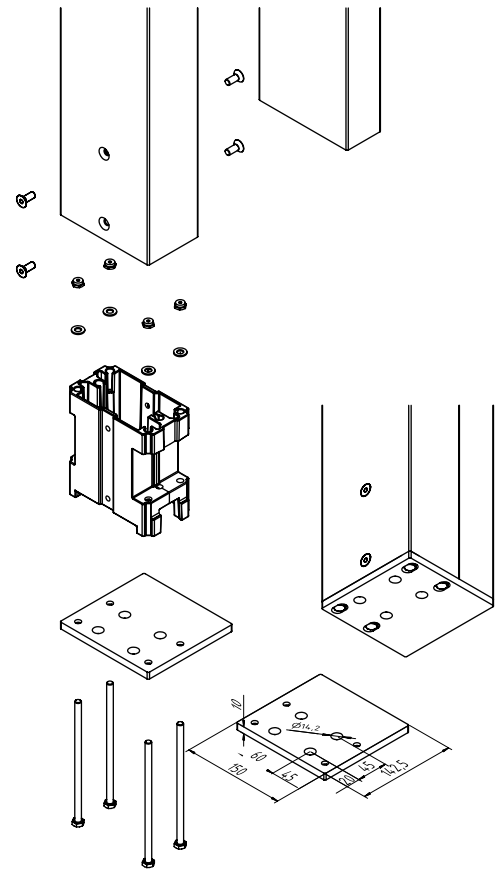
Note:
10 mm thick steel base. Requires 2 M12 bolts diagonally (in two of the 4 holes)



PERGOLA SB 400

Base flush with column extension

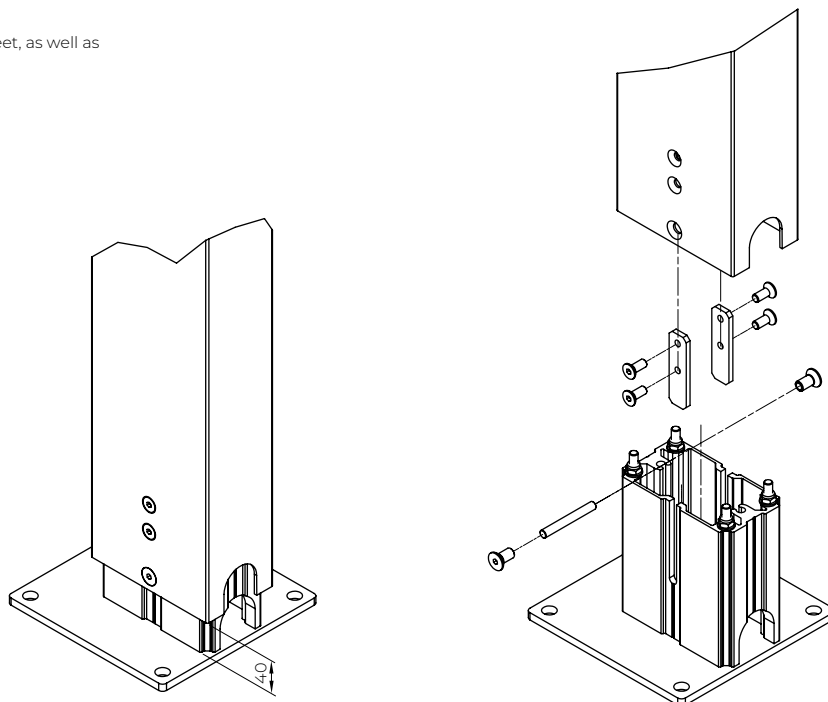
Note:
10 mm thick steel base. Requires 2 anchors diagonally (in two of the 4 holes)



PERGOLA SB 400 with concealed motor

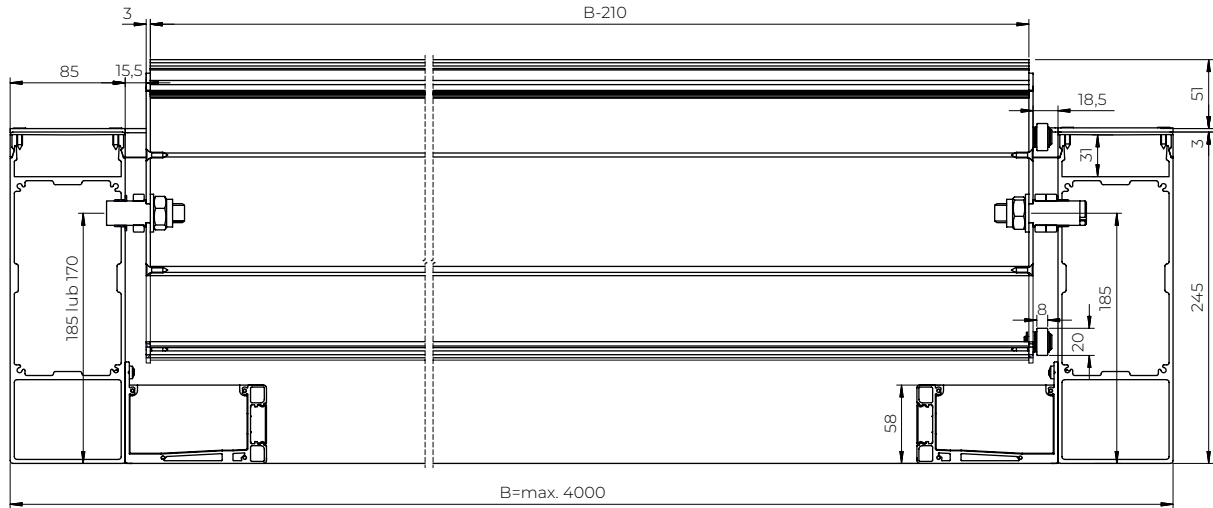
Type R-Adjustable post

Note:
Height adjustment up to 40 mm.
Can be manufactured with A to F type feet, as well as A+ODW, C+ODW and E+ODW.



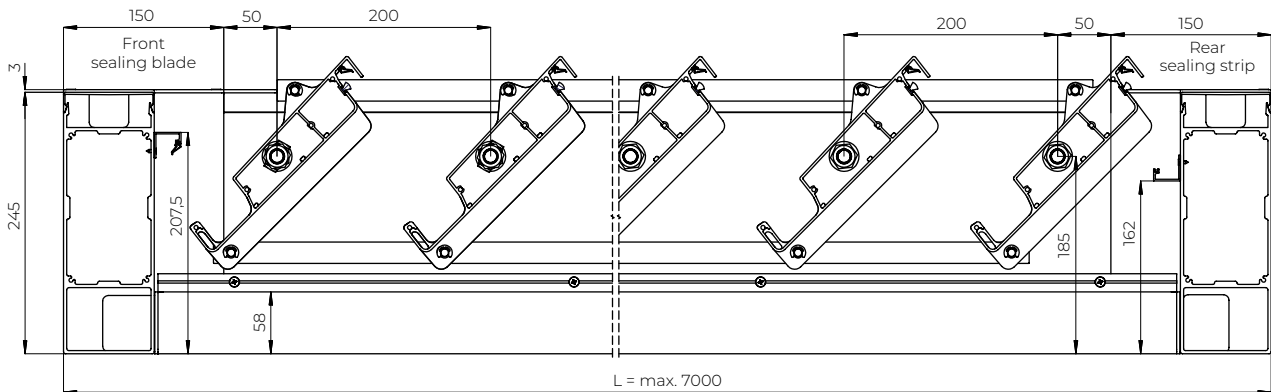
PERGOLA SB 400 with concealed motor
CROSS-SECTION

Note:
On the bearing side, there are elongated shafts for securing the blades.
Horizontal slats – no longitudinal drop. A drop of 15 mm between the ends of the slat is also possible on the side without the pull cord.

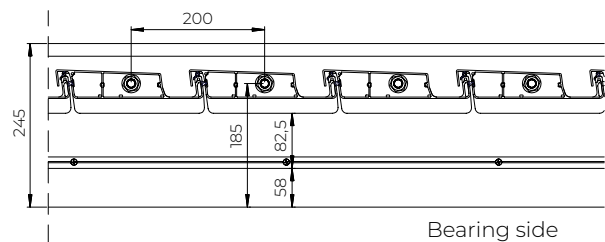


PERGOLA SB 400 with concealed motor
Longitudinal section (bearing side)

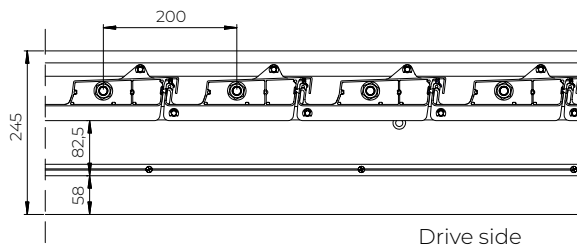
Insert the separately supplied gasket into the groove of the front sealing tongue. The opposite end has no gasket.



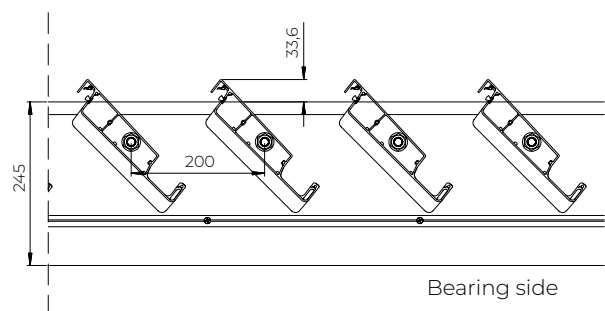
PERGOLA SB 400 with concealed motor
 Drive unit, blade rotation range - Motor Pergola Tilt 0 24V DC



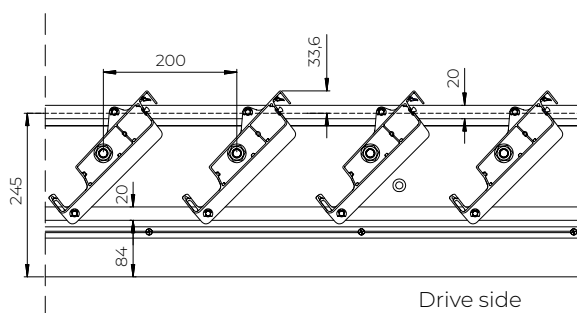
Blades closed



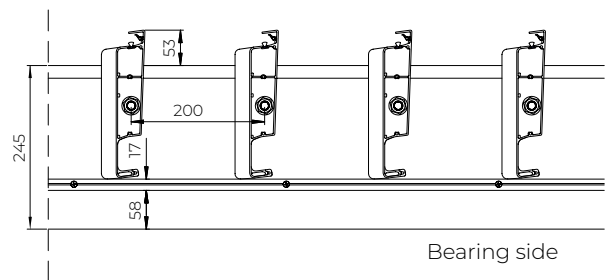
Drive side



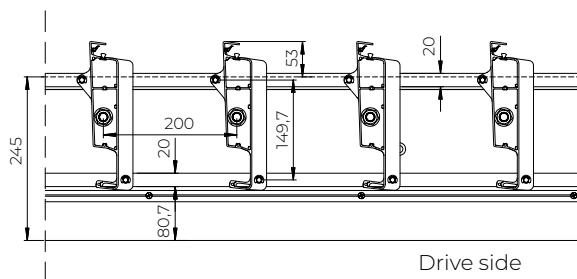
Open slats 45°



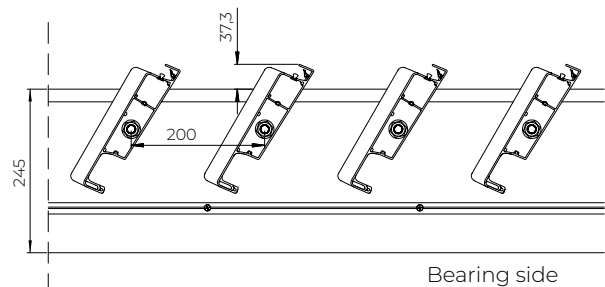
Drive side



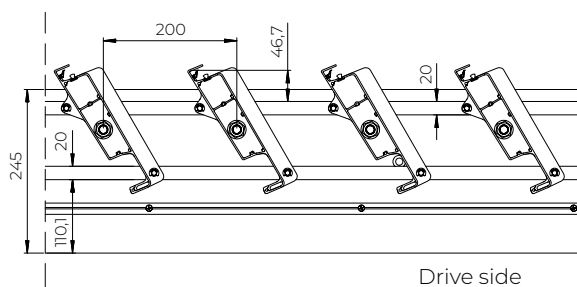
Open slats 90°



Drive side



Fully open slats

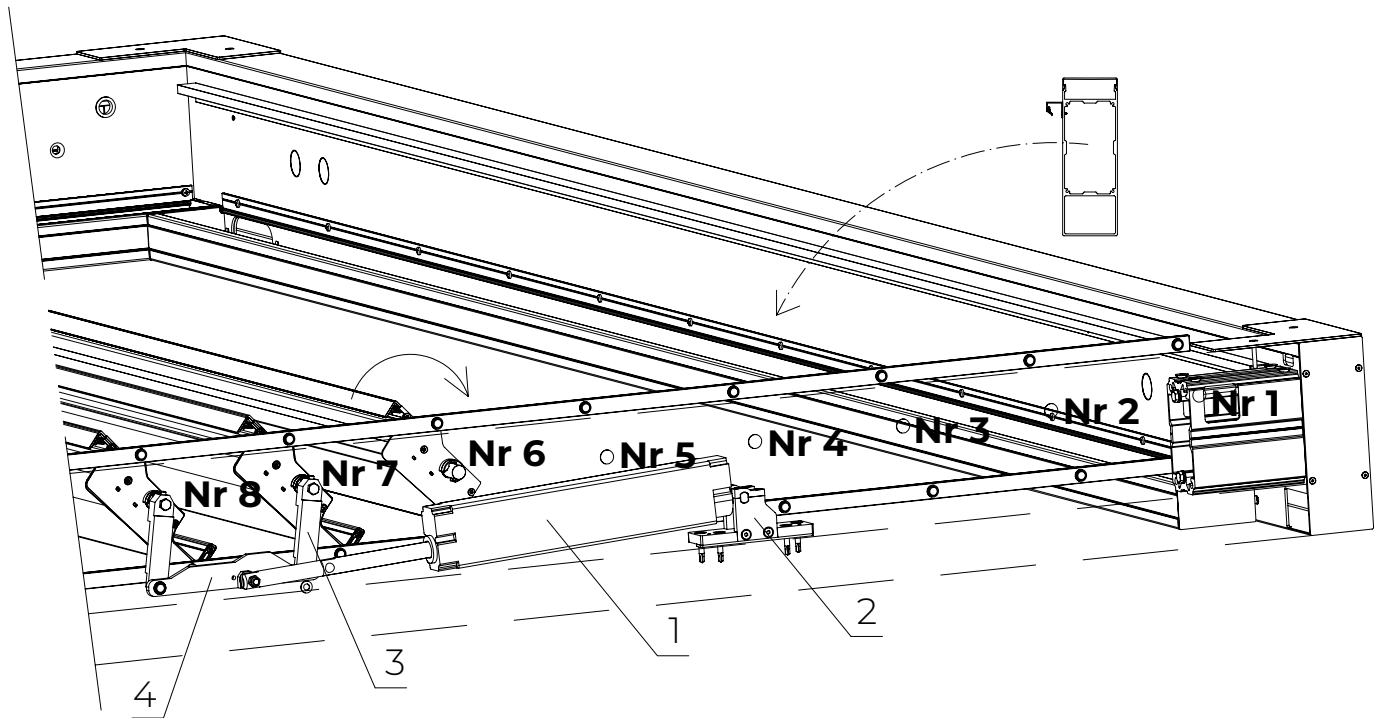


Drive side

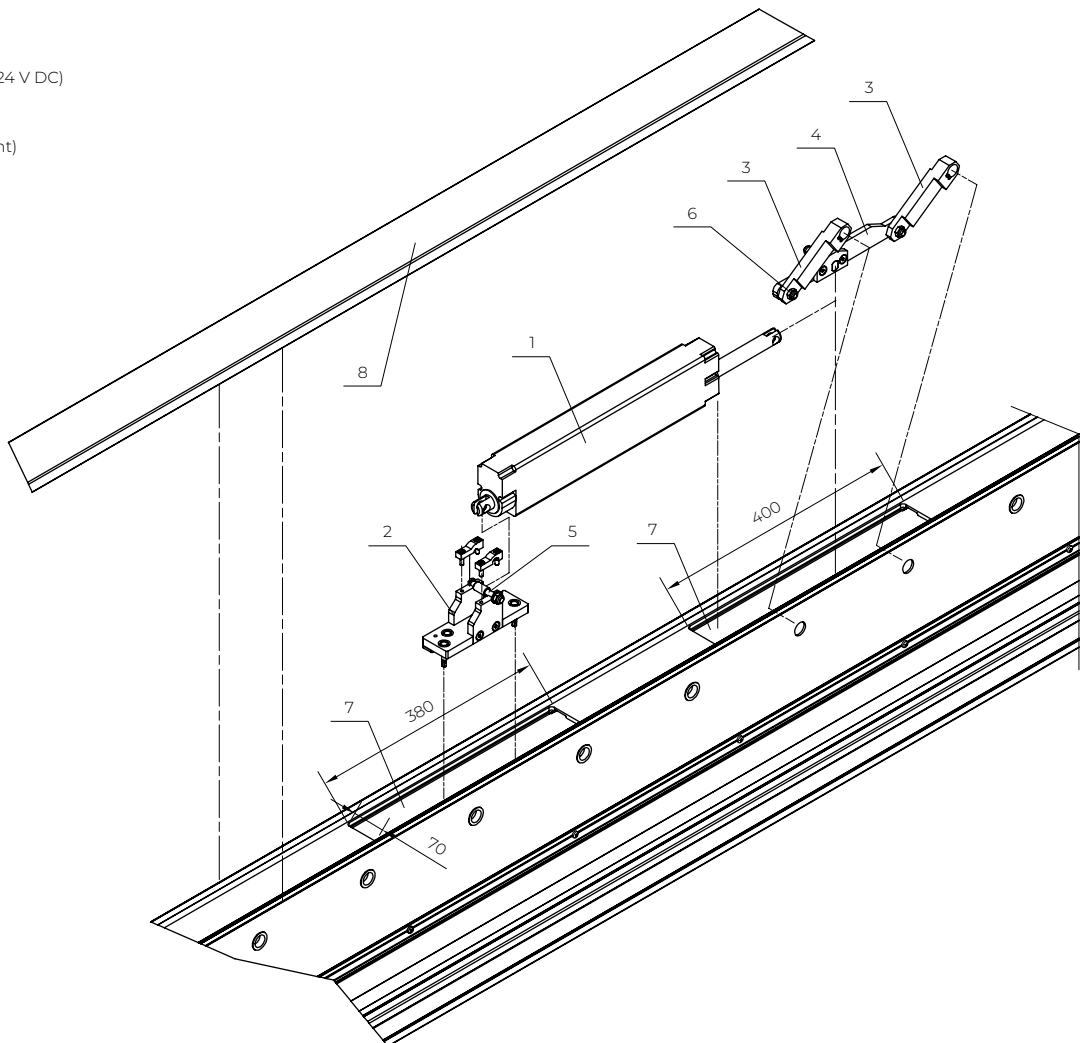
PERGOLA SB 400 with concealed motor
Pore drive unit - Motor Pergola Tilt 0 24V DC

Note:

The drive is located at the end of the beam, always on slats 7 and 8 counting from the end of the pergola with a crossbeam and a sealing slat in the 'canopy' position.

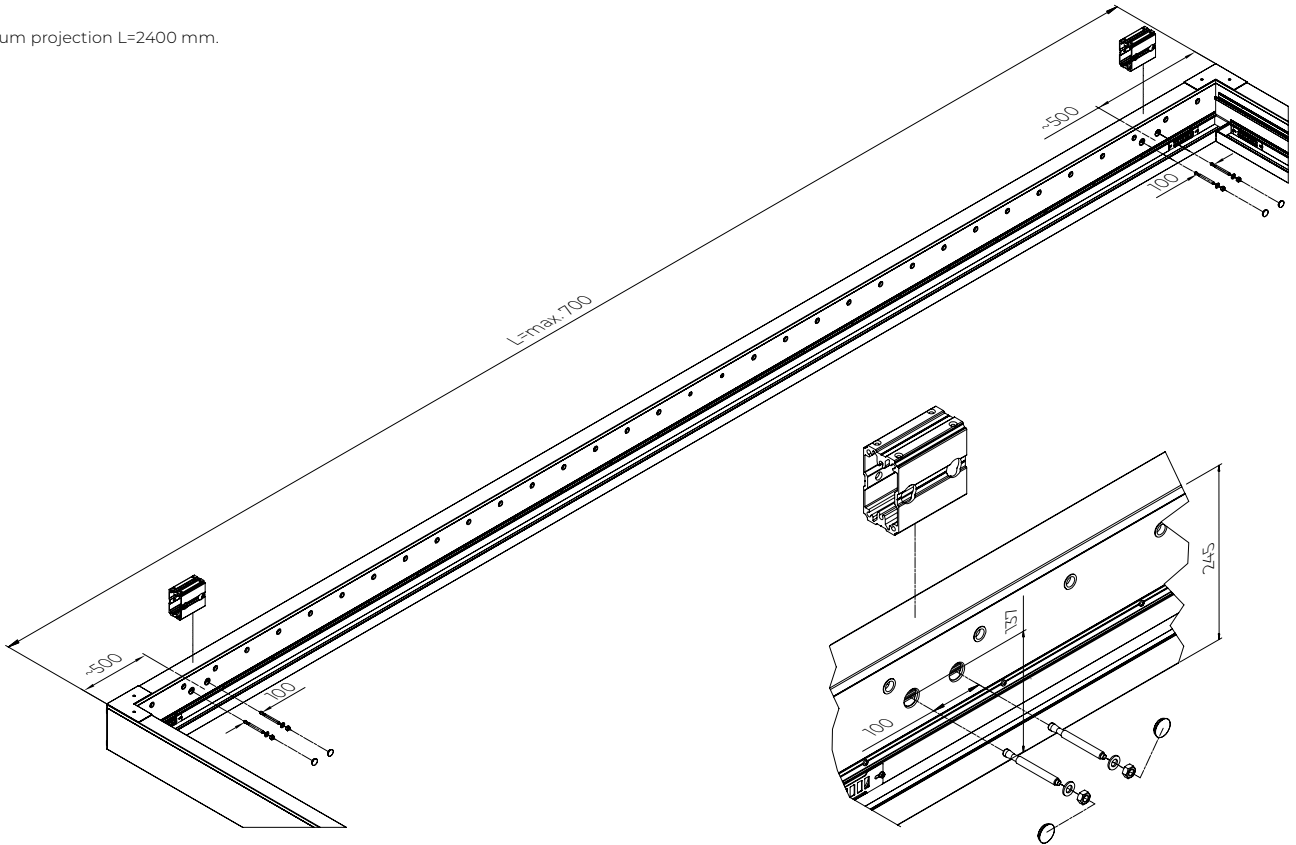


- 1. Motor Pergola Tilt 0° (24 V DC)
- 2. Motor bracket
- 3. Motor arm
- 4. Guide bracket (left/right)
- 5. Motor handle pin
- 6. Guide handle pin
- 7. Installation window
- 8. Revision

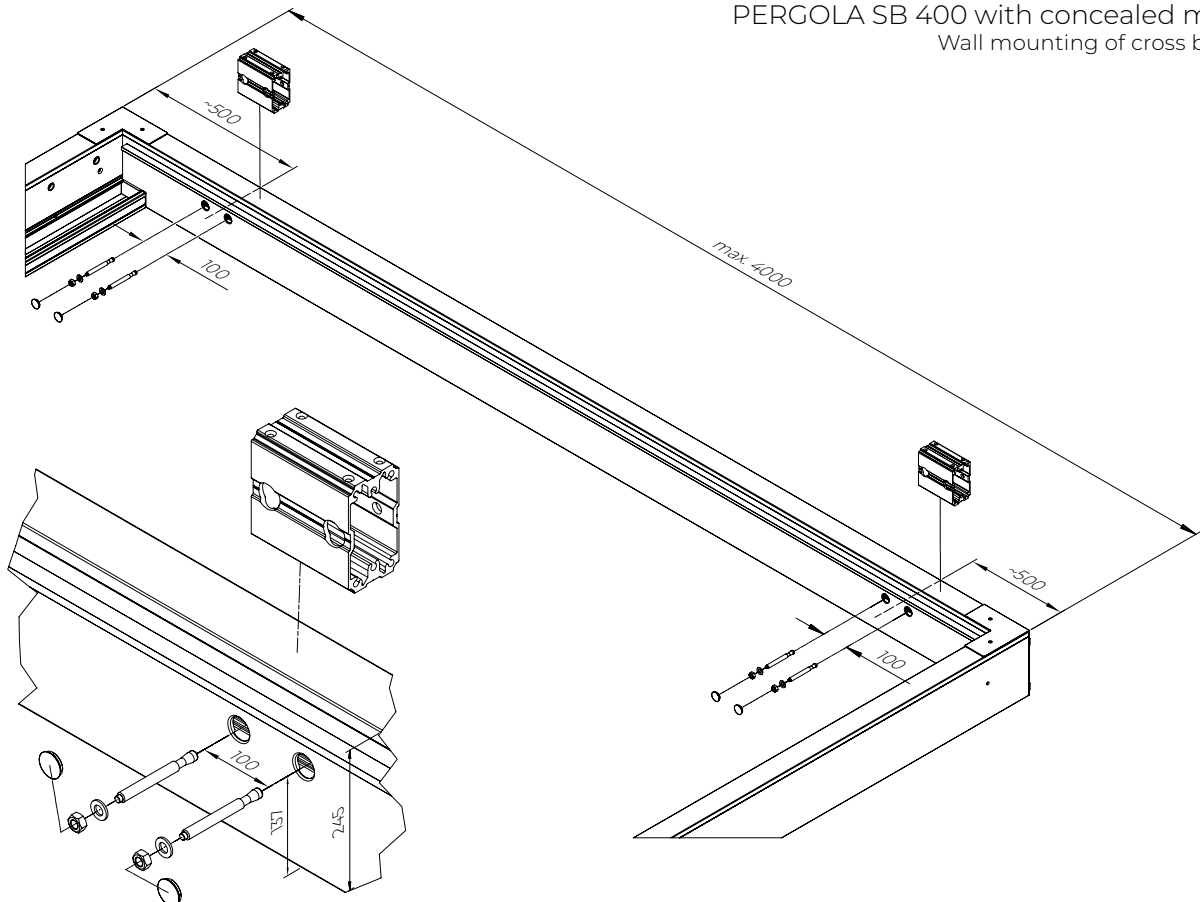


PERGOLA SB 400 with concealed motor
Wall mounting of longitudinal beams

Note:
Minimum projection L=2400 mm.



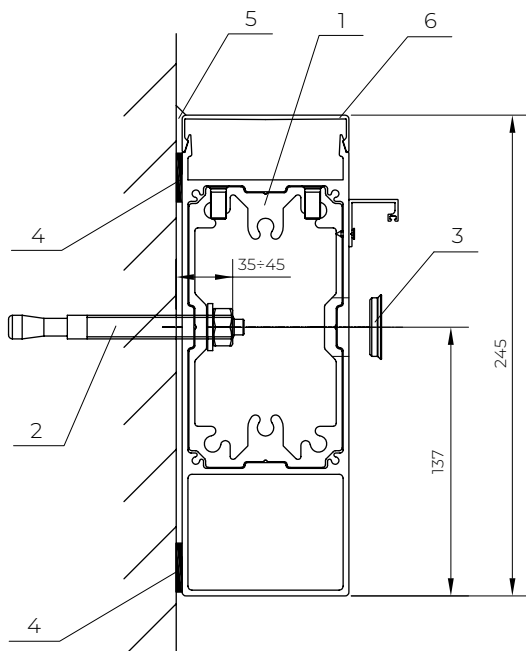
PERGOLA SB 400 with concealed motor
Wall mounting of cross beams



PERGOLA SB 400 with concealed motor
Wall mounting cross-section

Note:

ALUPROF accepts no liability for the selection of anchors and the fixing of the bracket to the substrate. This may significantly reduce the load-bearing capacity of the bracket (particularly in substrates with an insulation layer and/or perforated ceramic tiles).



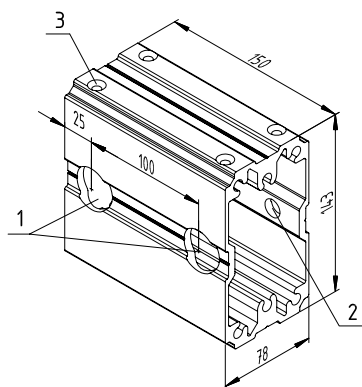
- 1. Wall-mounted connector (factory-fitted)
- 2. M12 anchor (not supplied by ALUPROF)
- 3. Lacquered end cap
- 4. EPDM belt width
- 5. Seal with silicone
- 6. Beam inspection

PERGOLA SB 400 with concealed motor
Wall mounting components

Note:

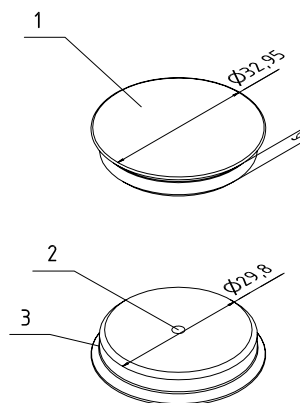
ALUPROF accepts no liability for the selection of anchors and the fixing of the bracket to the substrate. This may significantly reduce the load-bearing capacity of the bracket (particularly in substrates with an insulation layer and/or perforated ceramic tiles).

Wall-mounted connector (factory-fitted in the beam)



- 1. Openings $\varnothing 33$
- 2. Openings $\varnothing 14$
- 3. M8 holes (factory-fitted mounting)

Wall-mounting end cap (fixed after installing wall plugs)



- 1. Painted surface
- 2. Metric thread
- 3. Milled edges

PERGOLA SB 450

THE SB 450 pergola is designed as an external weather protection system, fixed to building structures (e.g. building walls, terraces) or as a free-standing structure. The product is intended for use by individuals and legal entities in the private sector (e.g. detached houses) and the public sector (e.g. restaurant gardens, hotels, etc.).

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Permissible outdoor use of the product in accordance with the product parameters.
- The movable roof slats allow you to adjust the amount of sunlight entering the room.
- Concealed motor and drive mechanism.
- The design of the product and the drive allows the slats to be stopped at a selected angle within their operating range.
- The rotation of the slats can be activated using a transmitter or a dedicated app.
- The side compartment of the beams, closed with an inspection hatch, allows for cable distribution.
- Operating the rotation of the slats during snowfall, icing or when there is snow or ice on the roof, as well as use outside the temperature ranges specified in the manual, is not permitted and may damage the product.
- Option to use LED lighting
- The covers of moving parts have been designed and manufactured in such a way as to ensure the safety of operators, assuming that they are used correctly.
- Water vapour may condense on the product, especially on its lower part, and water may run off or drip.
- Water resistance, aesthetic water drainage through integrated gutter and posts with drains.
- Drainage is via two gutters and all posts; it is possible to block one drain per gutter. This design does not protect against heavy rainfall.
- The pergola structure is made of aluminium profiles and load-bearing steel elements.
- The roof is made of aluminium profiles, available in two variants: Type 1 – with Type S slats (K440644X), Type 2 – with Type FLAT slats (K440825X) and Type 2 – with Type FLAT slats (K440959X).

TECHNICAL PARAMETERS:

- Maximum dimensions for free-standing or wall-mounted pergolas: width up to 4000 mm, length up to 6010 mm.
- Maximum structure height 3000 mm, including the louvre rotation mechanism 3113 mm
- Maximum clear height between roof beams $H_M = 2810$ mm.
- The product should be used within the limits of wind class 3 according to EN 13659 and/or the maximum snow load.
- Maximum drainage capacity drains rain with an intensity of up to 0.04 l/s/m² for a maximum duration of 5 minutes (with 4 drainage holes).
- The maximum permissible load at maximum dimensions on the roof is 72 kg/m², which corresponds to a 35 cm layer of snow – as an even layer of uniform height.
- The permissible wind load on a structure with a closed roof at maximum dimensions is 110 km/h. If wall elements such as screens, glass panels or other sliding screens are added, these values will be further reduced.
- Type 1 with Type S louvre (K440644X) with the ability to rotate around its own axis up to 135°.
- Type 2 with a Type FLAT louvre (K440825X) capable of rotating around its own axis up to 110° and optionally fitted with LED lighting in the form of light points.
- Type 2 with Type FLAT louvre (K440959X) with the ability to rotate around its own axis up to 110° and optional LED strip lighting.

PERGOLA SB 450

Single free-standing version

$H \leq 3000$, $B \leq 4000$, $L \leq 6010$

$B = MB + 120$

$MB = B - 120$

Louvre roof Type 1:

$L = ML + 120$

$ML = 390 + (n - 1) \times 220$, $n \leq 26$

$n =$ Number of slats in the nave

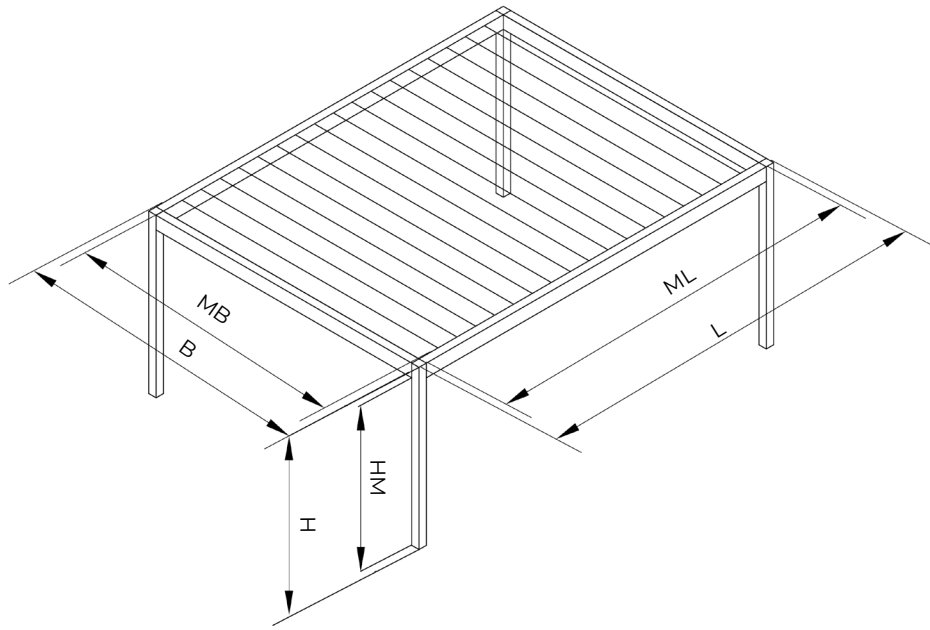
Louvre roof Type 2:

$L = ML + 120$

$ML = 382 + (n - 1) \times 204$, $n \leq 28$

$n =$ Number of slats in the nave

$HM = H - 190$



PERGOLA SB 450

Single-bay version against a wall Type 1

$H \leq 3000$, $B \leq 4000$, $L \leq 6008.5$

$B = MB + 120$

$MB = B - 120$

Louvre roof Type 1:

$L = ML + 118.5$

$ML = 390 + (n - 1) \times 220$, $n \leq 26$

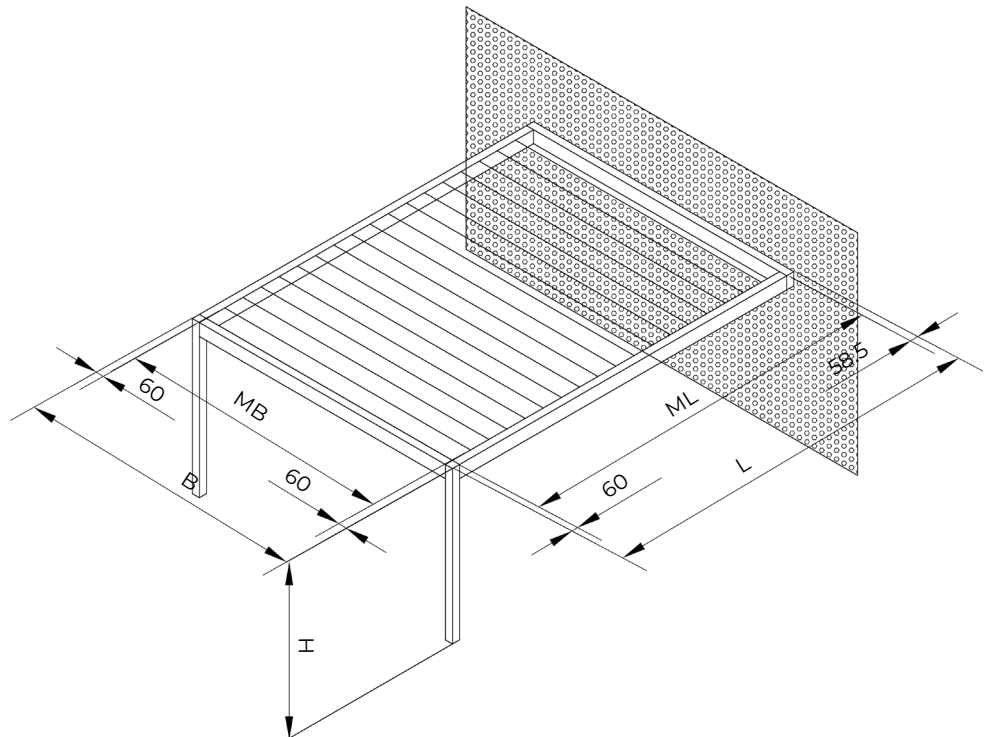
$n =$ Number of slats in the nave

Louvre roof Type 2:

$L = ML + 118.5$

$ML = 382 + (n - 1) \times 204$, $n \leq 28$

$n =$ Number of slats in the nave



PERGOLA SB 450

Single-bay version against a wall Type 2

$H \leq 3000$, $B \leq 3996$, $L \leq 6010$

$B = MB + 116$

$MB = B - 116$

Louvre roof Type 1:

$L = ML + 120$

$ML = 390 + (n - 1) \times 220$, $n \leq 26$

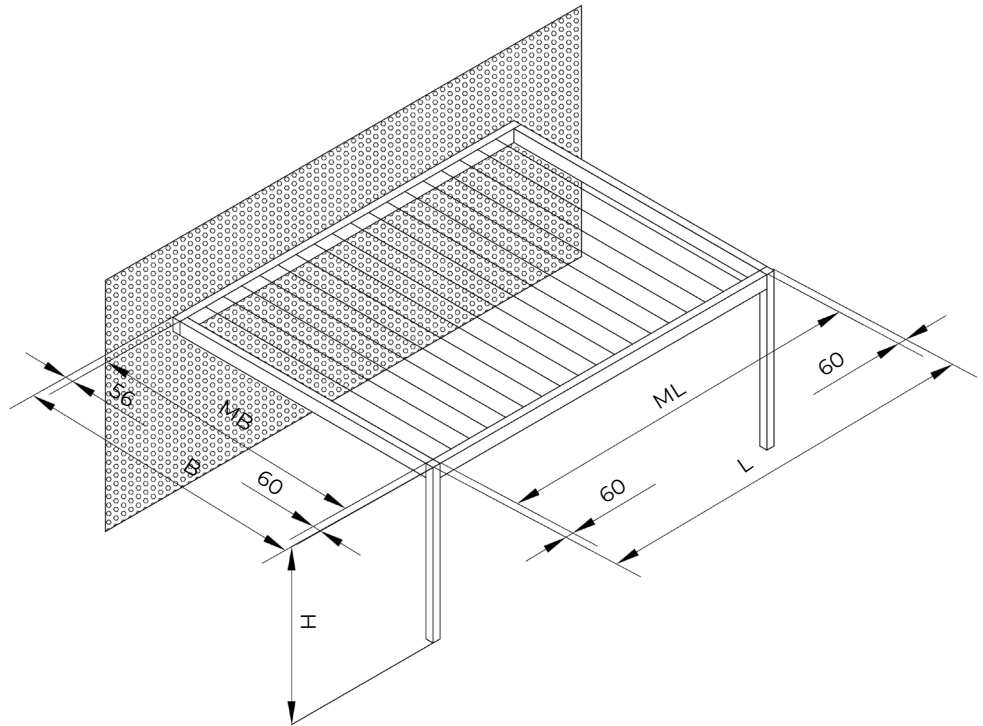
n = Number of slats in the nave

Louvre roof Type 2:

$L = ML + 120$

$ML = 382 + (n - 1) \times 204$, $n \leq 28$

n = Number of slats in the nave



PERGOLA SB 450

Single-bay version against a wall Type 3

$H \leq 3000$, $B \leq 3996$, $L \leq 6008.5$

$B = MB + 116$

$MB = B - 116$

Louvre roof Type 1:

$L = ML + 118.5$

$ML = 390 + (n - 1) \times 220$, $n \leq 26$

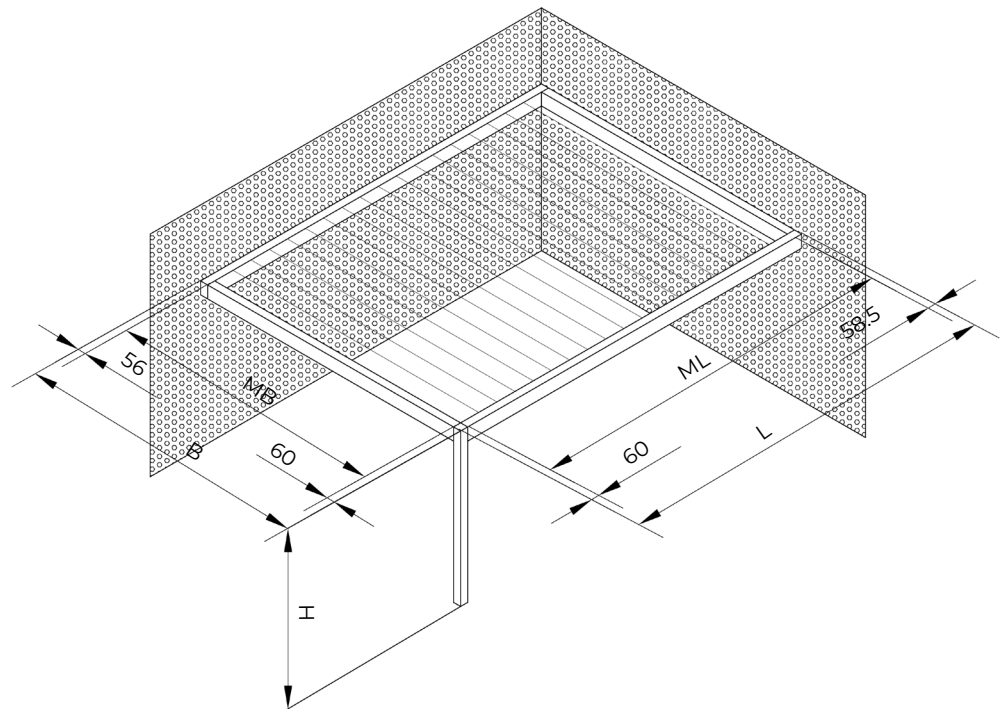
n = Number of slats in the nave

Louvre roof Type 2:

$L = ML + 118.5$

$ML = 382 + (n - 1) \times 204$, $n \leq 28$

n = Number of slats in the nave



PERGOLA SB 450

Single-bay version against a wall Type 4

$H \leq 3000$, $B \leq 3998.5$, $L \leq 6008.5$, $L1 \leq 1000$

$B = MB + 118.5$

$MB = B - 118.5$

Louvre roof Type 1:

$L = ML + 118.5$

$ML = 390 + (n - 1) \times 220$, $n \leq 26$

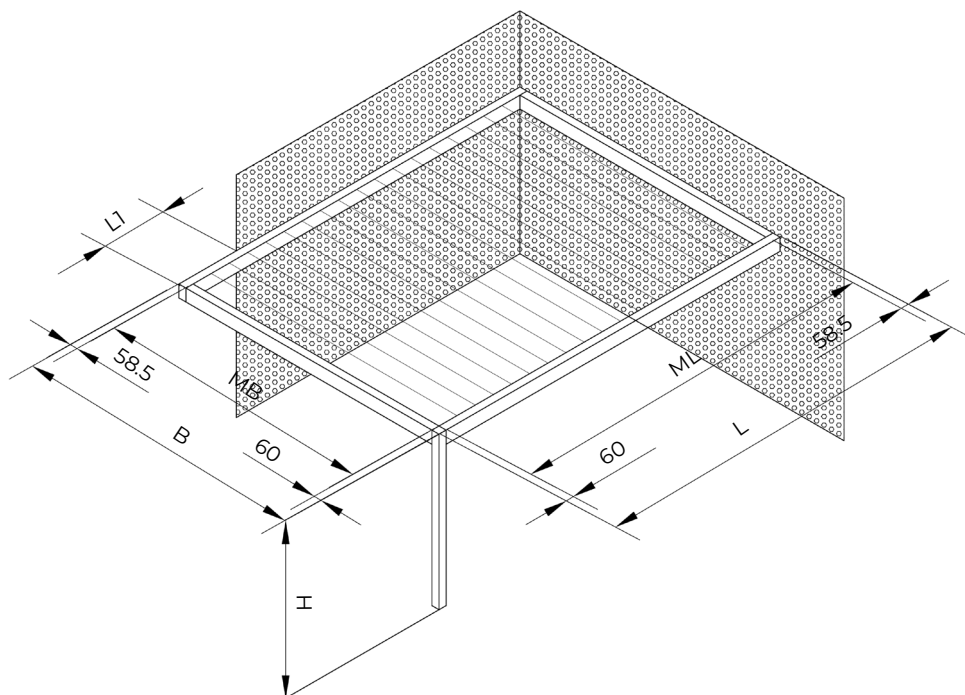
n = Number of slats in the nave

Louvre roof Type 2:

$L = ML + 118.5$

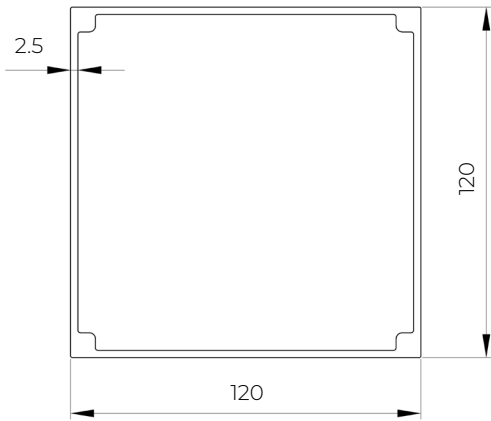
$ML = 382 + (n - 1) \times 204$, $n \leq 28$

n = Number of slats in the nave

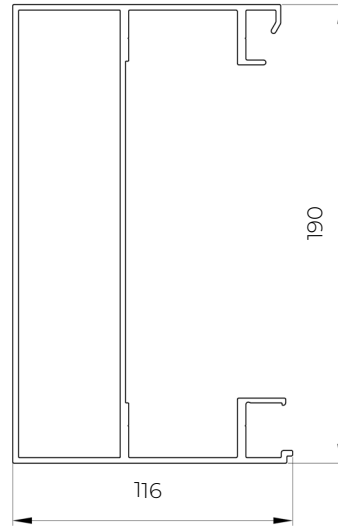


PERGOLA SB 450
Profiles – structure

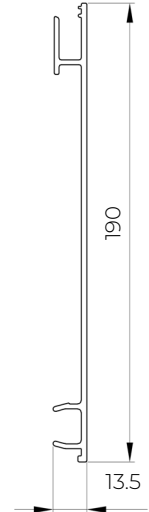
K440639X



K440640X

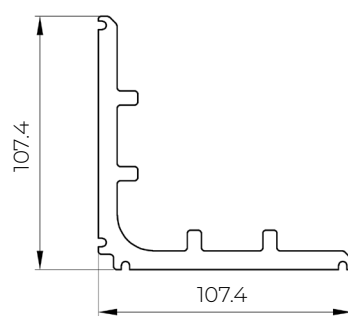


K440641X

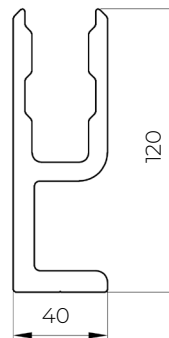


PERGOLA SB 450
Profiles – structure

K440642X

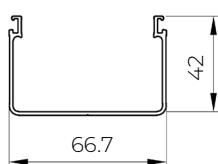


K440653X

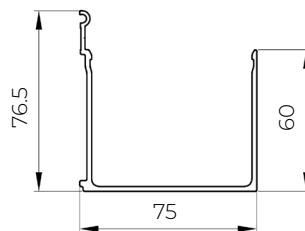


PERGOLA SB 450
Cross-sections of drainage gutters

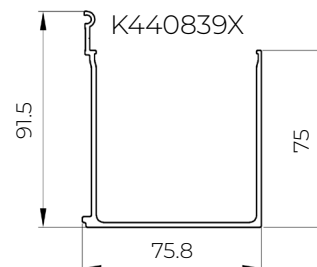
K440650X



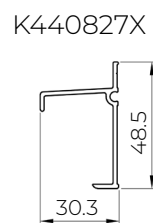
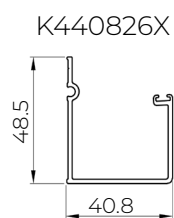
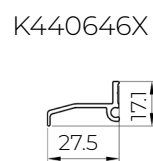
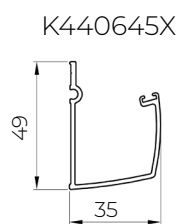
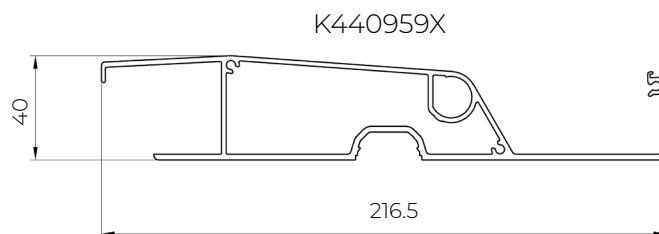
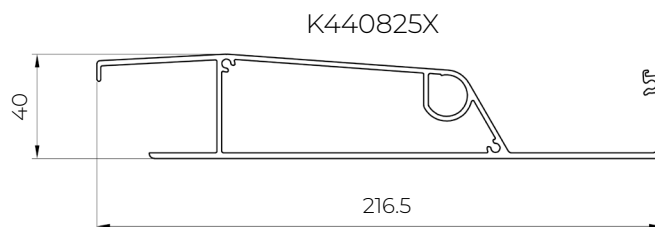
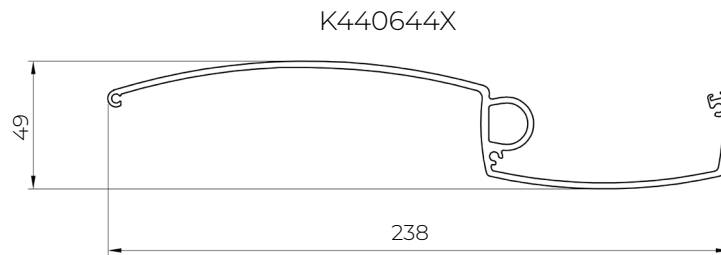
K440651X



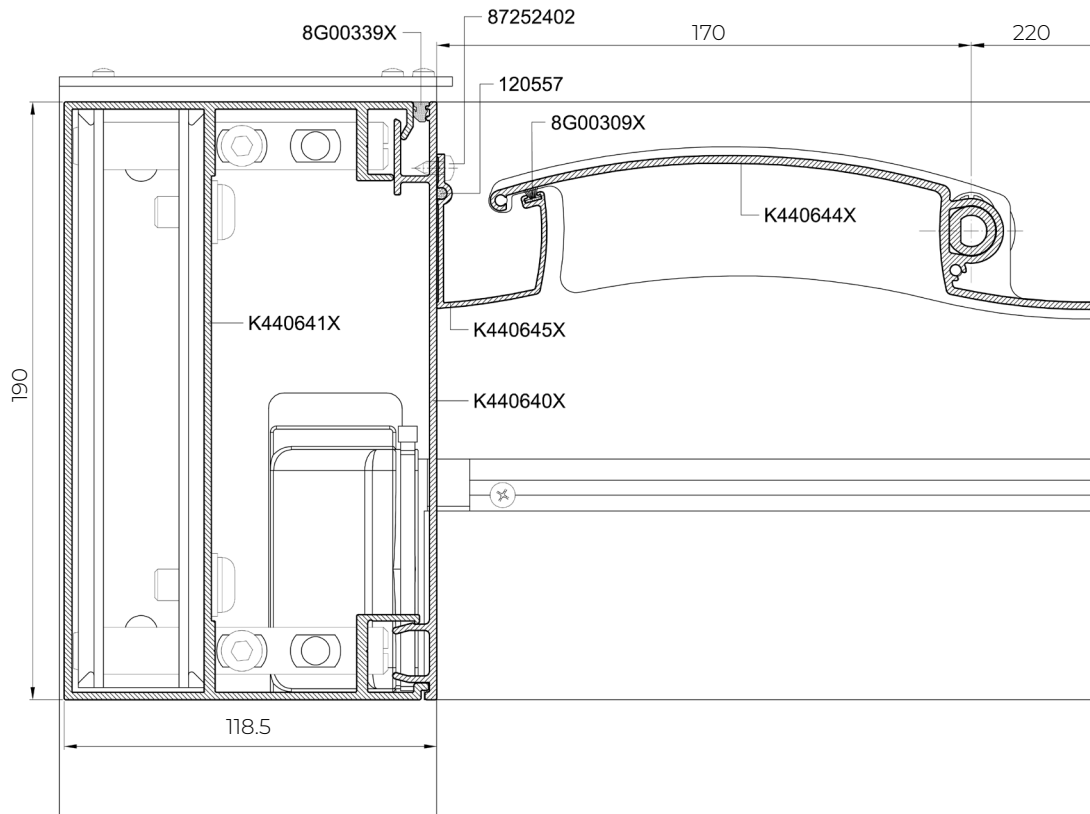
K440839X



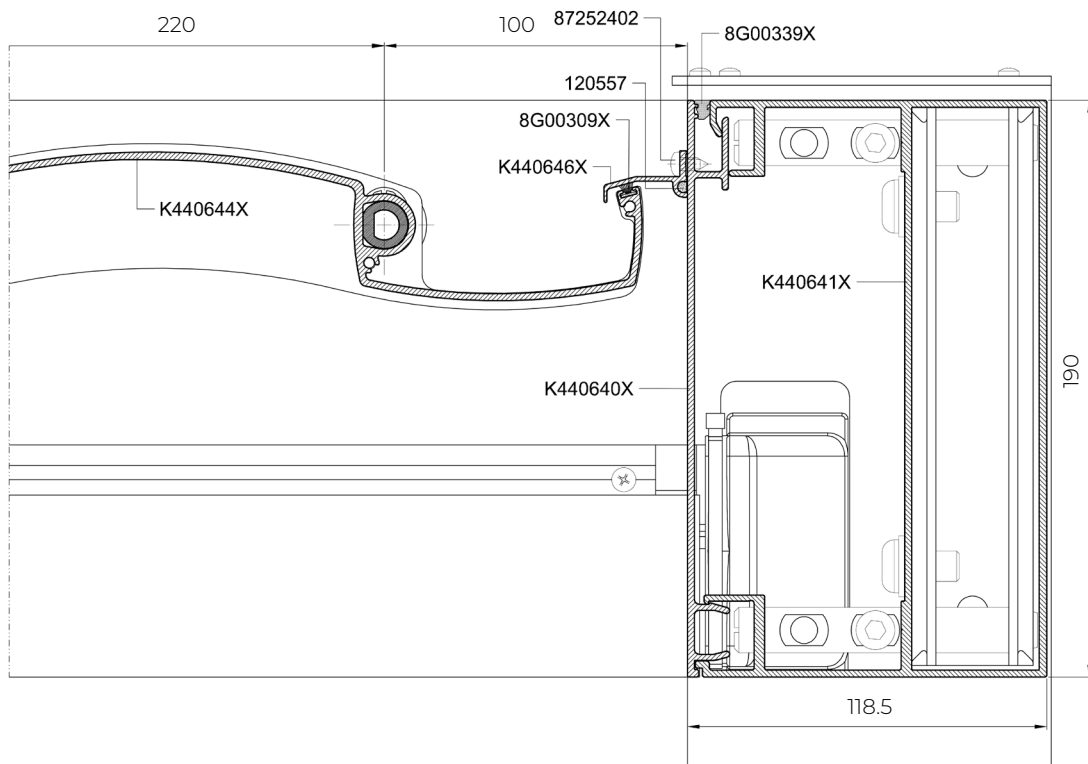
PERGOLA SB 450
Profiles – slatted roof



PERGOLA SB 450
Bottom end profile, slatted roof Type 1

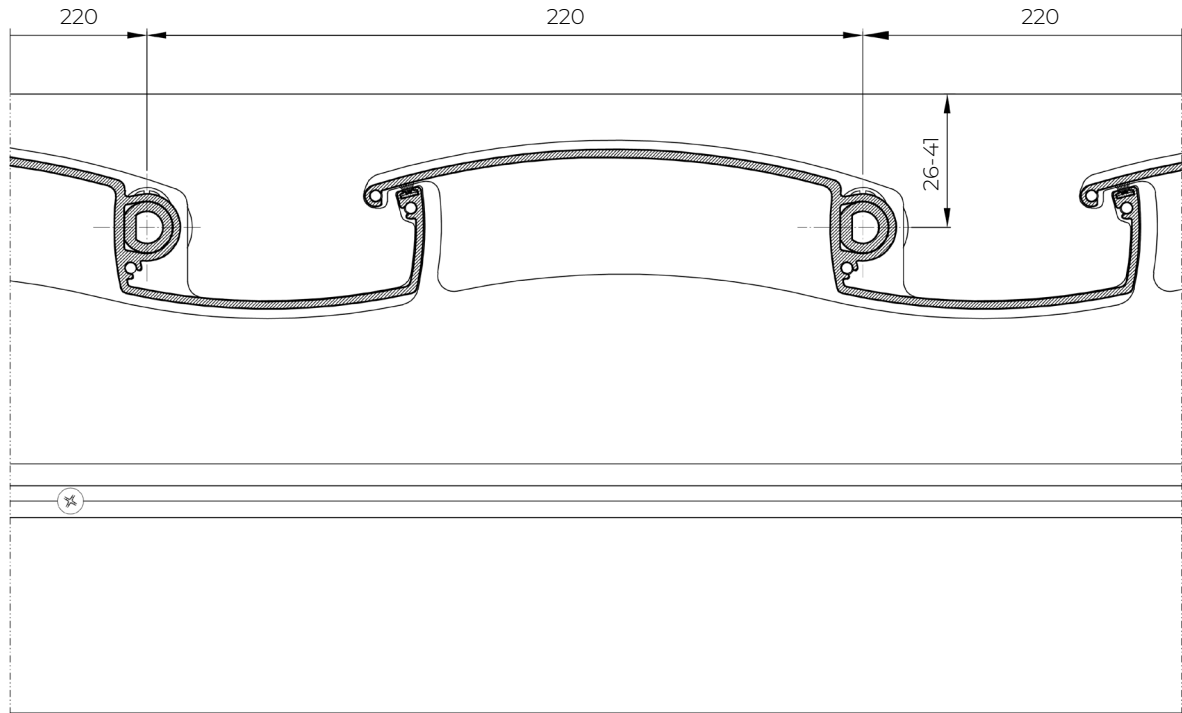


PERGOLA SB 450
Top end profile, slatted roof Type 1



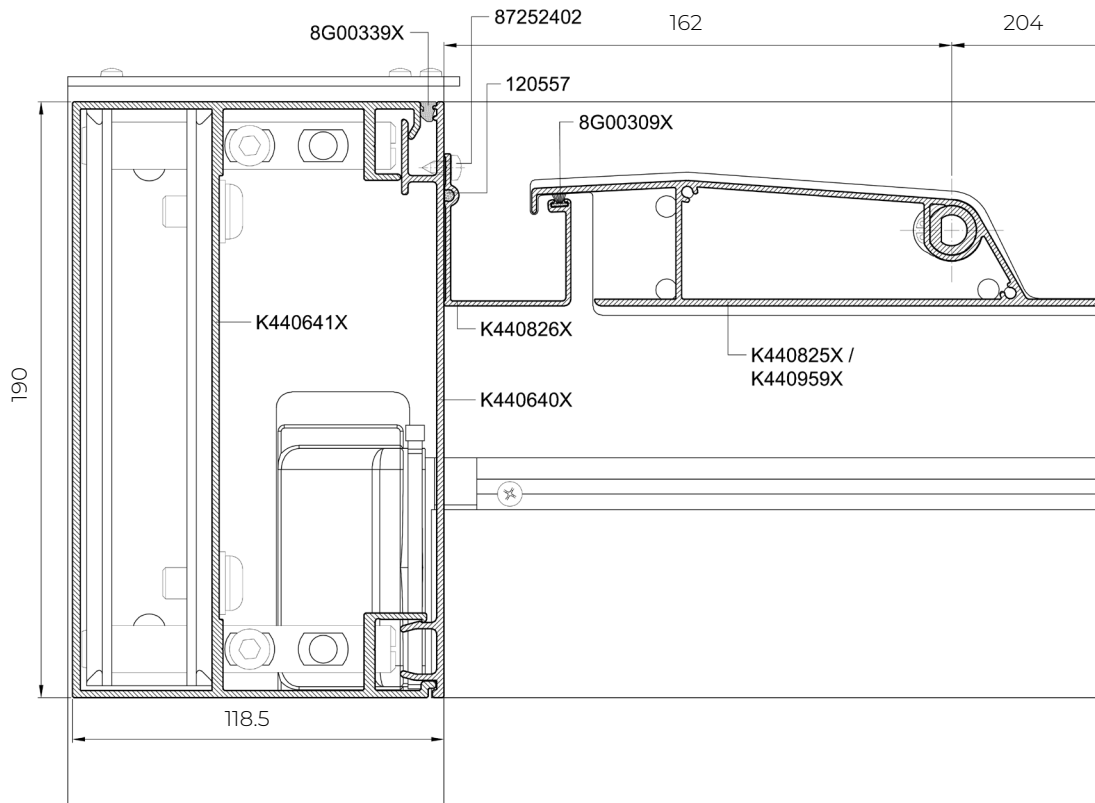
PERGOLA SB 450

Cross-section through a slat, slatted roof Type 1

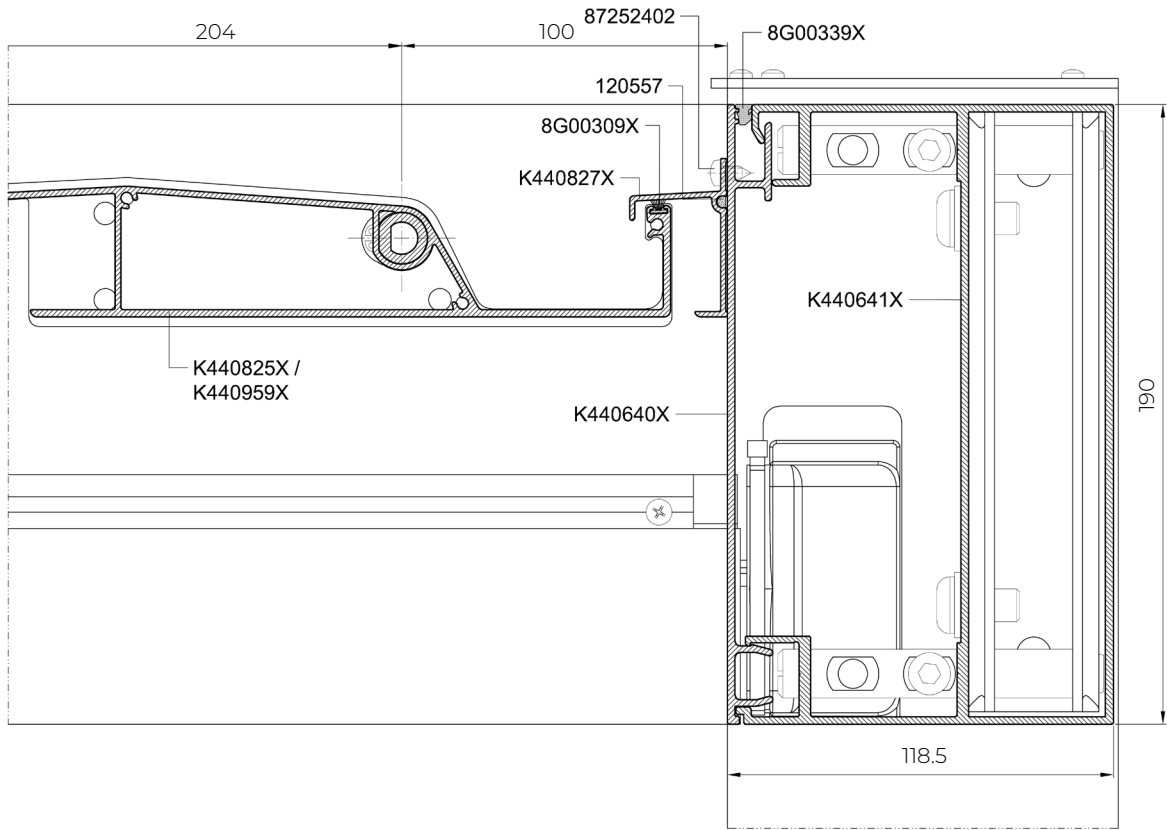


PERGOLA SB 450

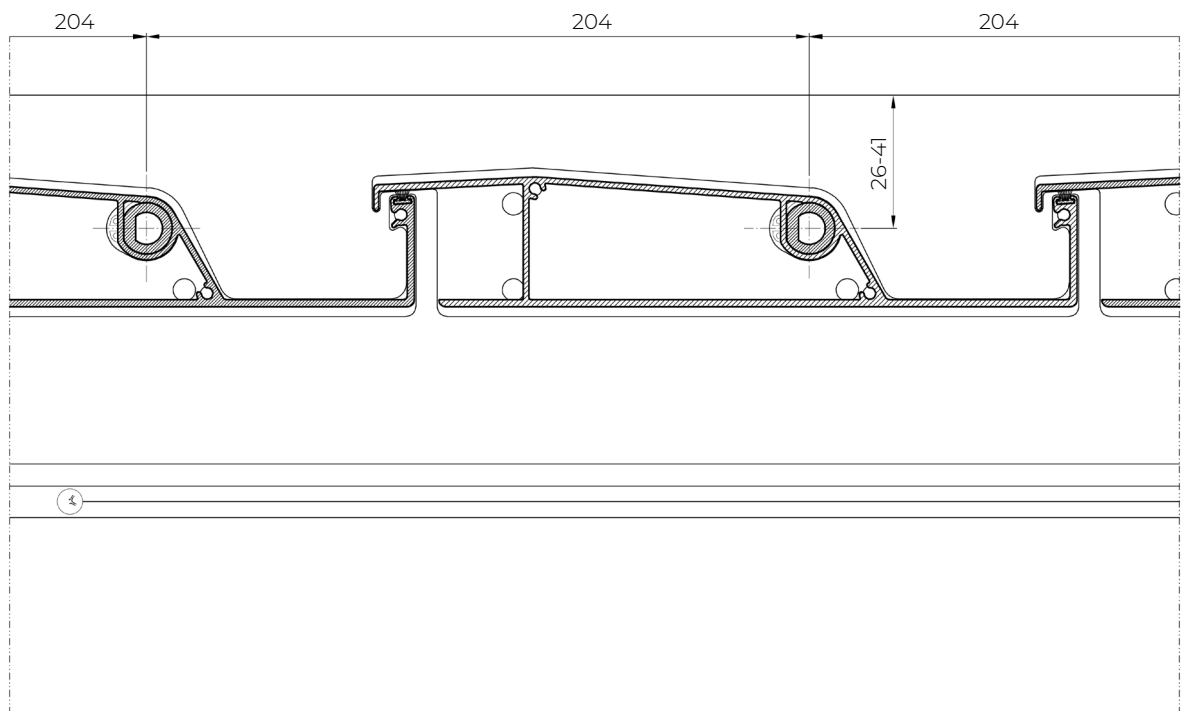
Bottom end profile, slatted roof Type 2



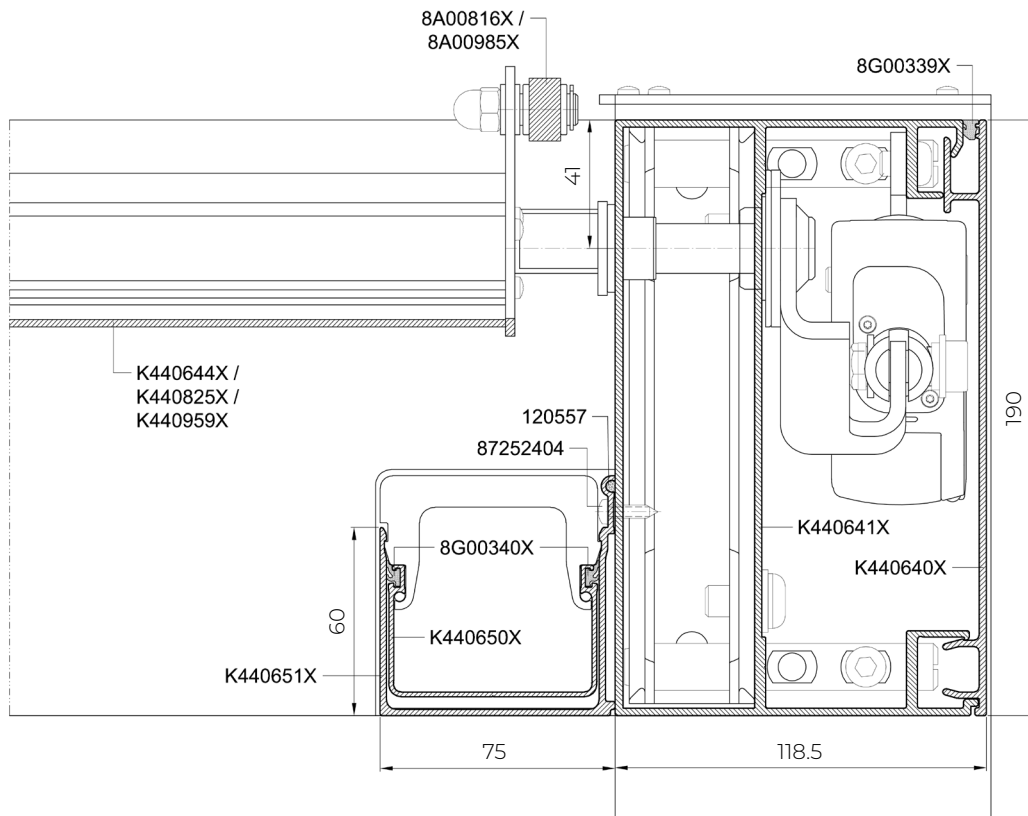
PERGOLA SB 450
Top end profile, slatted roof Type 2



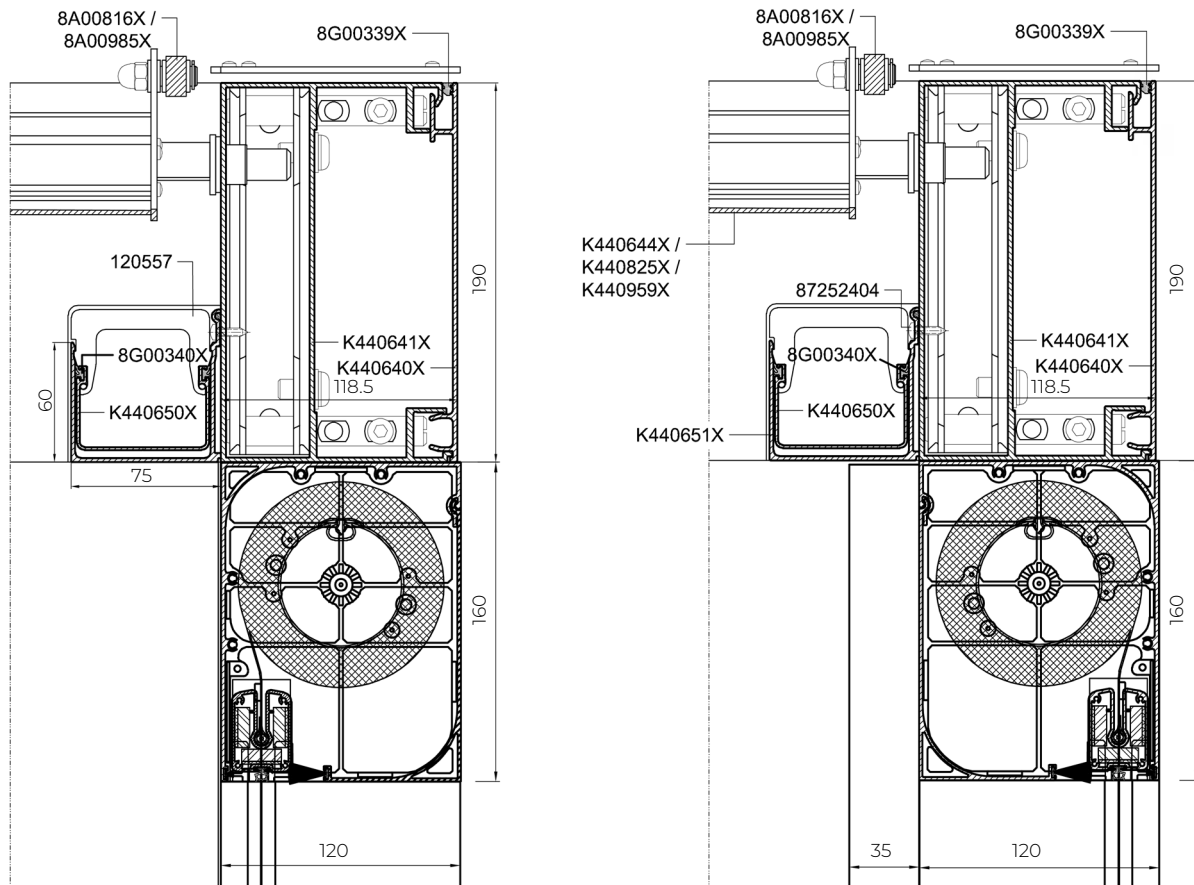
PERGOLA SB 450
Cross-section through a slat, slatted roof Type 2



PERGOLA SB 450
Cross-section through the rafter

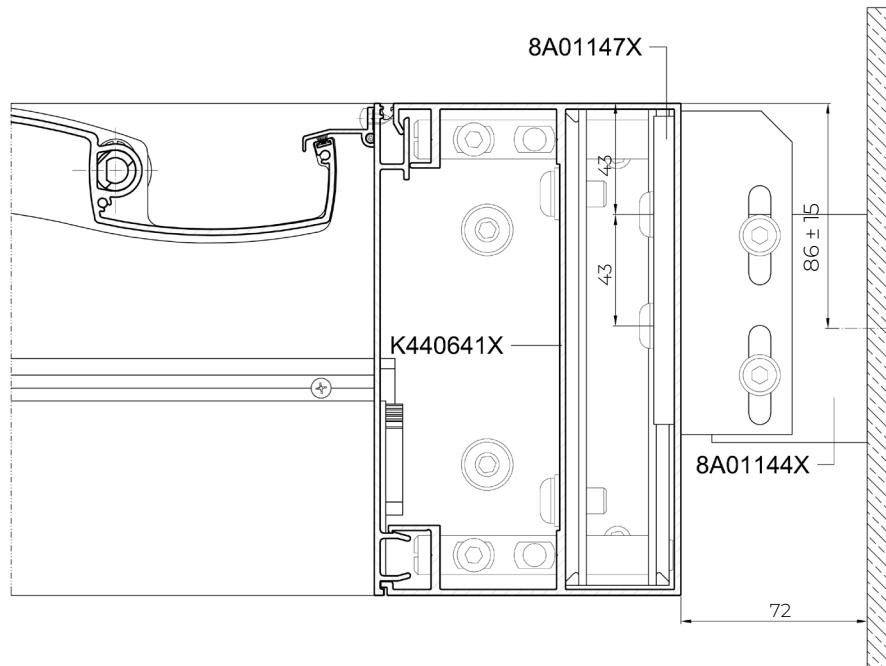
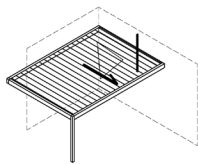
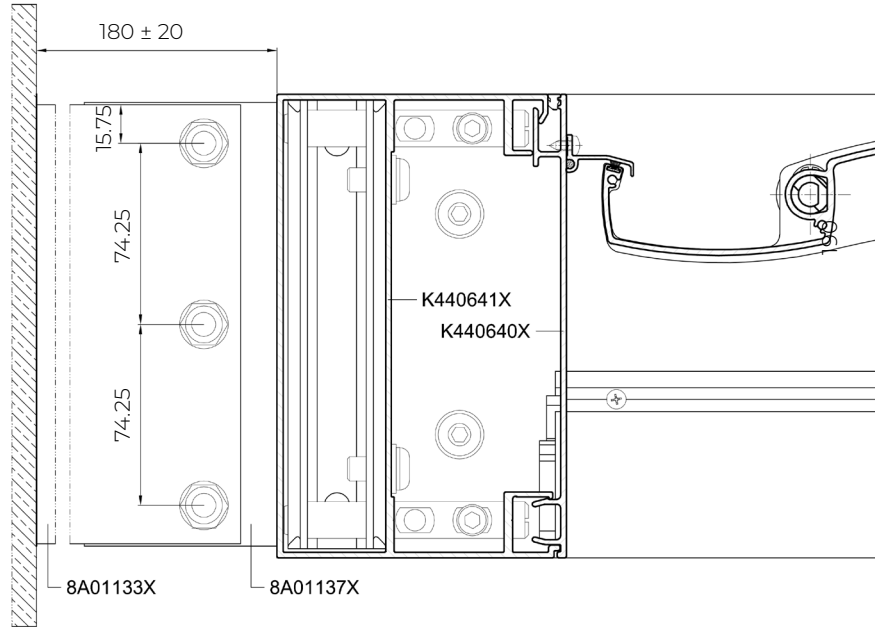
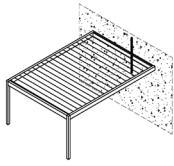


PERGOLA SB 450
Cross-section through a rafter with the SRS SkyRoll ZIP installation system

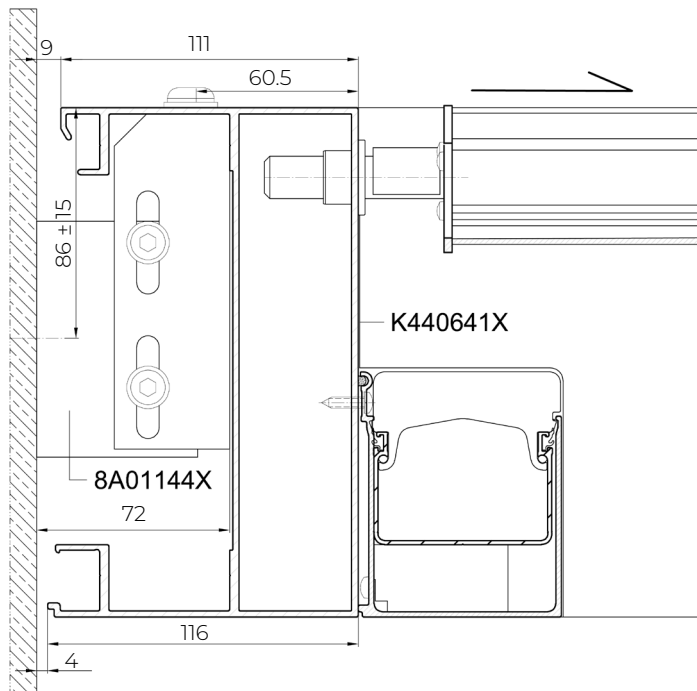
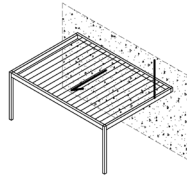


PERGOLA SB 450

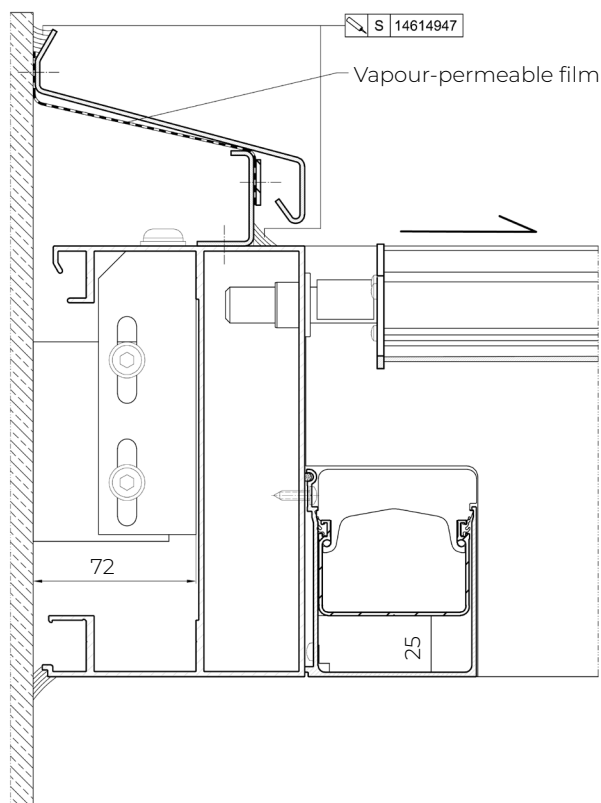
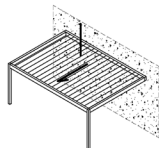
Cross-sections through wall purlins with brackets



PERGOLA SB 450
Cross-section of wall rafter

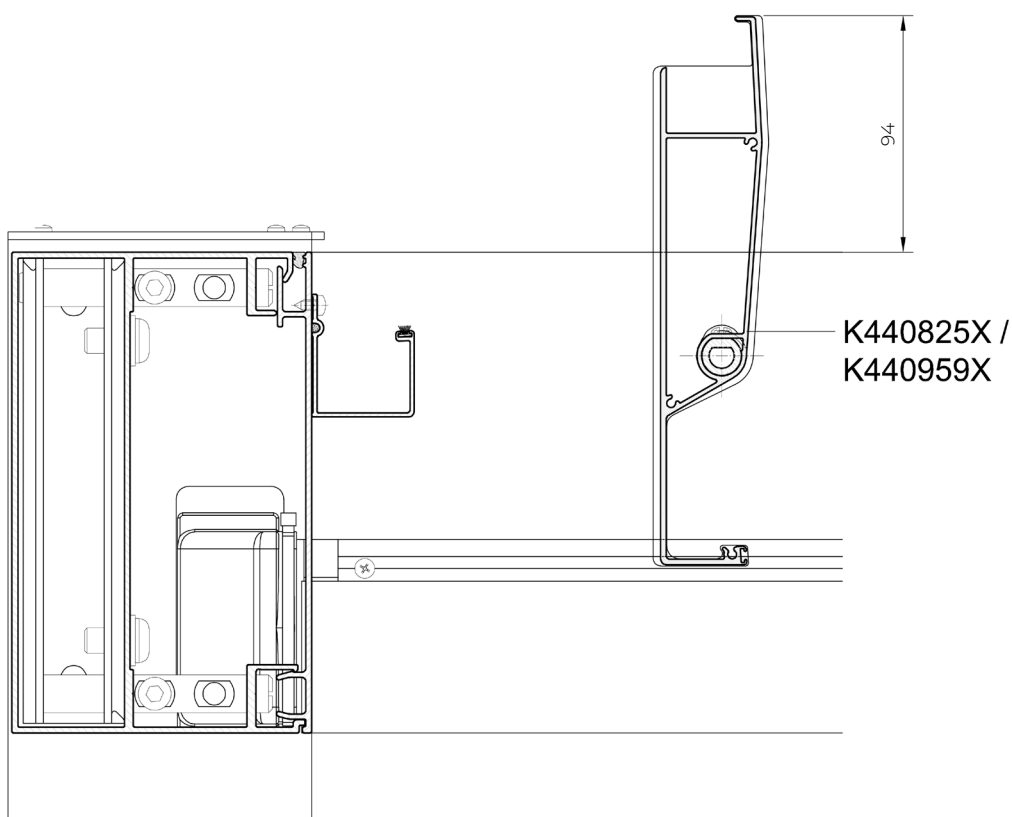
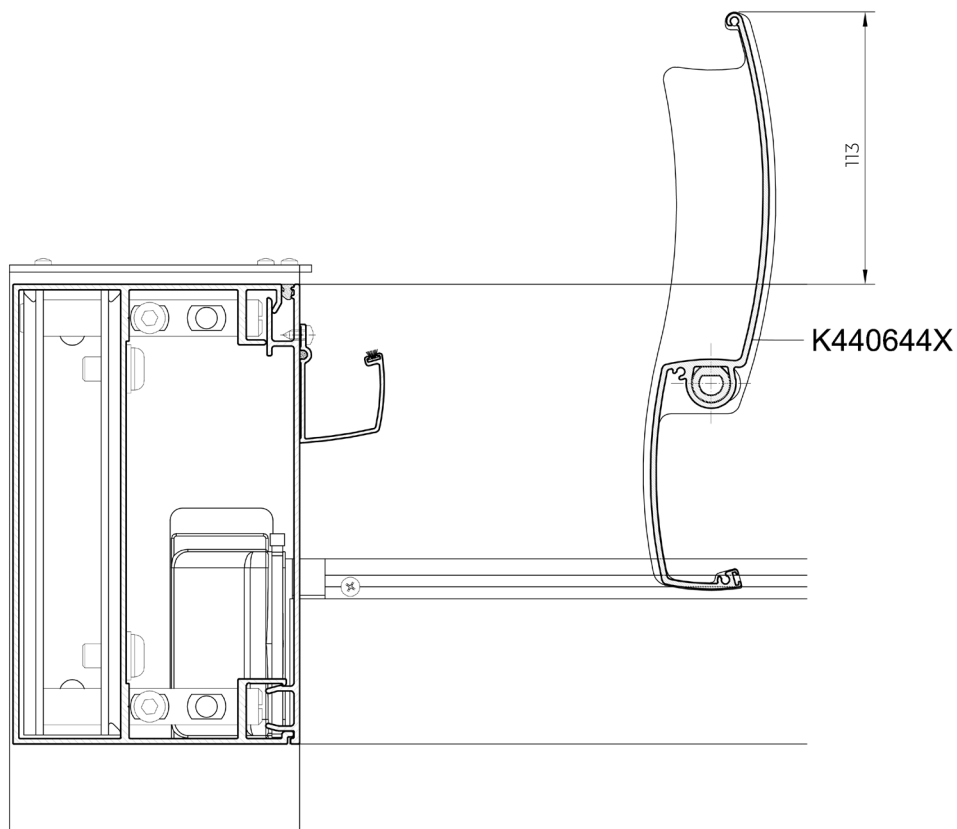


PERGOLA SB 450
Cross-section of wall rafter - Installation example

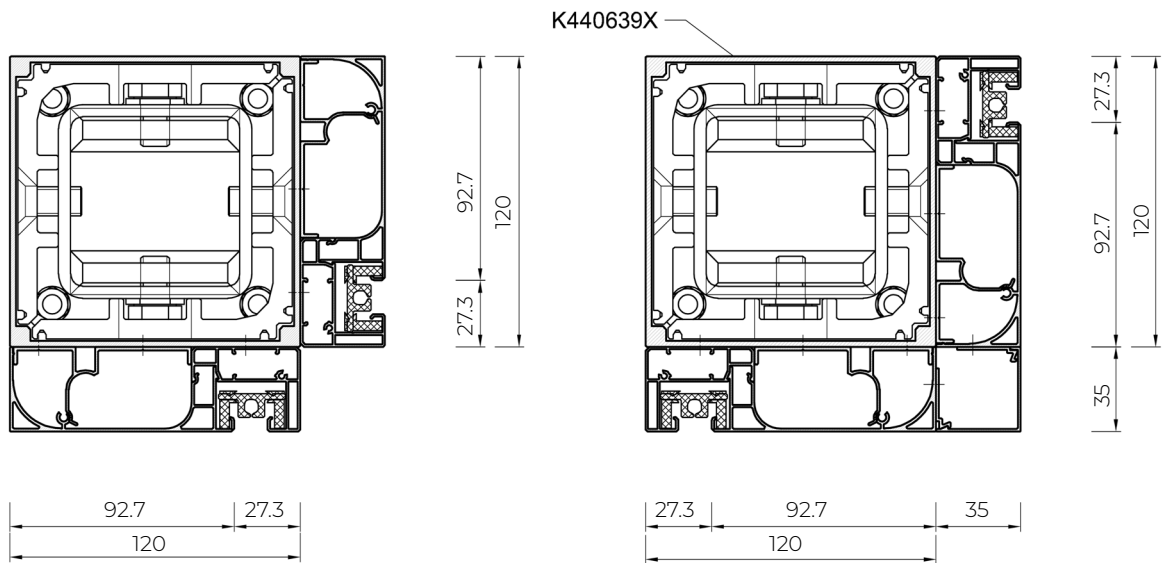


PERGOLA SB 450

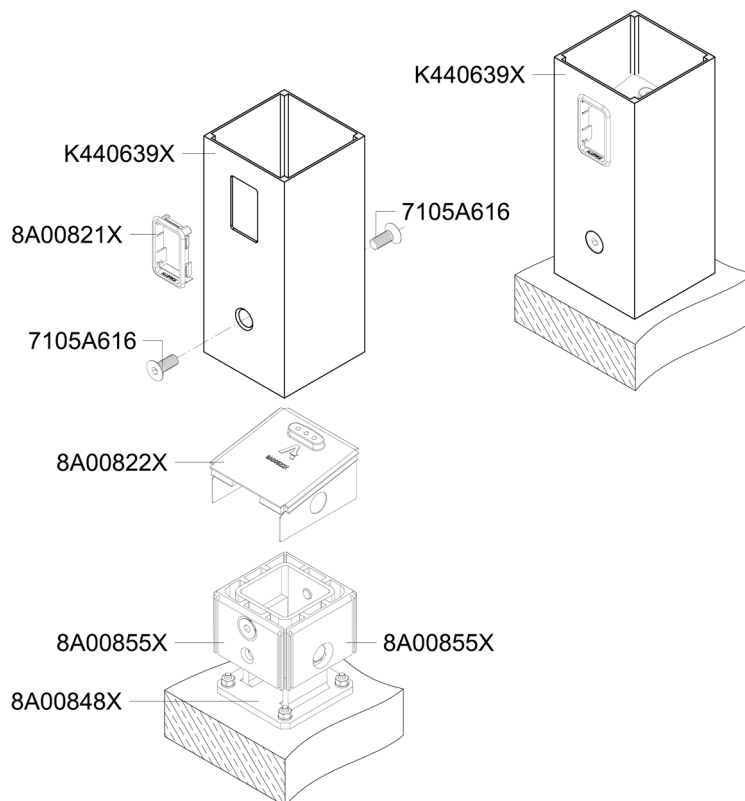
Maximum projection of the slats above the beam



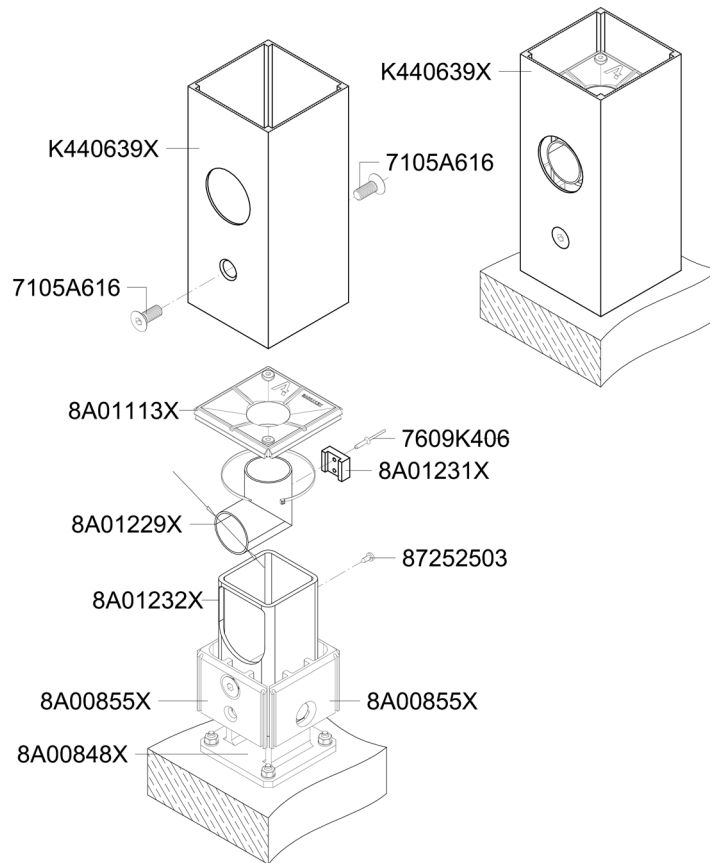
PERGOLA SB 450
 Cross-section through a post
 Visible drainage



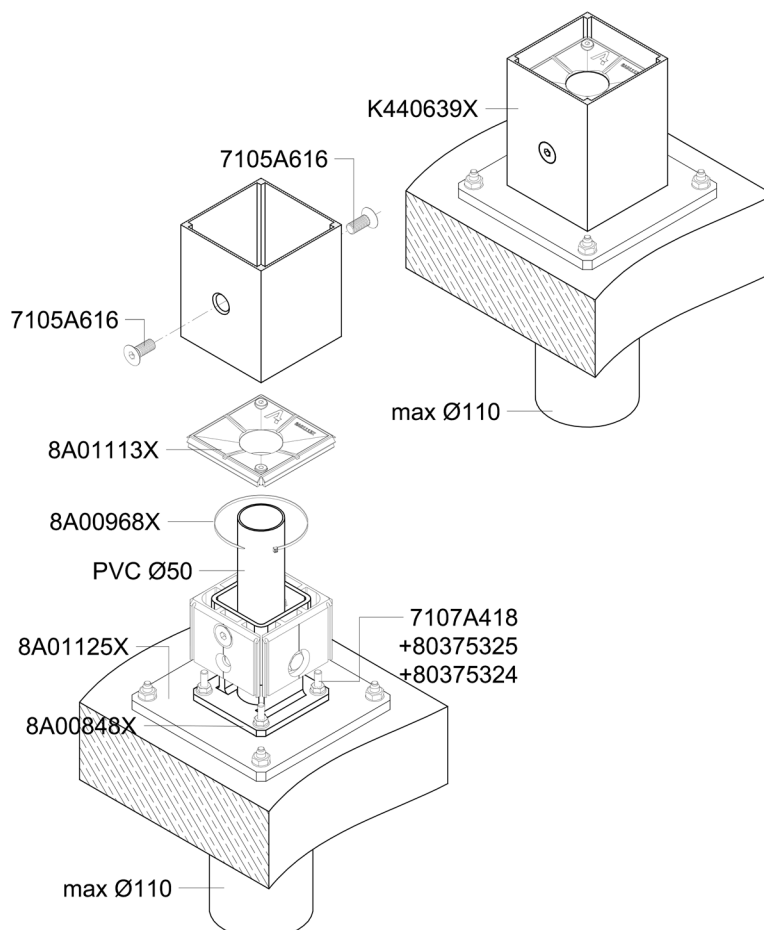
PERGOLA SB 450
 Type A+Visible drainage



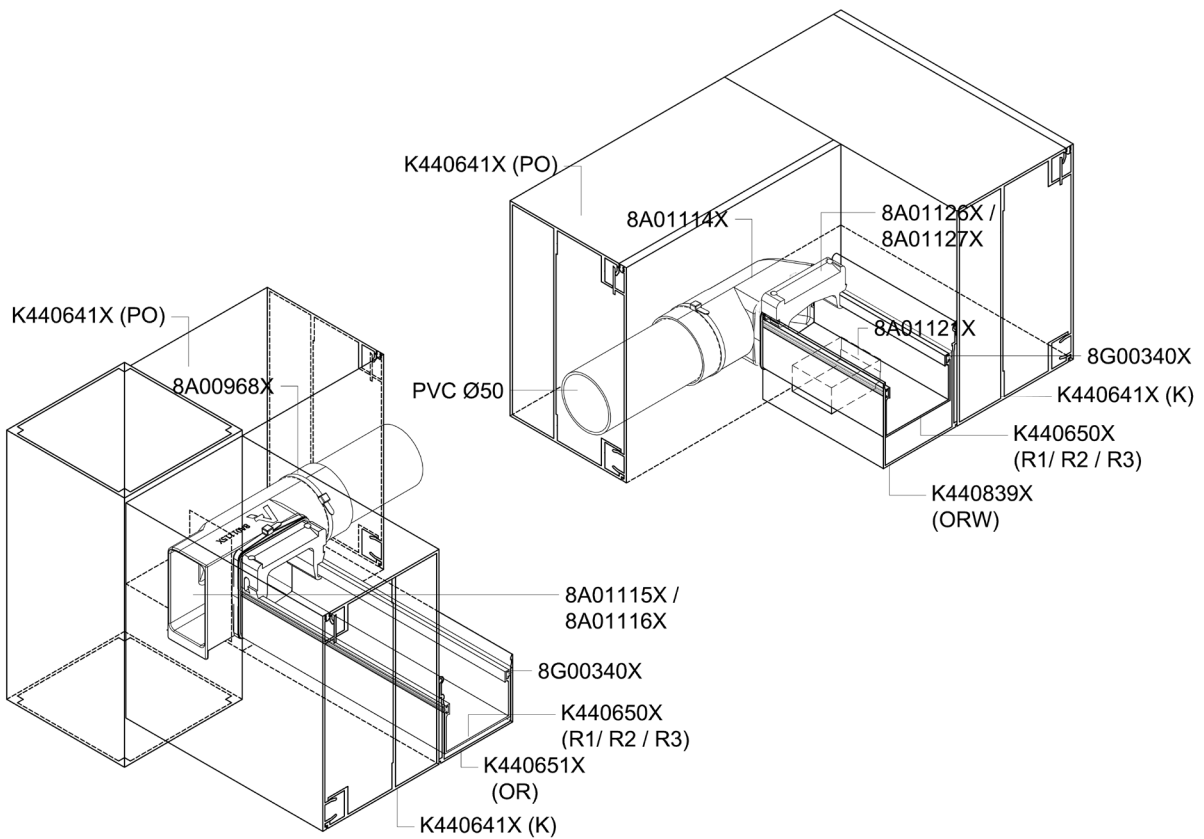
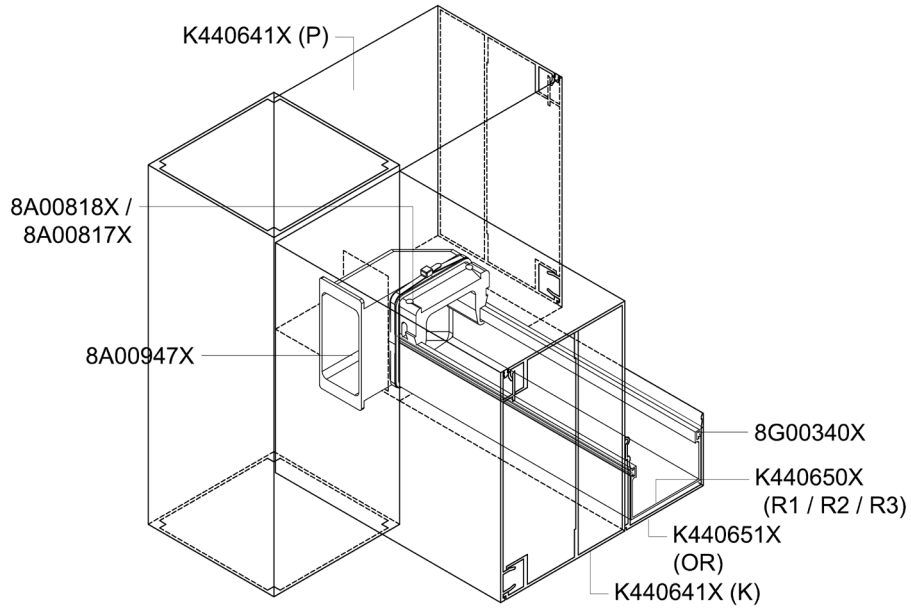
PERGOLA SB 450
Type B+Visible drainage



PERGOLA SB 450
Concealed drainage

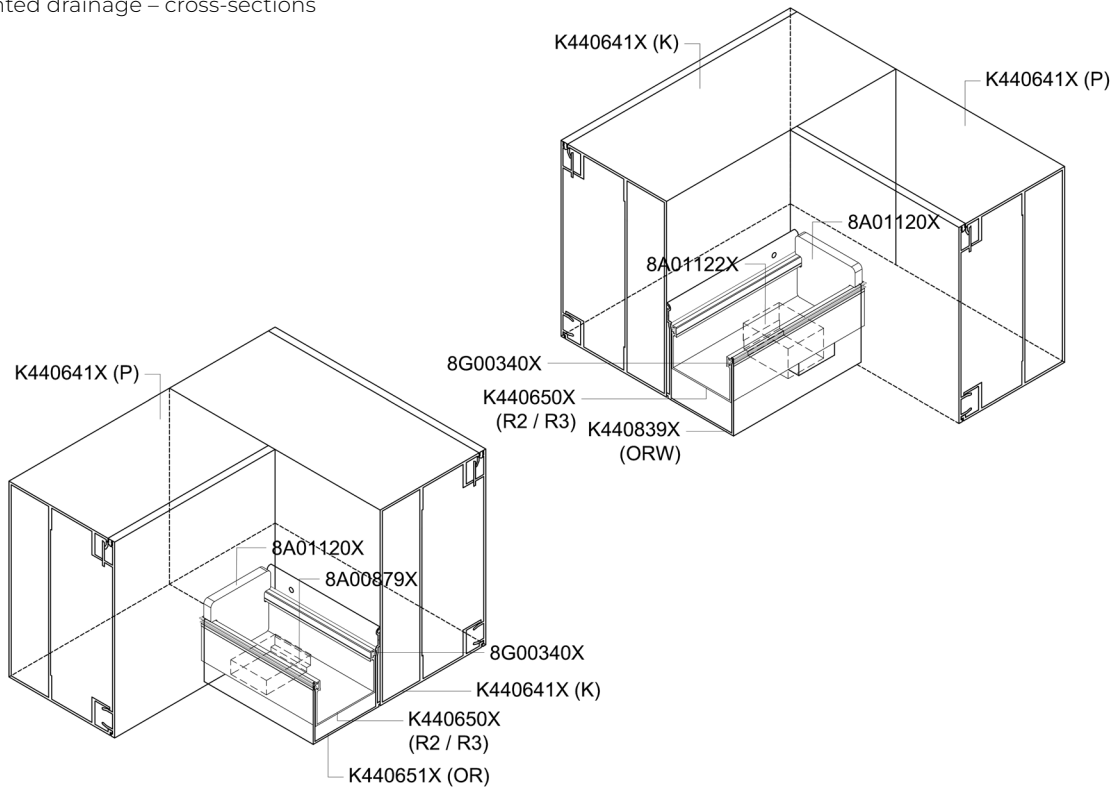


PERGOLA SB 450
 Drainage - cross-sections



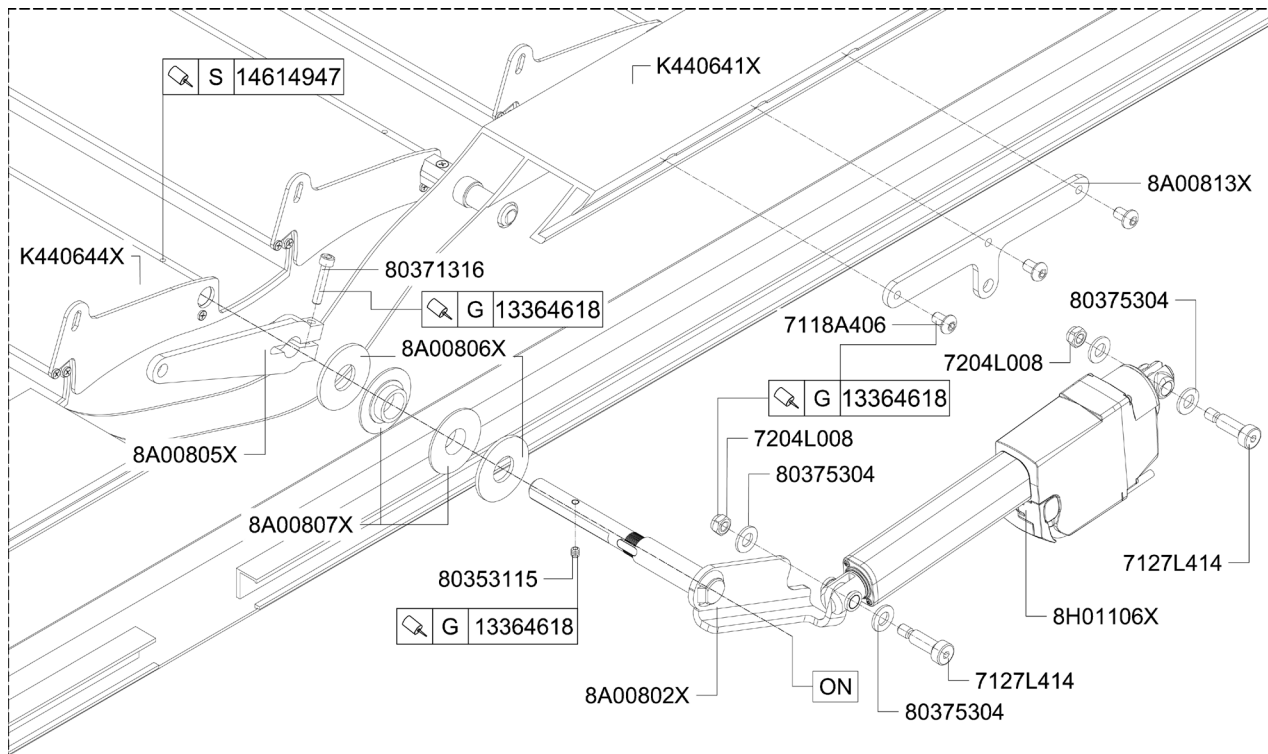
PERGOLA SB 450

Wall-mounted drainage – cross-sections



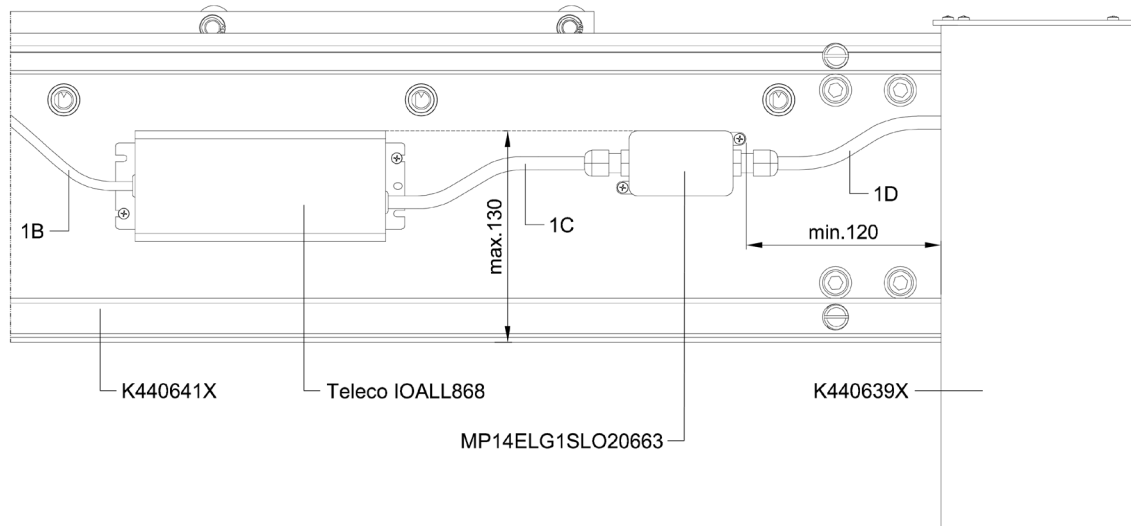
PERGOLA SB 450

Example of actuator installation, louvre roof Type 1



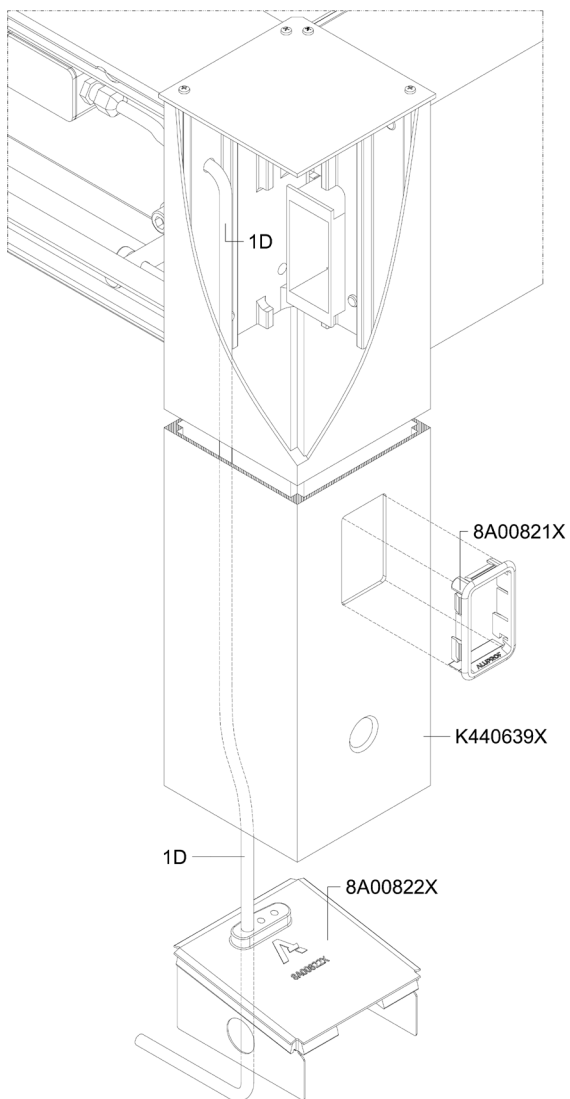
PERGOLA SB 450

Installation of power supply cables, louvre roof Type 1



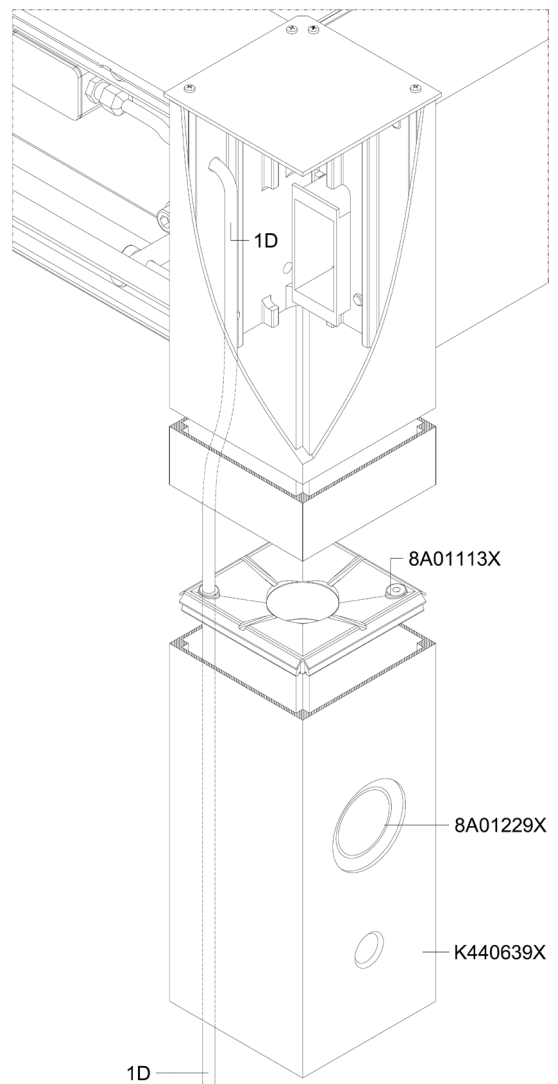
PERGOLA SB 450

Installation of the power cable in the pole, drainage visible Type A



PERGOLA SB 450

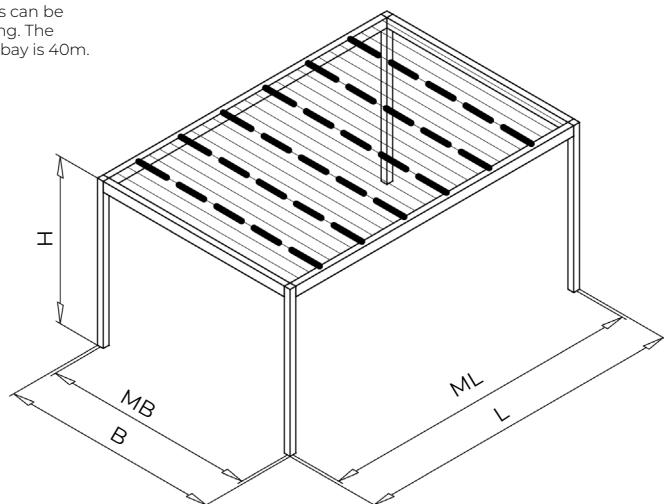
Installation of the power cable in the pole, drainage visible Type B



PERGOLA SB 450

LED strips for slats: K440644X/K440959X

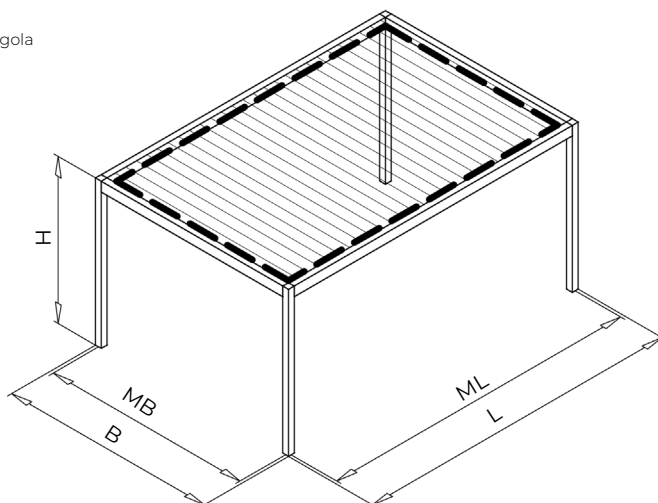
To ensure optimal light intensity, LED strips can be fitted to a maximum of 4 slats, each 4m long. The maximum length of LED strip per pergola bay is 40m.



PERGOLA SB 450

LED strips for the pergola crown

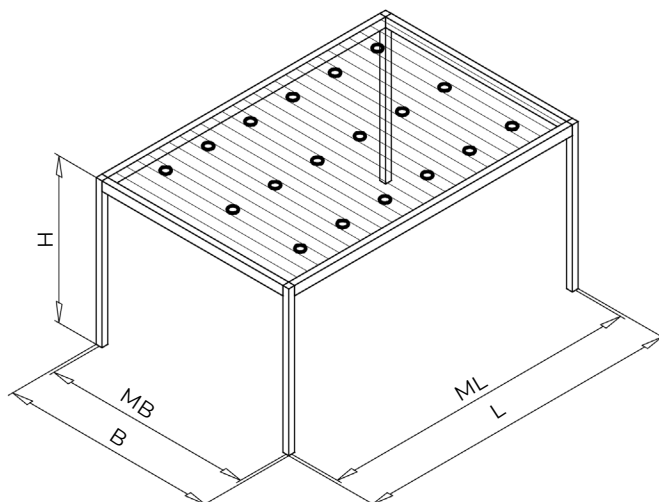
The length of the LED strip installed in the pergola crown is 24 m.



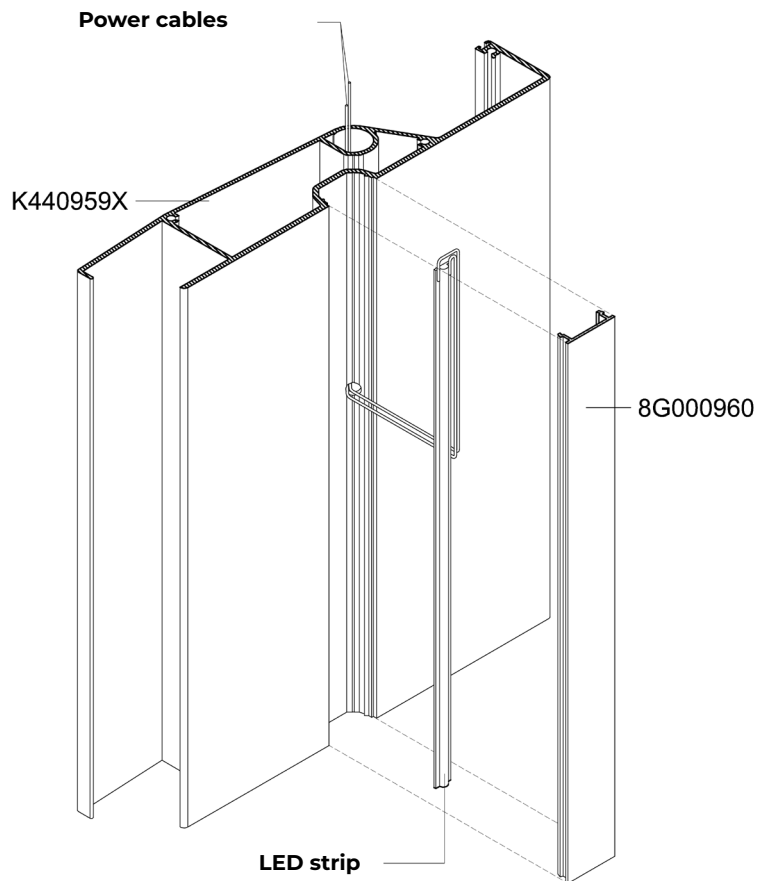
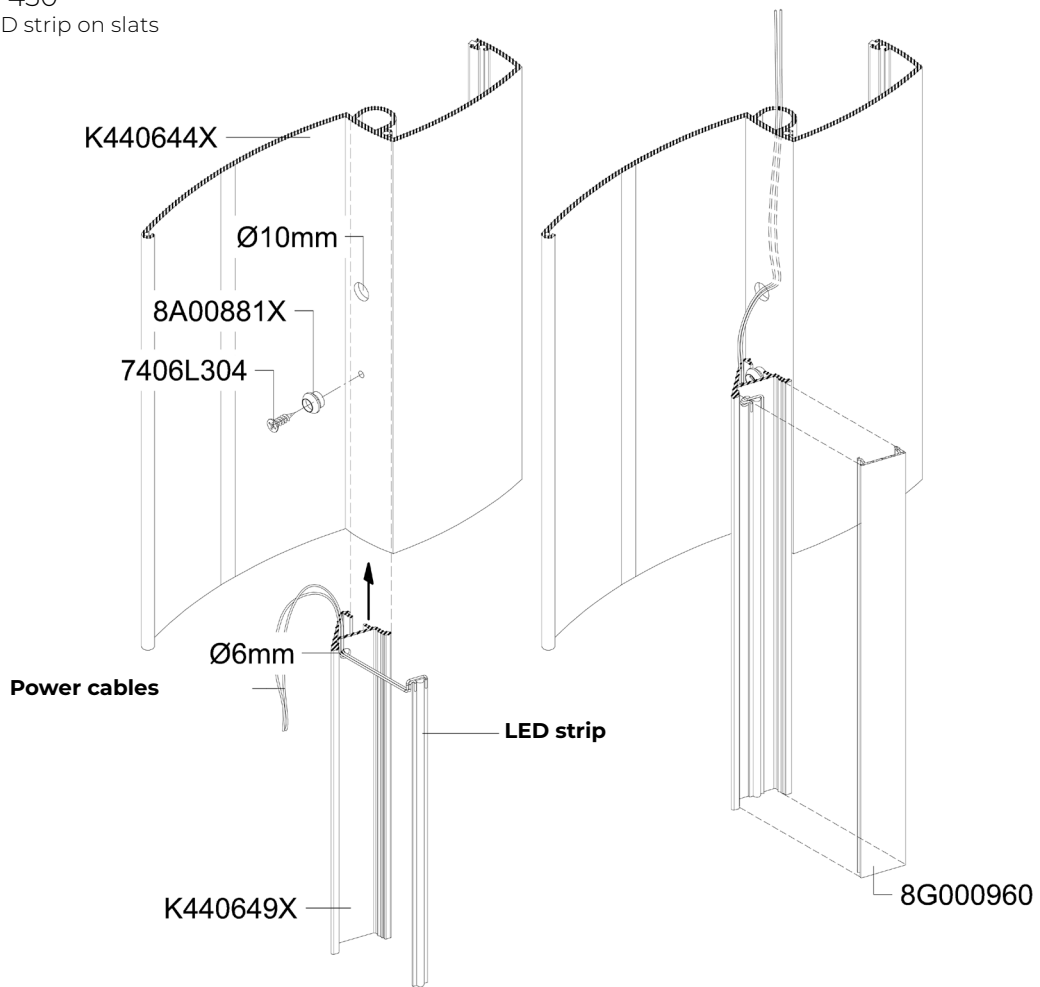
PERGOLA SB 450

LED spotlights for slats K440825X

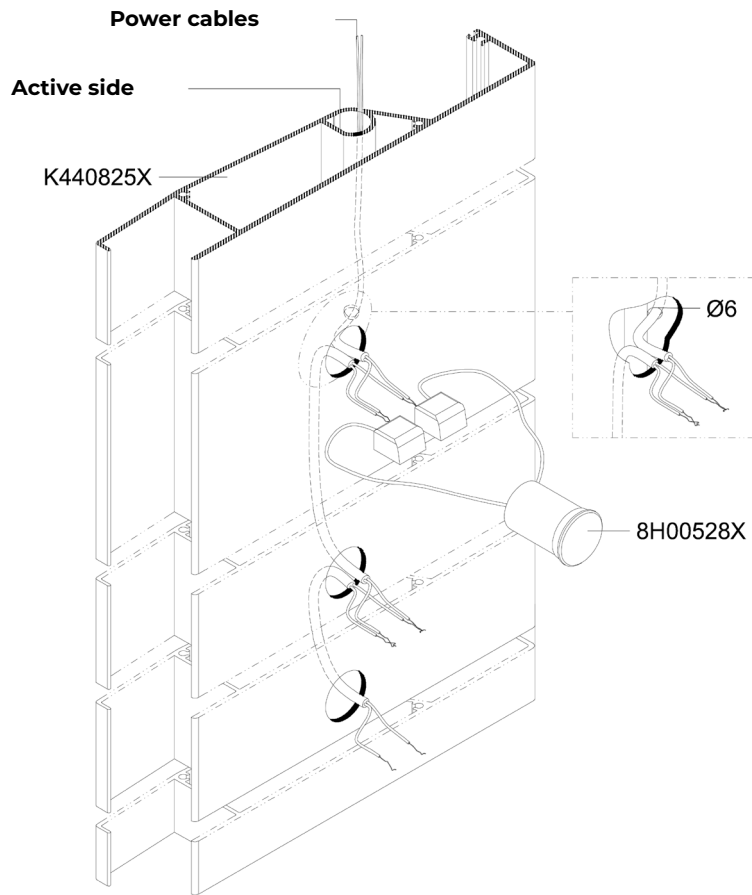
Number of points: 4 to 12
Number of points in the blade: 2 to 3



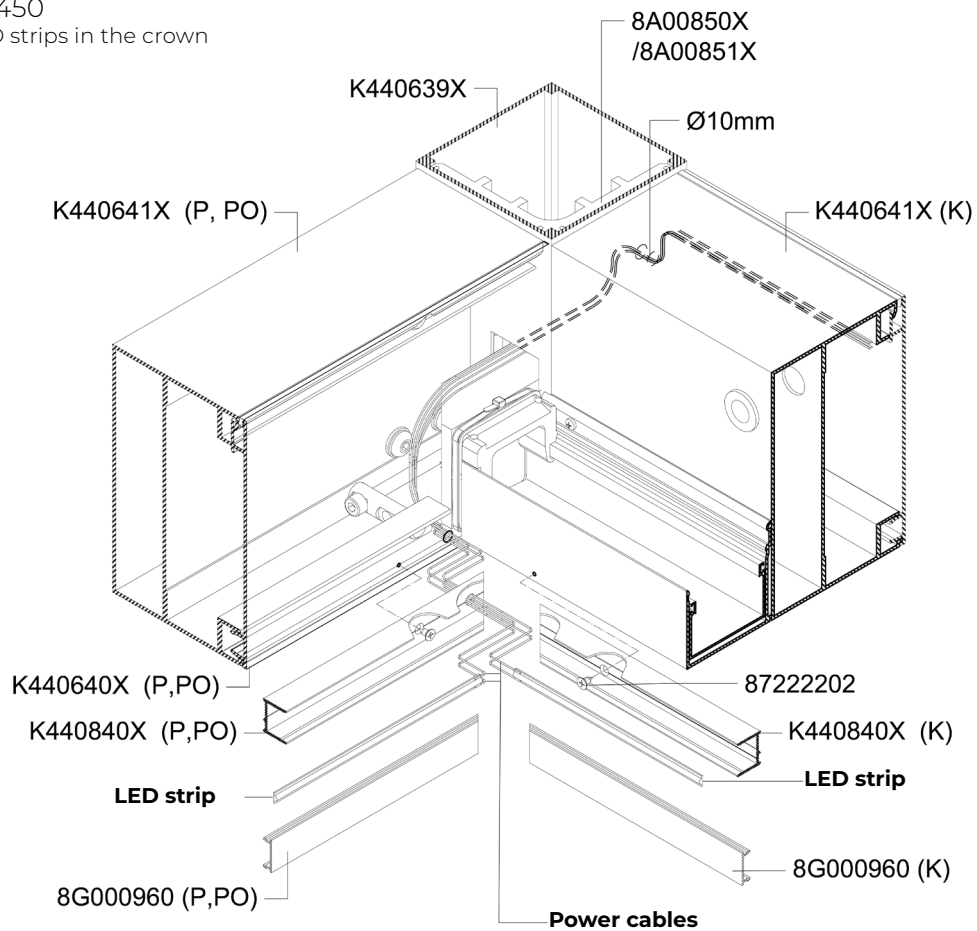
PERGOLA SB 450
Installation of LED strip on slats



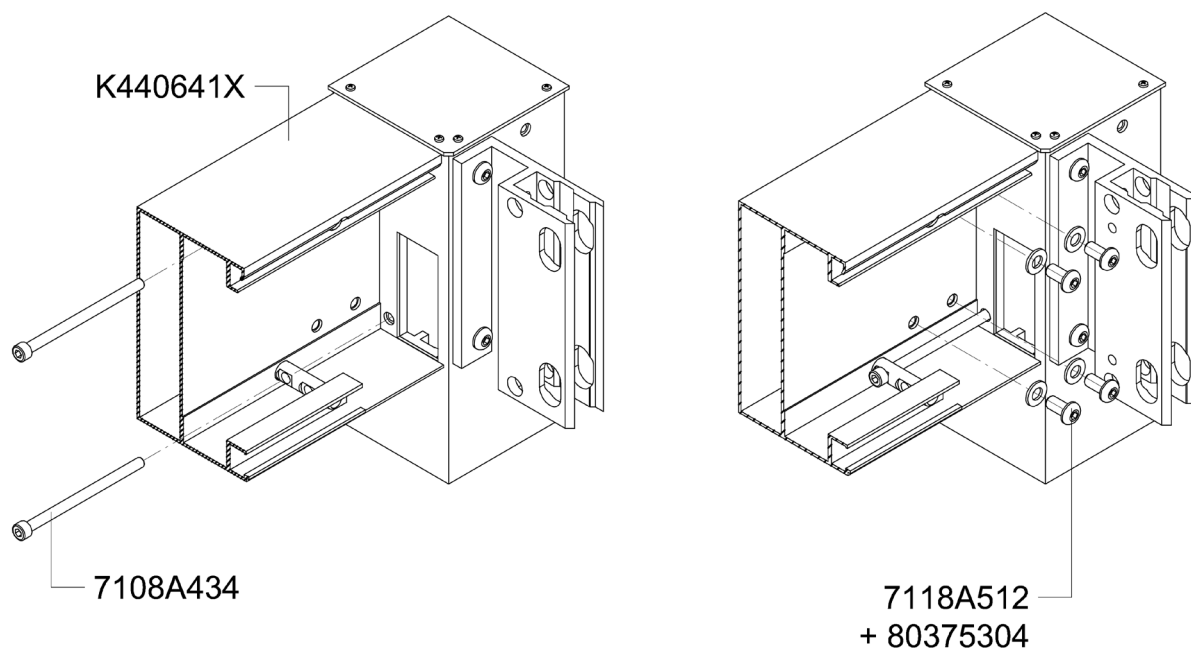
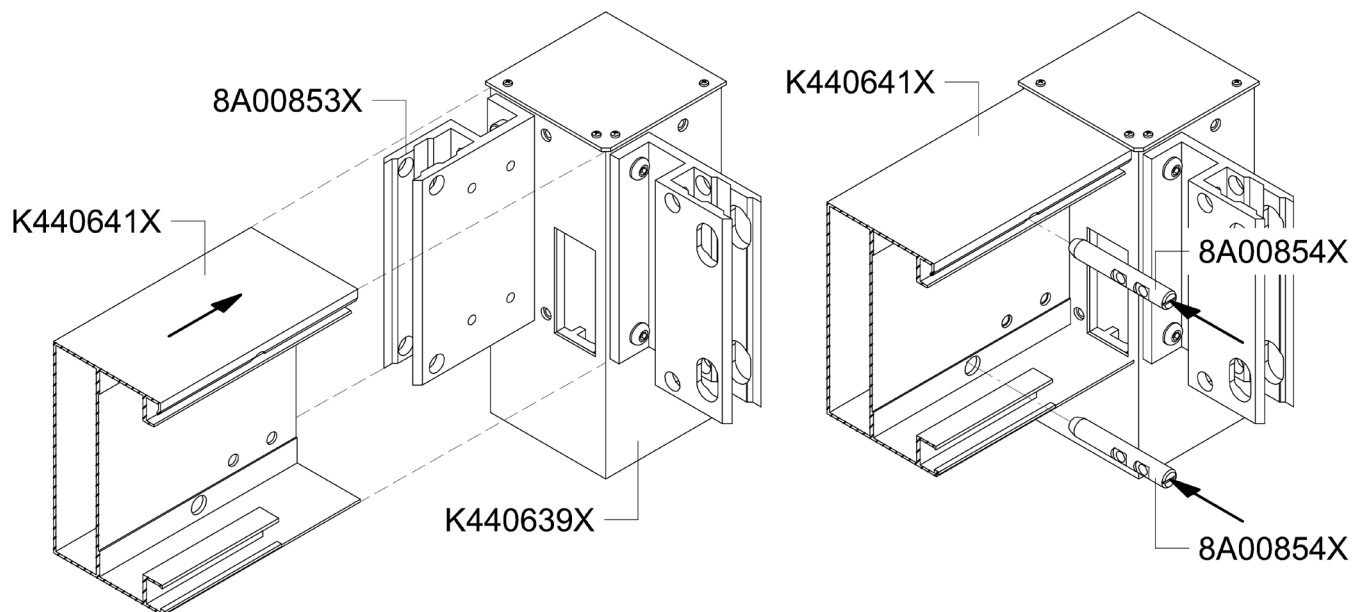
PERGOLA SB 450
Installation of LED points



PERGOLA SB 450
Installation of LED strips in the crown

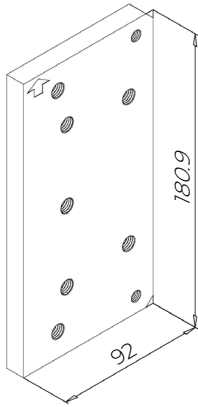


PERGOLA SB 450
Post-purlin connection

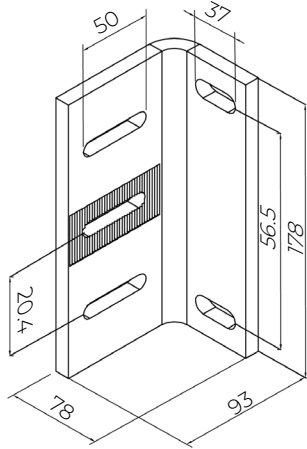


PERGOLA SB 450
Wall connections – accessories

8A01135X



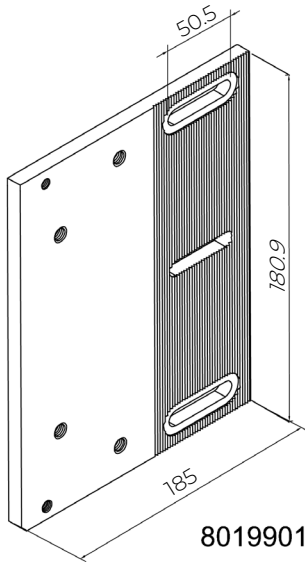
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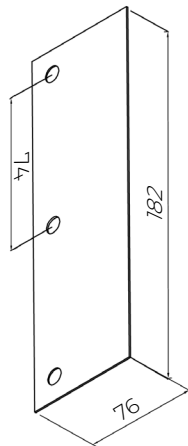
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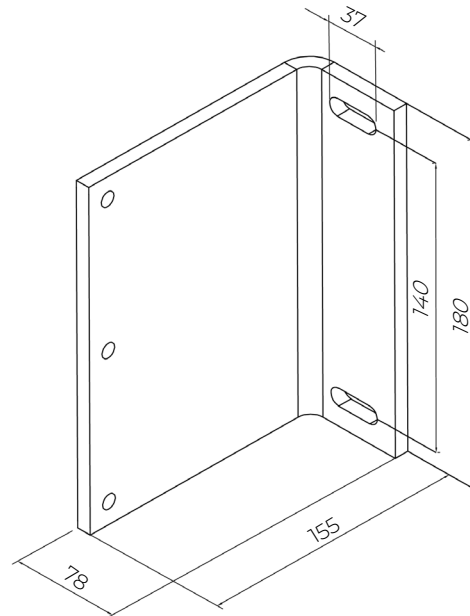
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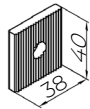
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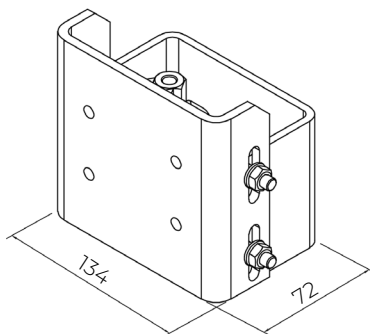
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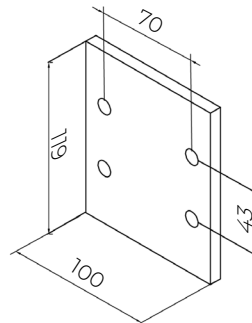
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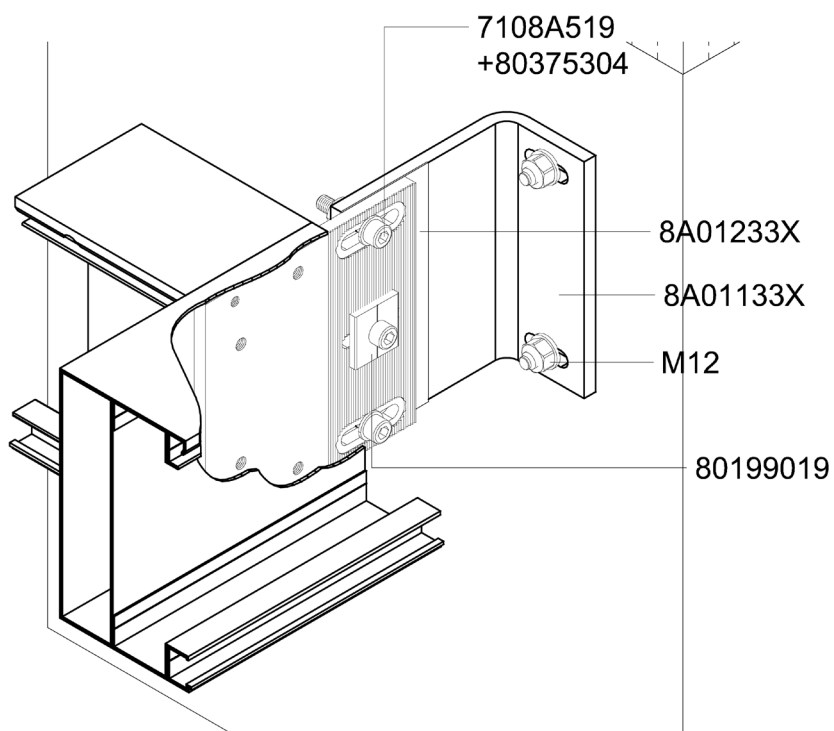
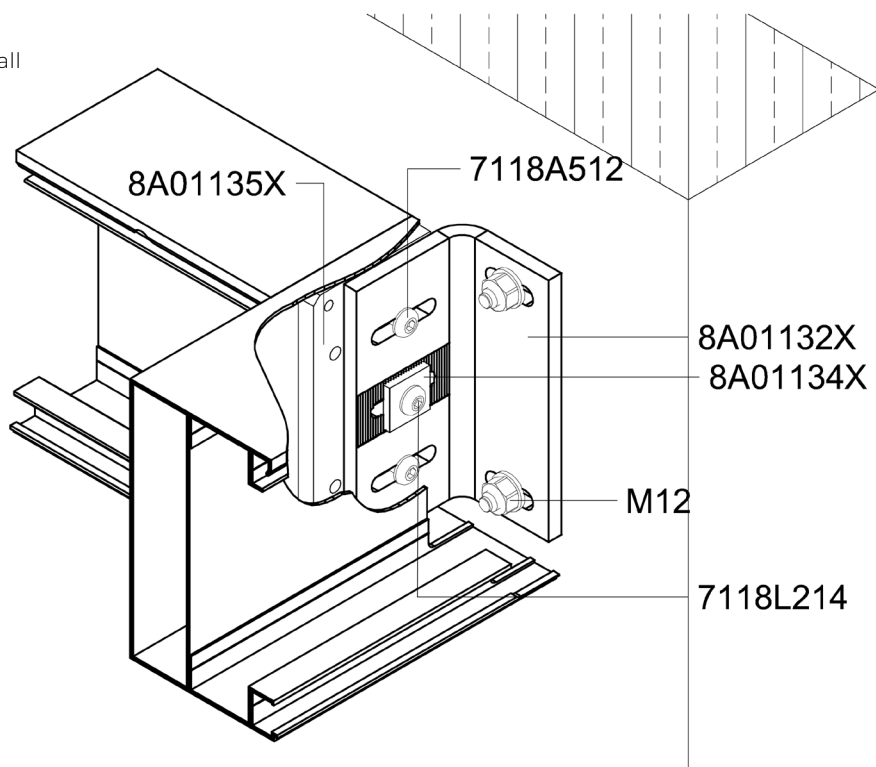
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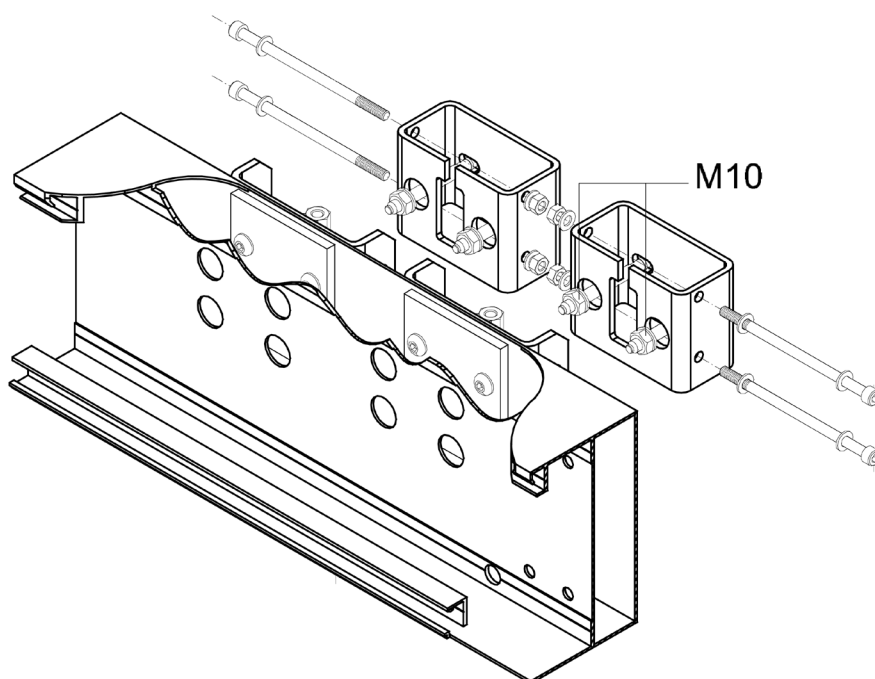
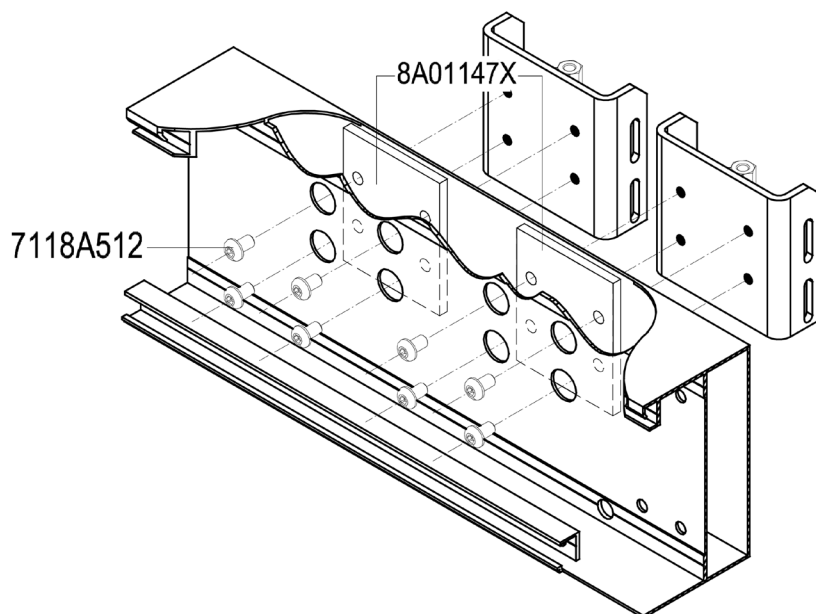
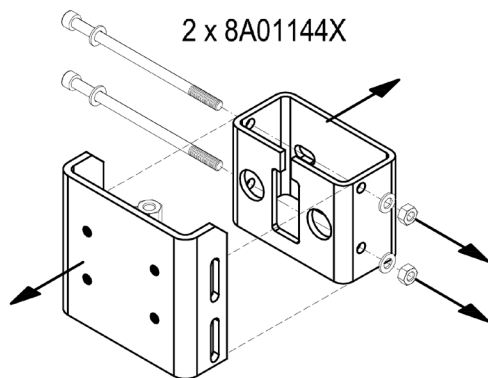
8A01147X



PERGOLA SB 450
Rafter connection - Wall



PERGOLA SB 450
Purlin connection - Wall



PERGOLA SB 550

THE SB 550 pergola is designed as an external weather protection system, mounted onto building structures (e.g. building walls, terraces) or as a free-standing structure. The product is intended for use by individuals and legal entities in the private sector (e.g. detached houses) and the public sector (e.g. restaurant gardens, hotels, etc.).

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Permissible outdoor use of the product in accordance with the product parameters.
- A pergola is a structure that protects against sunlight and moderate rainfall. This structure does not protect against heavy rainfall.
- The movable roof slats allow you to adjust the amount of sunlight entering the room.
- Concealed motor and drive mechanism.
- A pergola can be built as a freestanding or wall-mounted structure. It is also available in single-bay or double-bay configurations, as a transverse or longitudinal pergola.
- Option to use LED lighting
- The pergola structure is made of aluminium profiles and load-bearing steel elements.
- The design of the product and the drive allows the slats to be stopped at a selected angle within their operating range.
- The rotation of the slats can be activated using a transmitter or a dedicated app.
- The covers of moving parts have been designed and manufactured in such a way as to ensure the safety of operators, assuming that they are used correctly.
- Operating the rotation of the slats during snowfall, icing or when there is snow or ice on the roof, as well as use outside the temperature ranges specified in the manual, is not permitted and may damage the product.
- The side compartment of the beams, closed with an inspection hatch, allows for cable distribution.

TECHNICAL PARAMETERS

- Maximum dimensions for a single-bay pergola: width up to 5000 mm, length up to 6980 mm
- Maximum structure height 3000 mm, including the louvre rotation mechanism 3079 mm
- Maximum clear height of the roof $H_M = 2745$
- Maximum dimensions for a double-bay transverse pergola: width up to 9860 mm, length up to 6980 mm, height up to 3000 mm
- Maximum dimensions for a double-bay longitudinal pergola: width up to 5000 mm, length up to 9020 mm, height up to 3000 mm
- Range of roof louvre tilt: 0 to 135°
- The maximum permissible load at maximum dimensions on the roof is 72 kg/m^2 , which corresponds to a 35 cm layer of snow – as an even layer of uniform height.
- The permissible wind load on a structure with a closed roof at maximum dimensions is 110 km/h. If wall elements such as screens, glass panels or other sliding screens are added, these values will be further reduced.
- The product should be used within the limits of wind class 3 according to EN 13659 and/or the maximum snow load.
- Maximum drainage capacity drains rain with an intensity of up to 0.04 l/s/m^2 for a maximum duration of 5 minutes (with 4 drainage holes).

PERGOLA SB 550

Single free-standing version

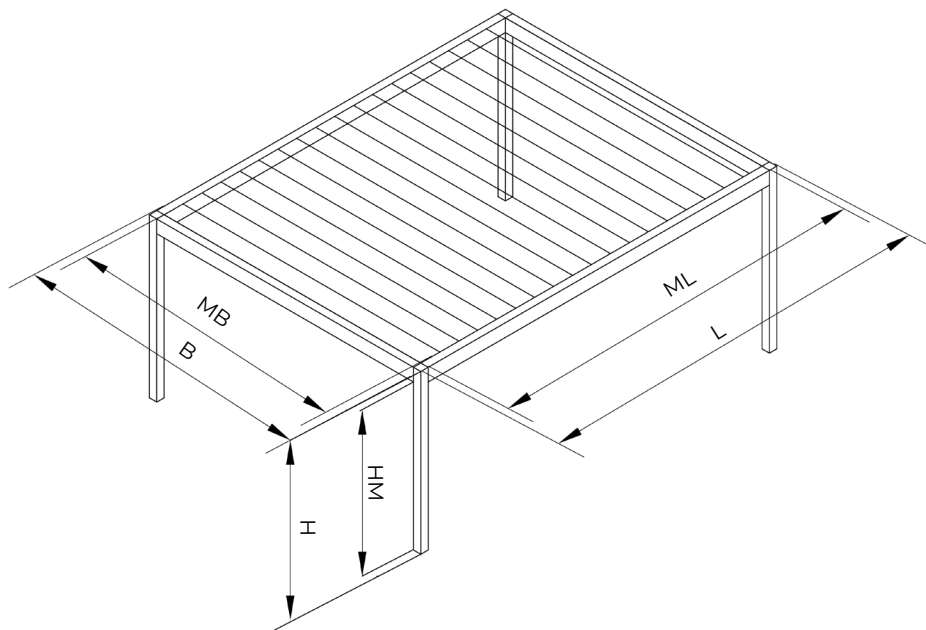
$B \leq 5000$ $MB \leq 4860$

$L \leq 6980$ co 200

$ML \leq 6840$ co 200

$H \leq 3000$

$HM = H - 255$



PERGOLA SB 550

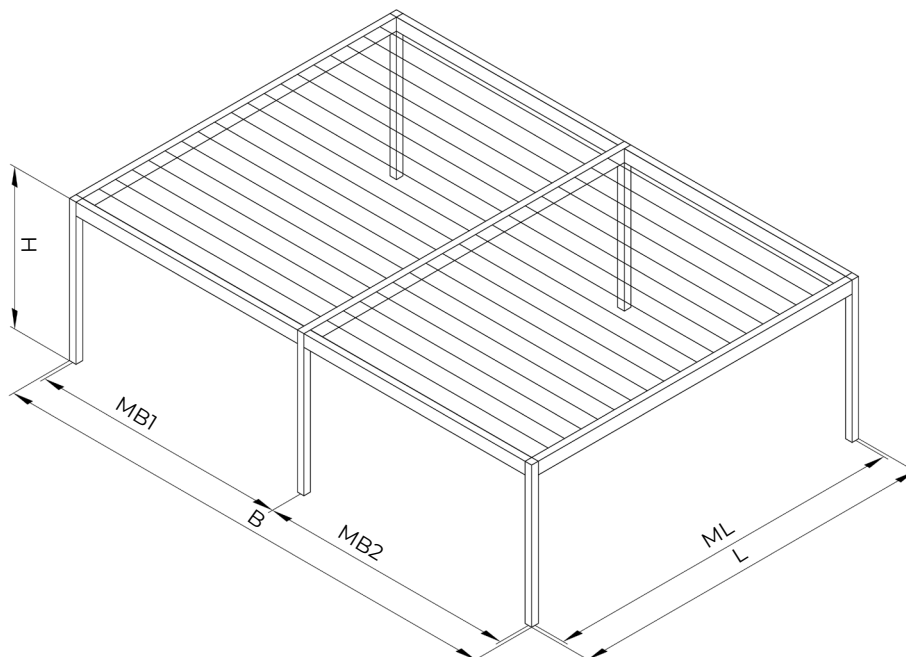
Two-bay crosswise freestanding version

$B \leq 9860$ $MB1 \leq 4860$, $MB2 \leq 4860$

$L \leq 6980$ co 200

$ML \leq 6840$ co 200

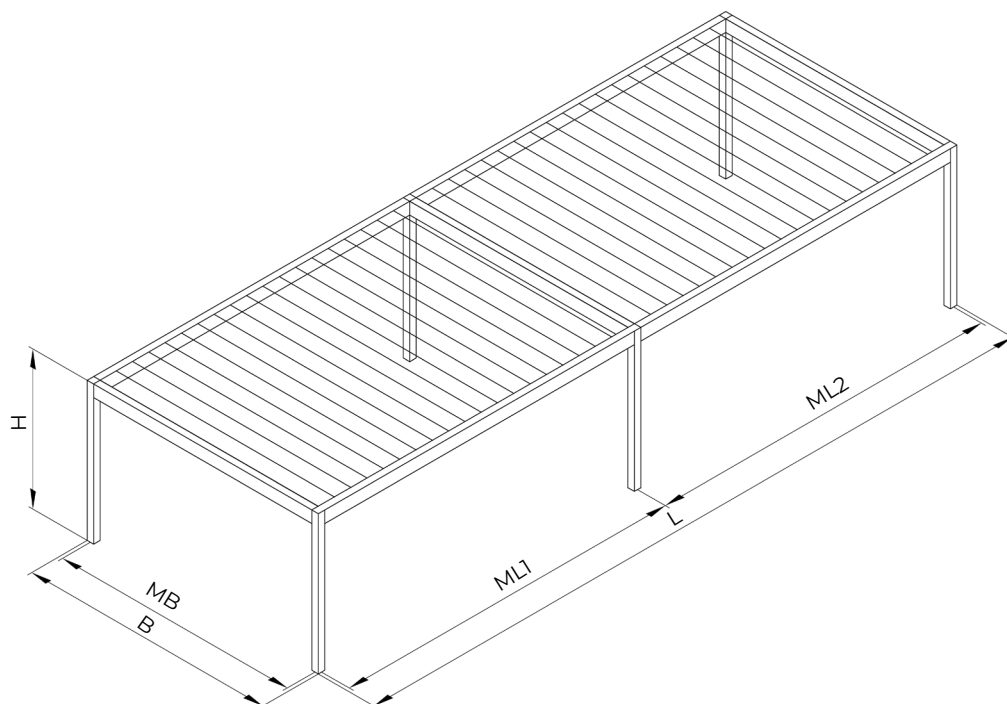
$H \leq 3000$



PERGOLA SB 550

Two-module longitudinal freestanding version

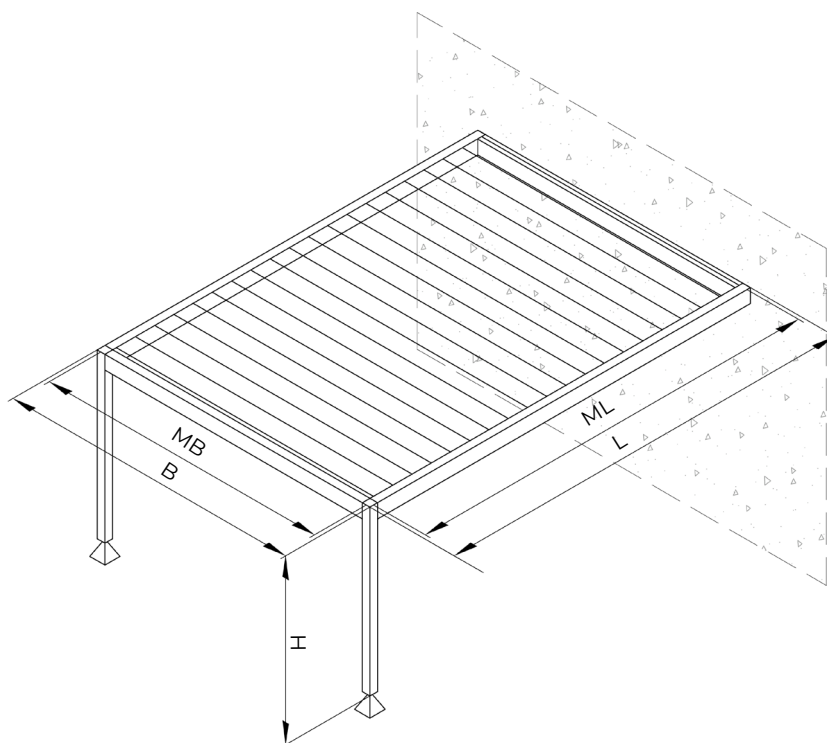
$B \leq 5000$ $MB \leq 4860$
 $L \leq 9020$ co 200
 $ML1 \leq 4440$ co 200
 $ML2 \leq 4440$ co 200
 $H \leq 3000$



PERGOLA SB 550

Single-bay version against a wall Type 1

$B \leq 5000$ $MB \leq 4860$
 $L \leq 6980$ co 200
 $ML \leq 6840$ co 200
 $H \leq 3000$



PERGOLA SB 550

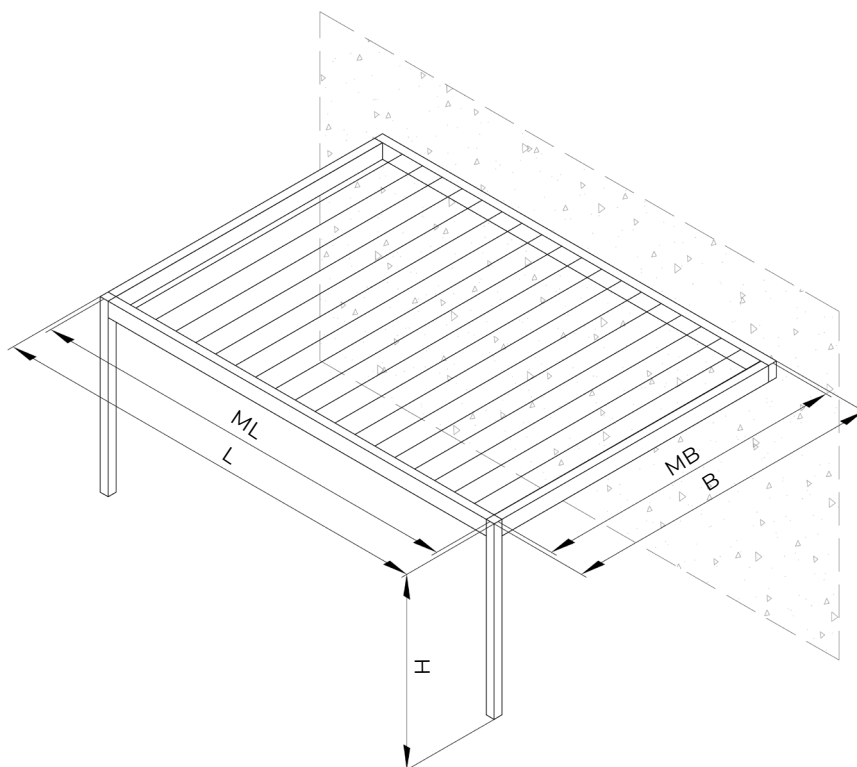
Single-bay crosswise version against a wall

$B \leq 5000$ $MB \leq 4860$

$L \leq 6980$ co 200

$ML \leq 6840$ co 200

$H \leq 3000$



PERGOLA SB 550

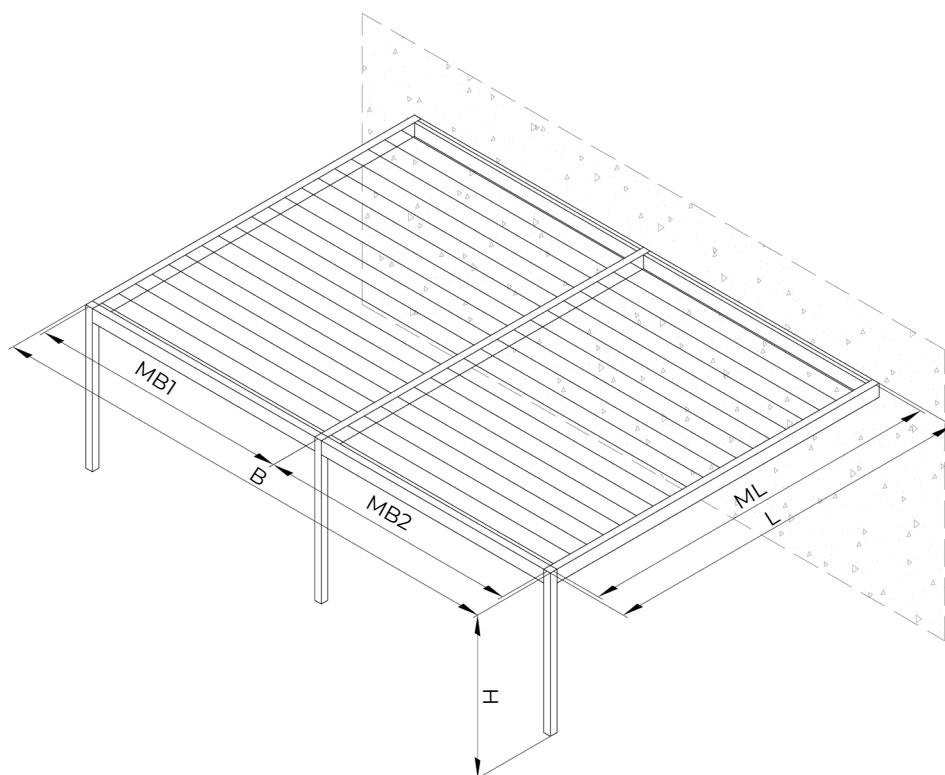
Two-bay version against a wall Type 2

$B \leq 9860$ $MB1 \leq 4860$, $MB2 \leq 4860$

$L \leq 6980$ co 200

$ML \leq 6840$ co 200

$H \leq 3000$



PERGOLA SB 550

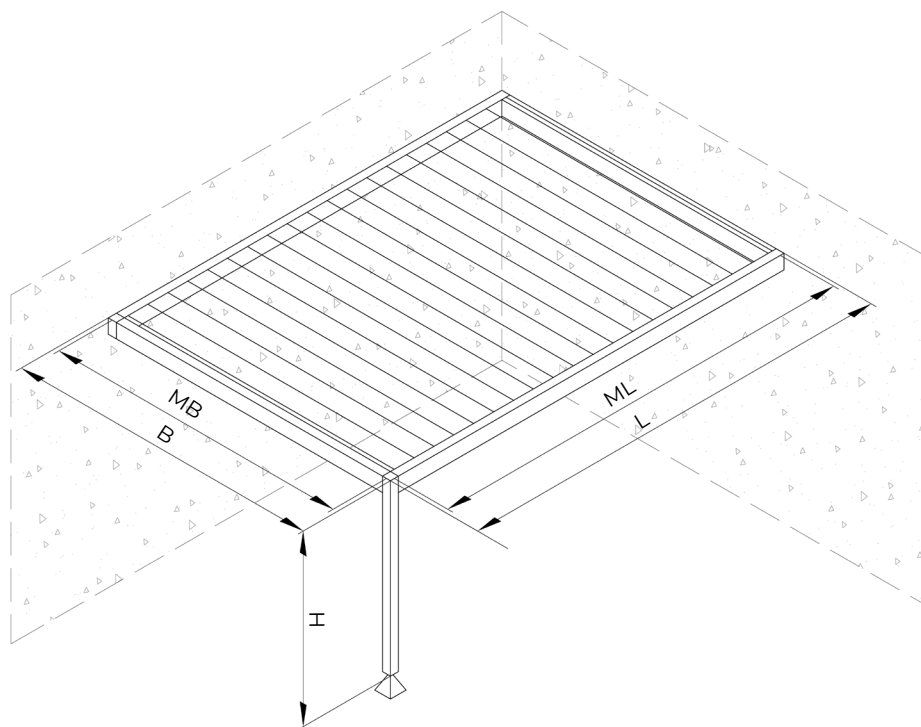
Single-bay version against a wall Type 3

$B \leq 5000$ $MB \leq 4860$

$L \leq 6980$ co 200

$ML \leq 6840$ co 200

$H \leq 3000$



PERGOLA SB 550

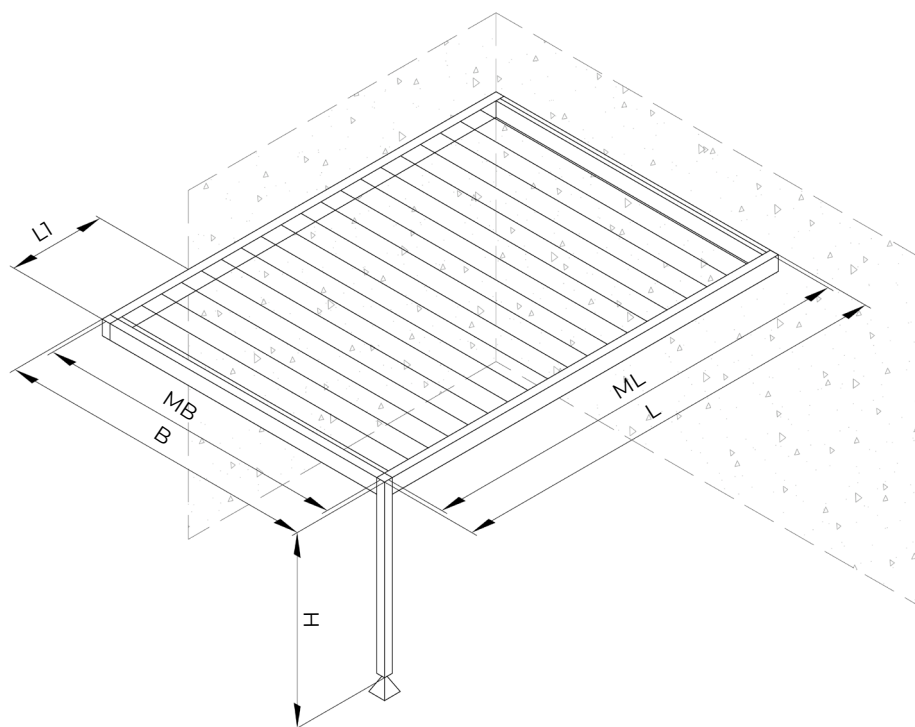
Single-bay version against a wall Type 4

$B \leq 5000$ $MB \leq 4860$

$L \leq 6980$ co 200, $L1 \leq 900$

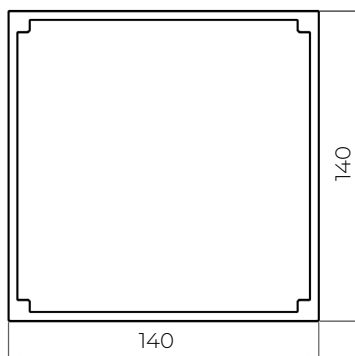
$ML \leq 6840$ co 200

$H \leq 3000$

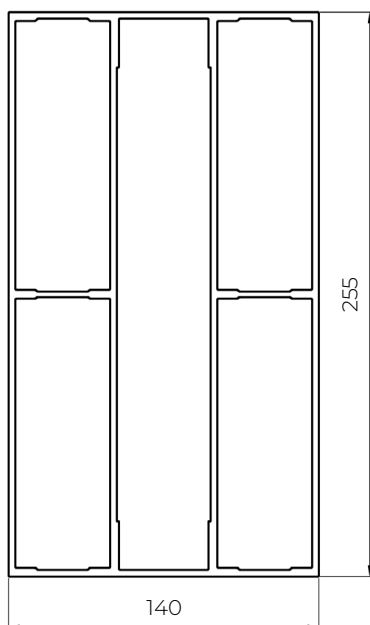


PERGOLA SB 550
Profiles - structure

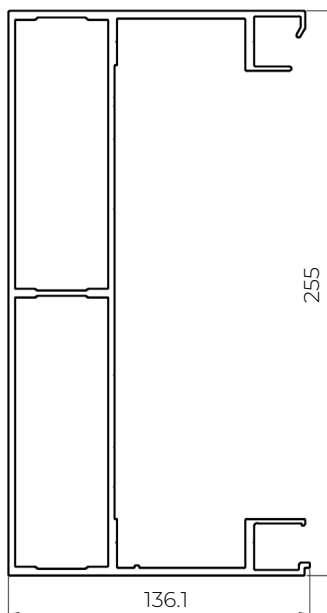
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K440139X



K440141X

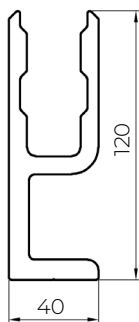


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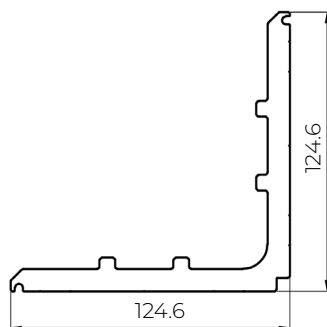


PERGOLA SB 550
Profiles - structure

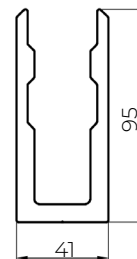
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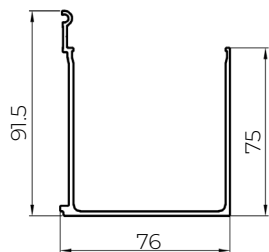
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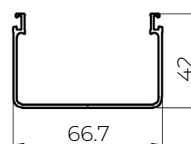
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K440839X

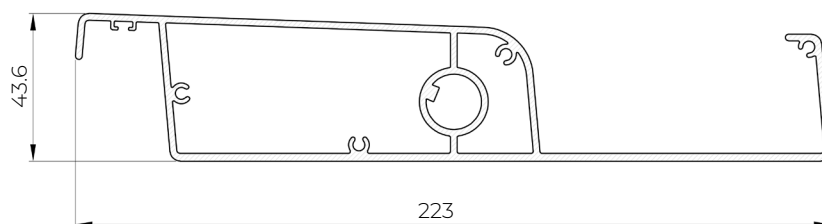


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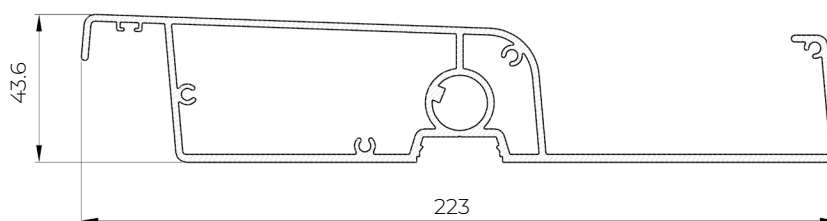


PERGOLA SB 550
Profiles - slatted roof

K441197X

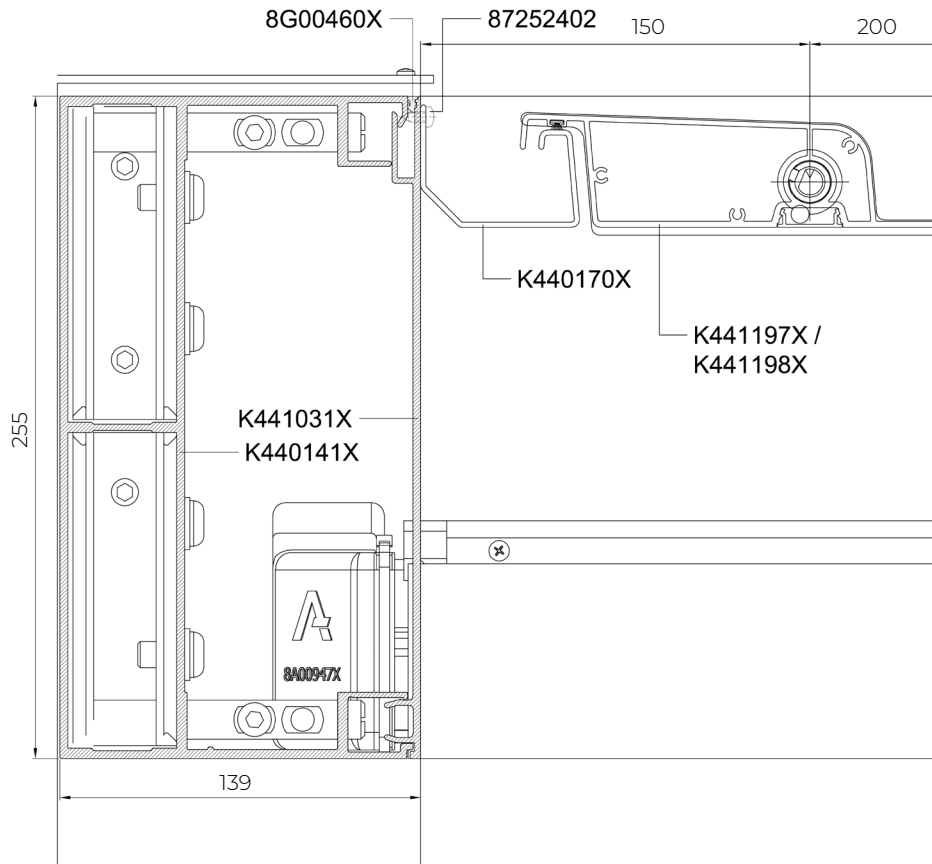


K441198X



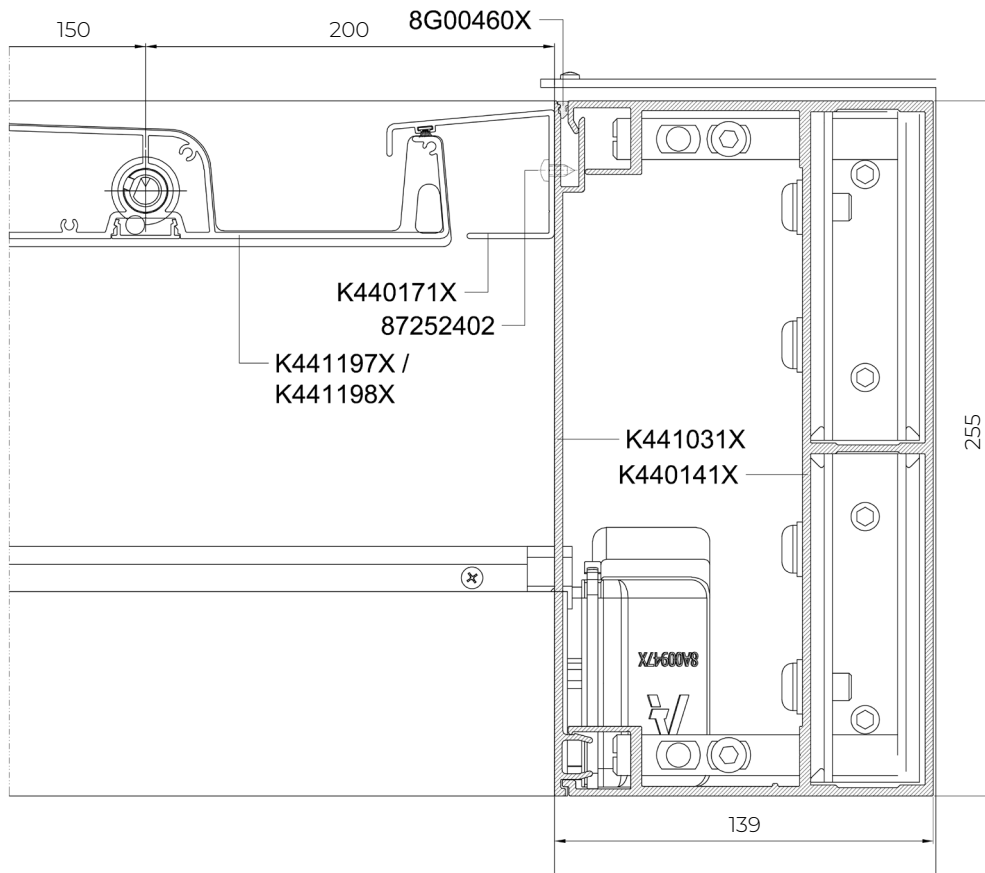
PERGOLA SB 550

Cross-section through a purlin and a slatted roof

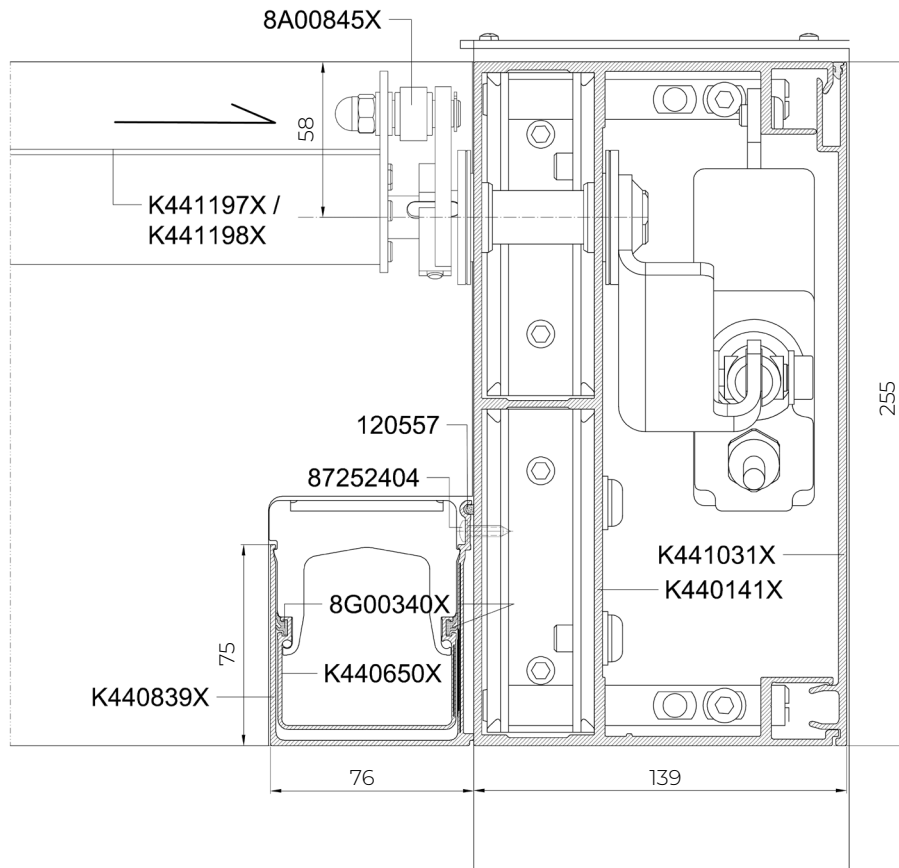


PERGOLA SB 550

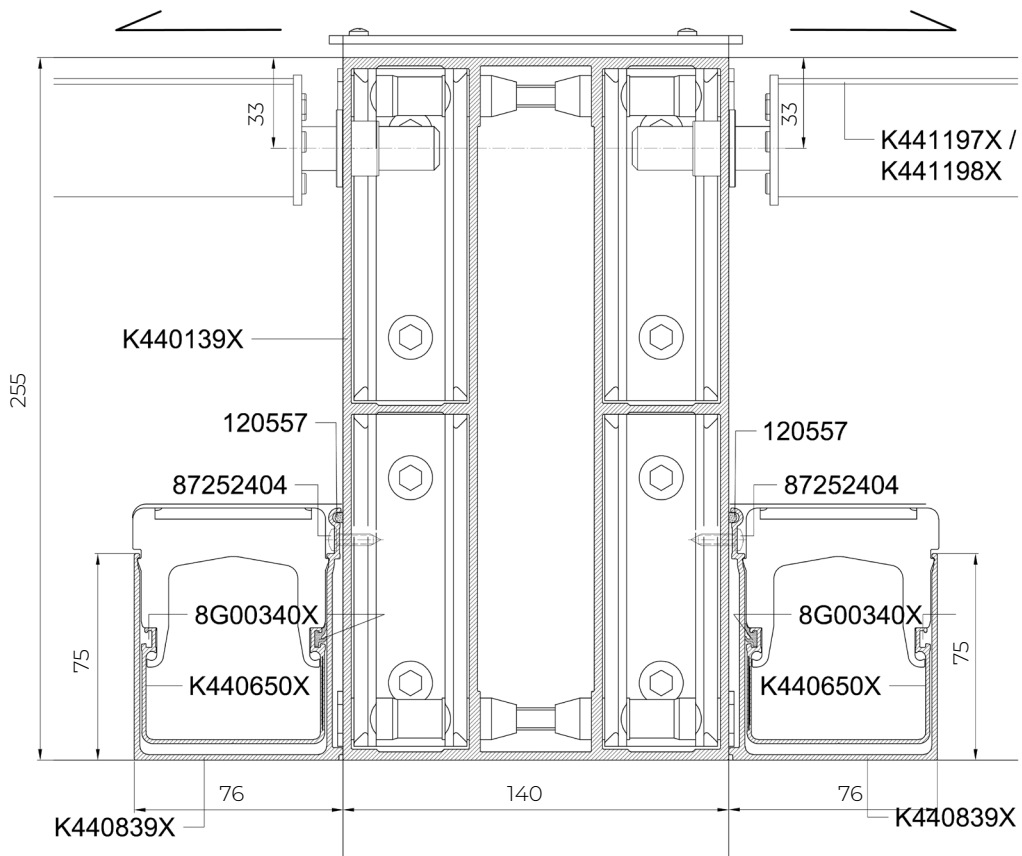
Cross-section through a purlin and a slatted roof



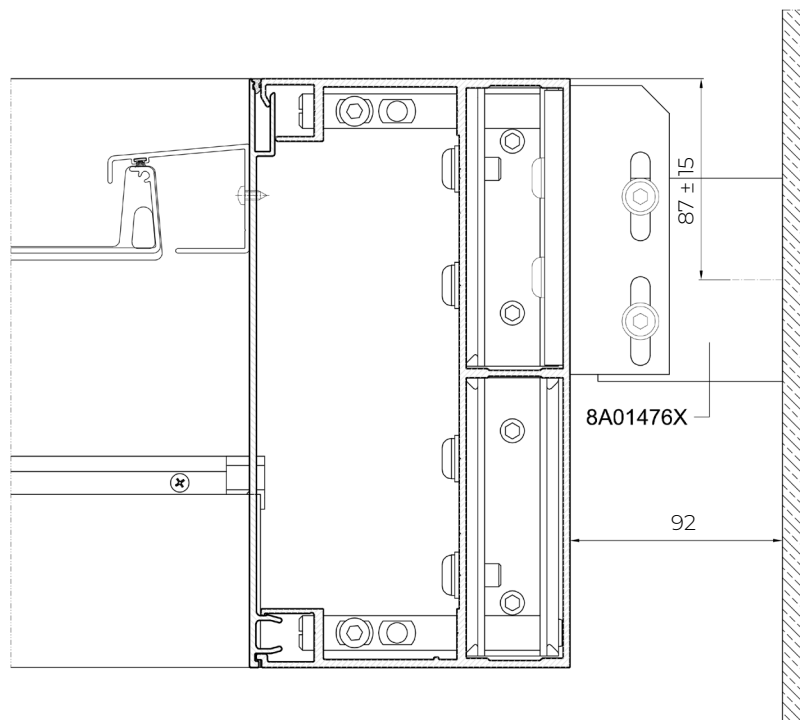
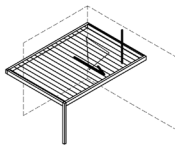
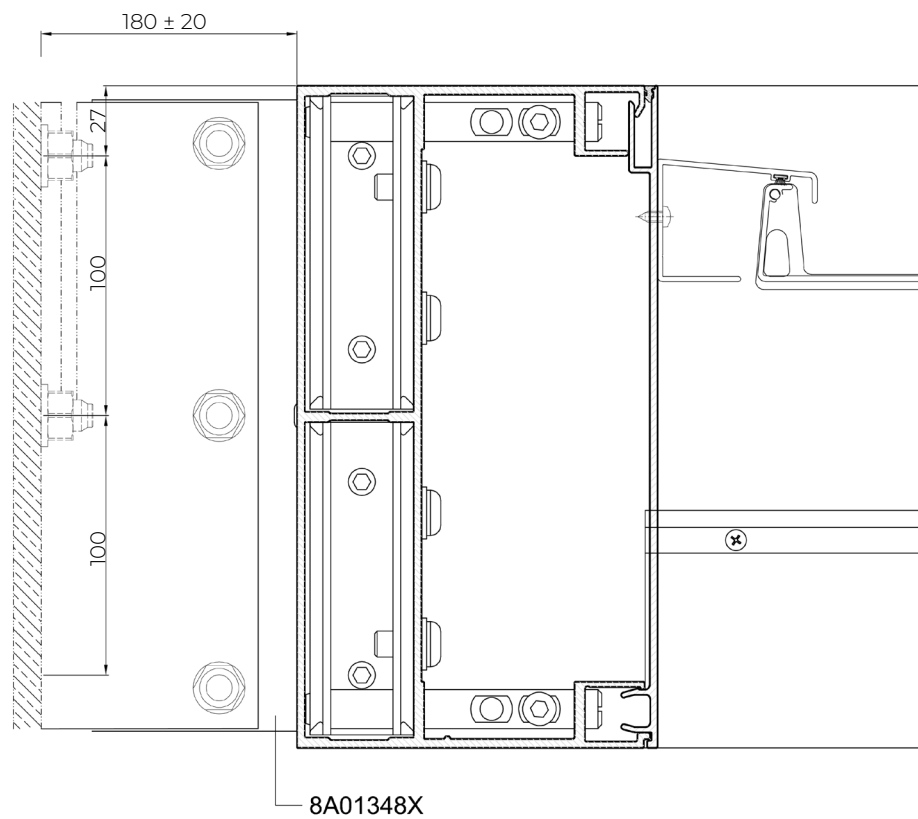
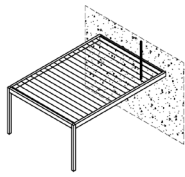
PERGOLA SB 550
Cross-section through the rafter



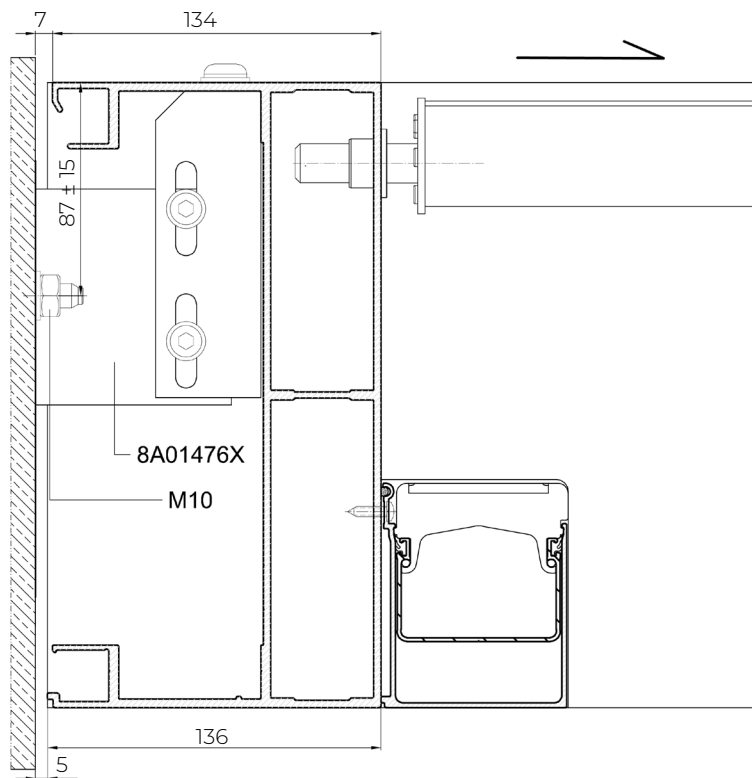
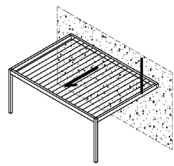
PERGOLA SB 550
Cross-section through intermediate rafter



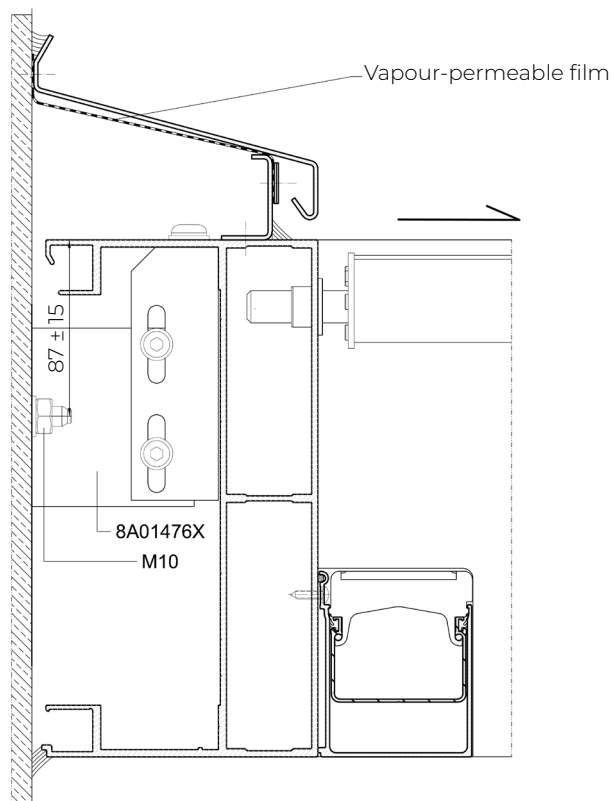
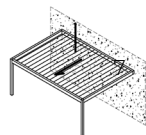
PERGOLA SB 550
Cross-sections through wall purlins with brackets



PERGOLA SB 550
Cross-sections through wall rafters

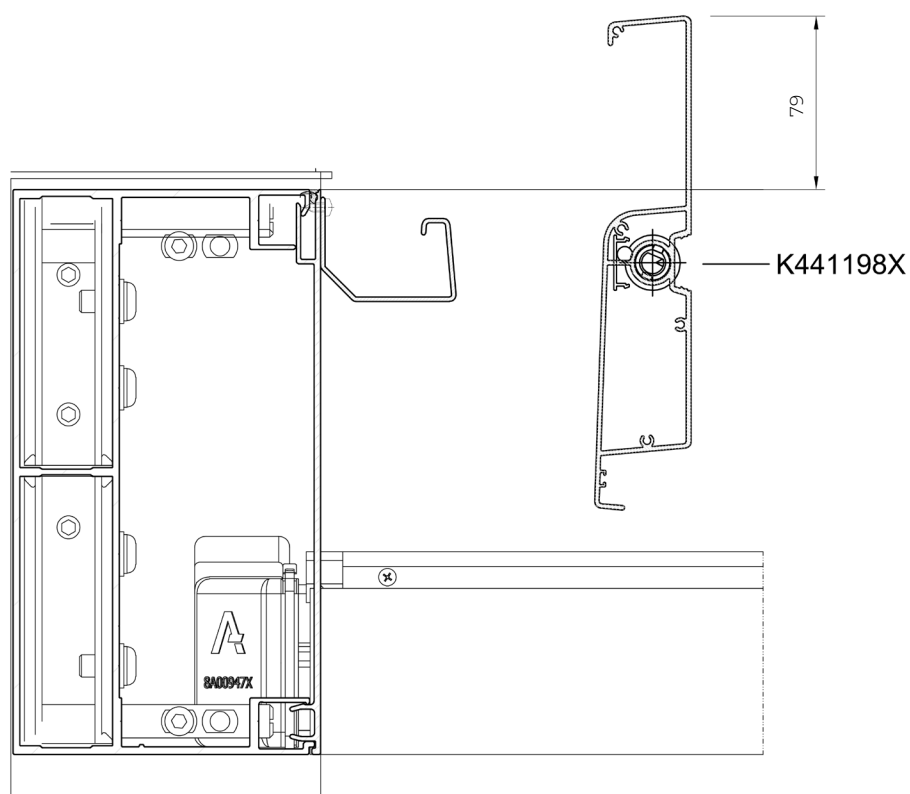
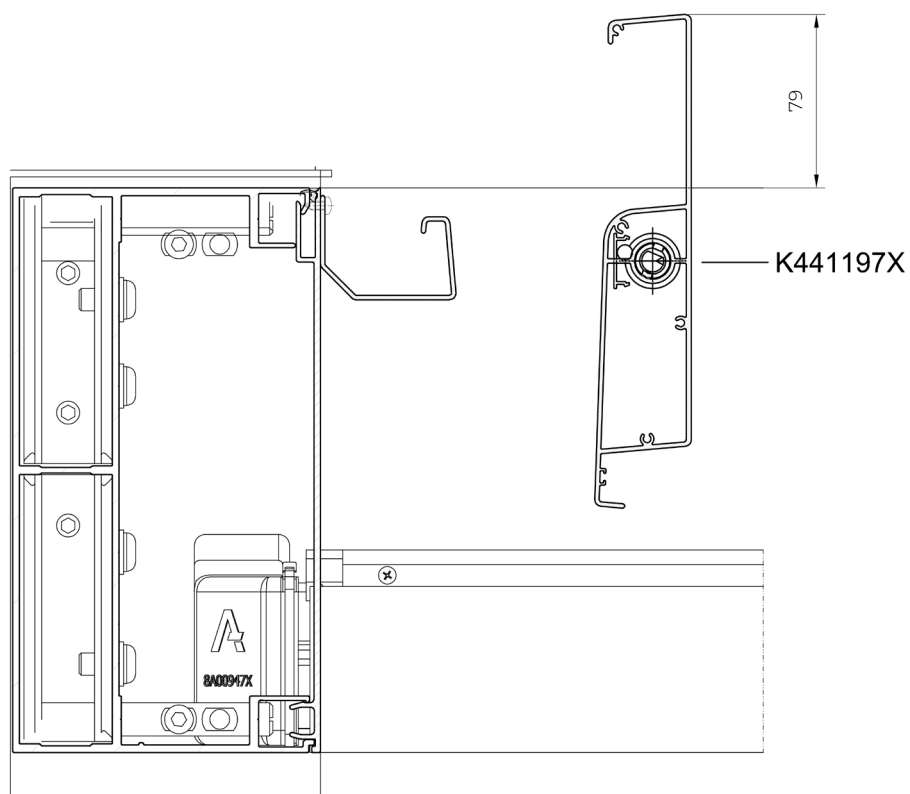


PERGOLA SB 550
Cross-sections through wall rafters



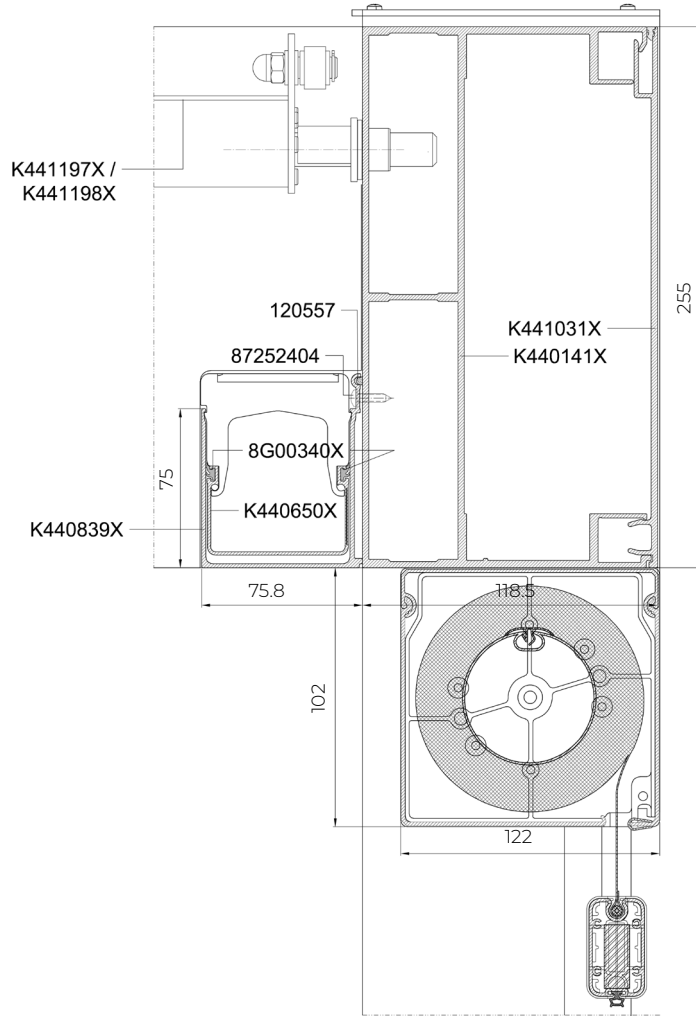
PERGOLA SB 550

Maximum projection of rafters beyond the beam



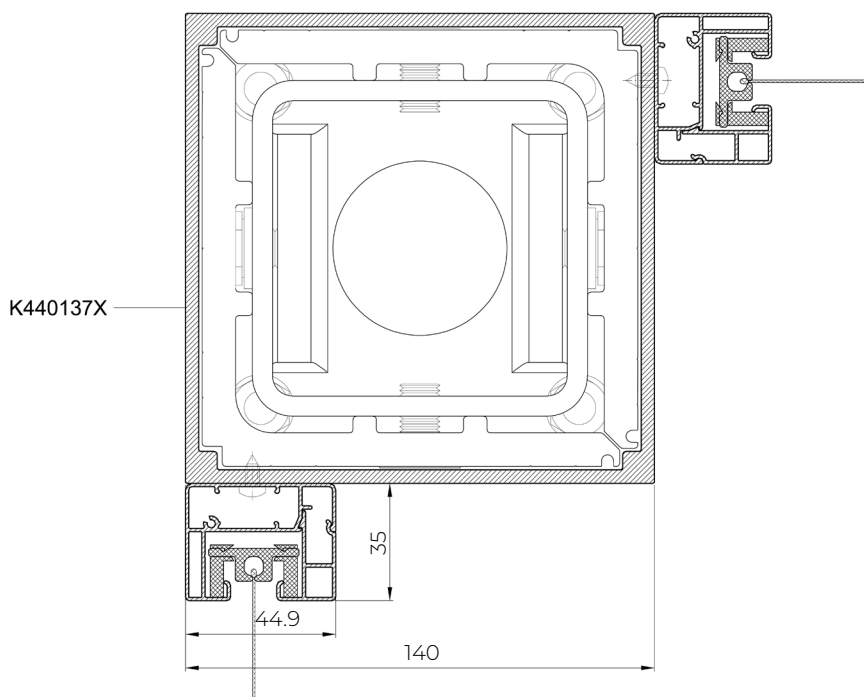
PERGOLA SB 550

Cross-section through a rafter with the SRS SkyRoll ZIP installation system

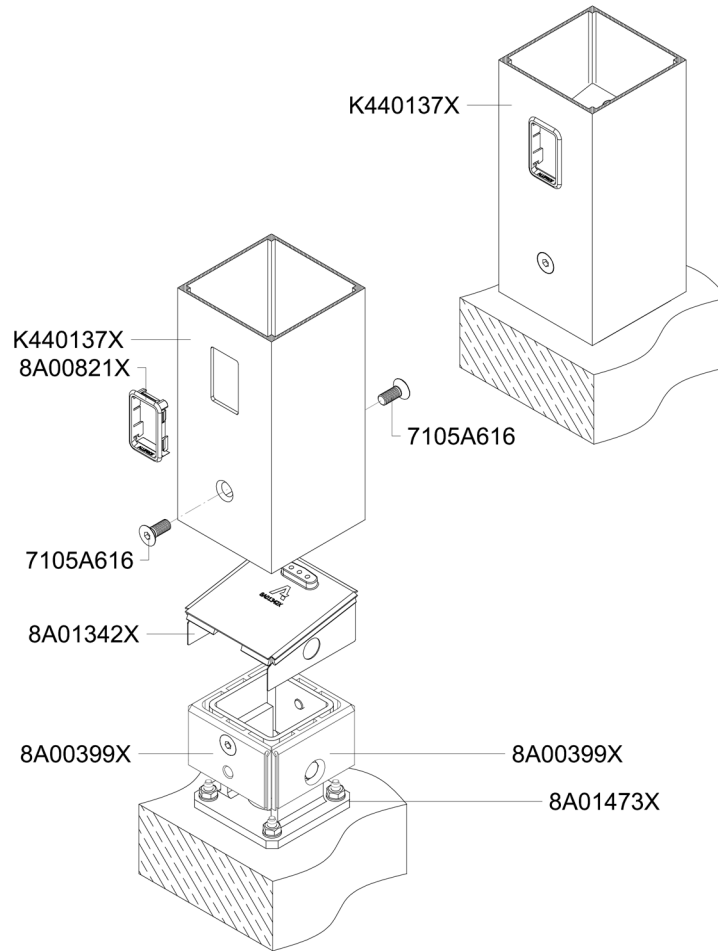


PERGOLA SB 550

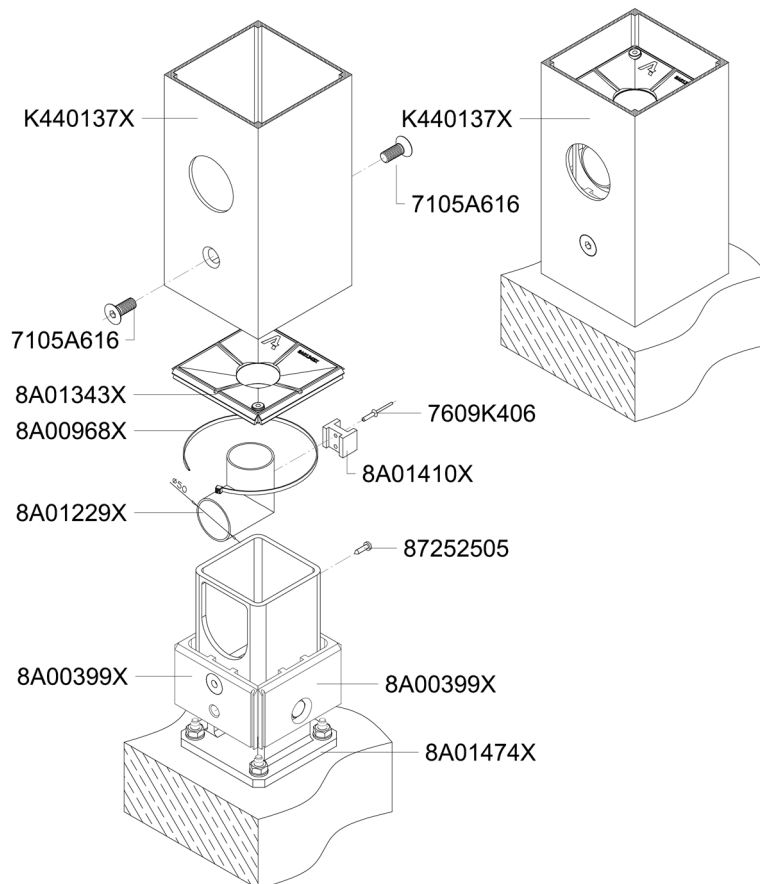
Cross-section of a post with the SRS SkyRoll ZIP installation system



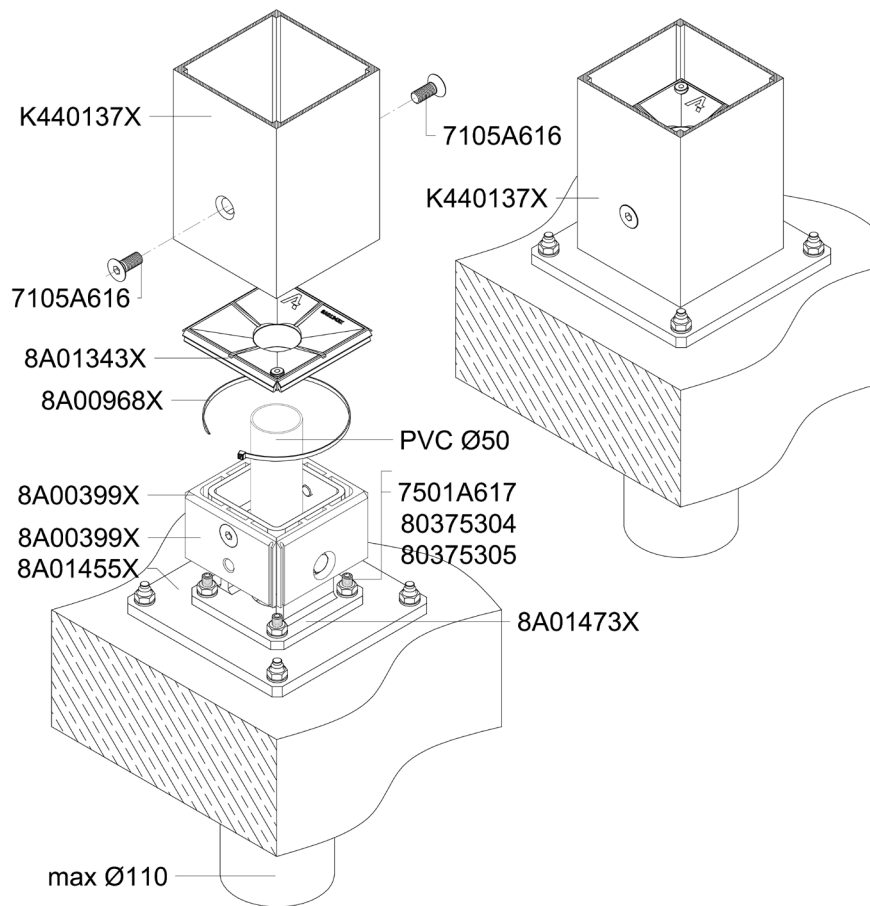
PERGOLA SB 550
Type A+Visible drainage



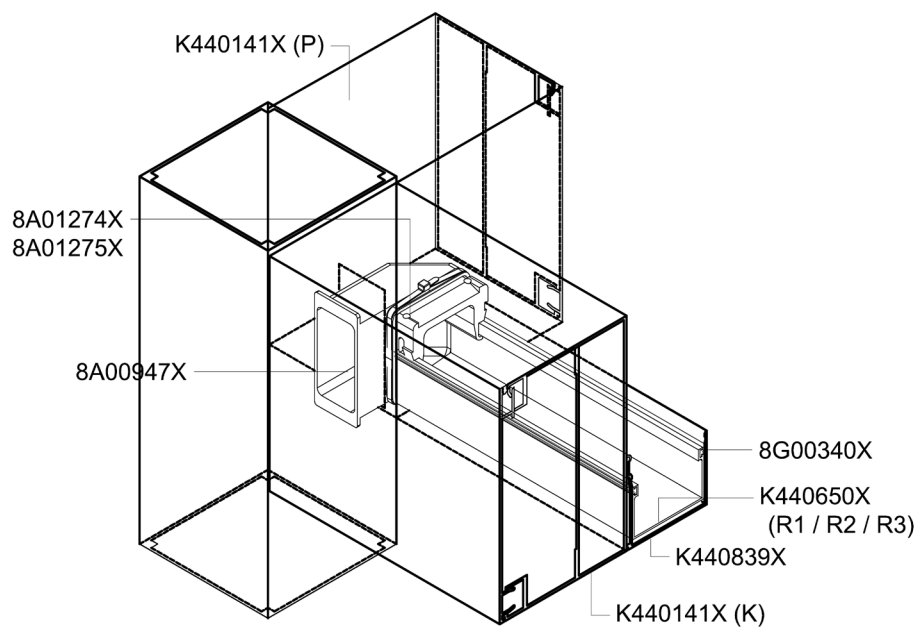
PERGOLA SB 550
Type B+Visible drainage



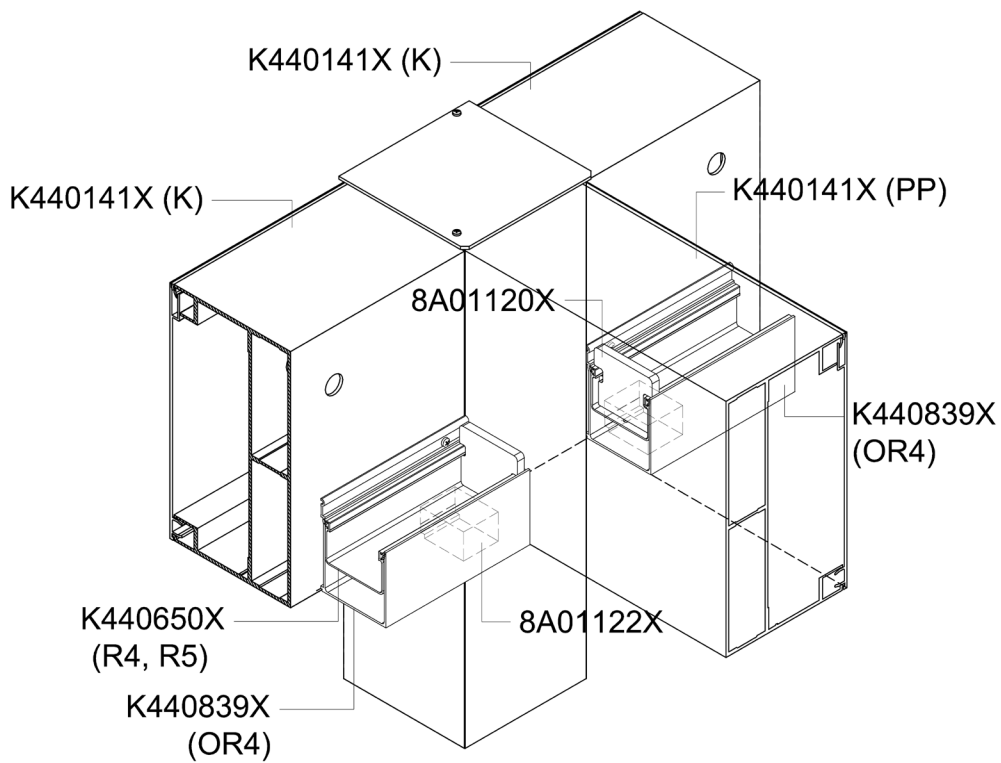
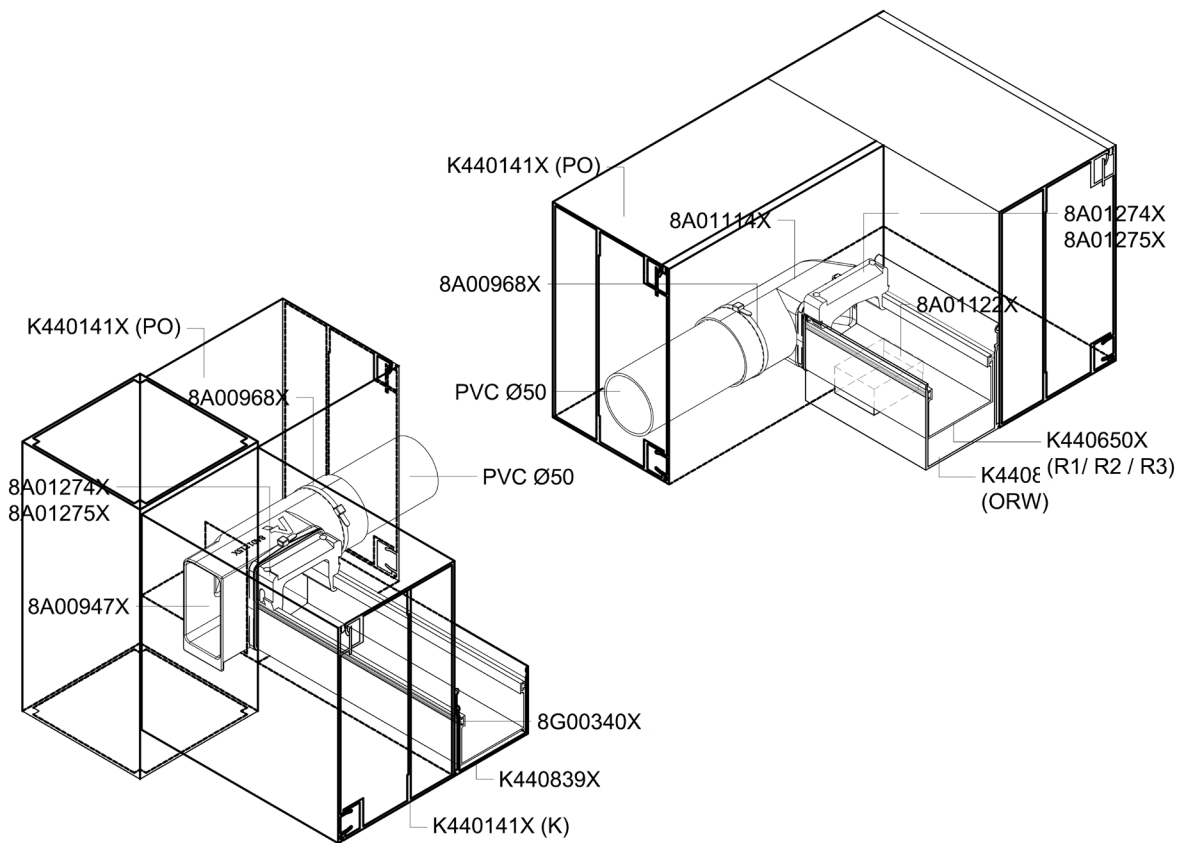
PERGOLA SB 550
Concealed drainage



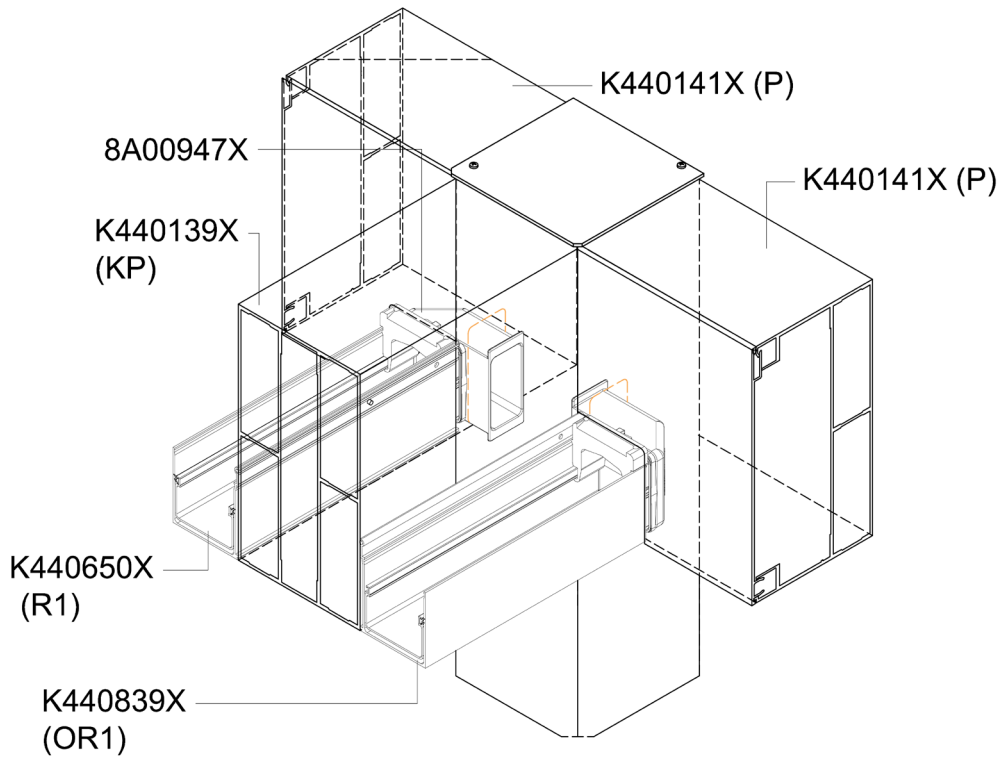
PERGOLA SB 550
Drainage - cross-sections



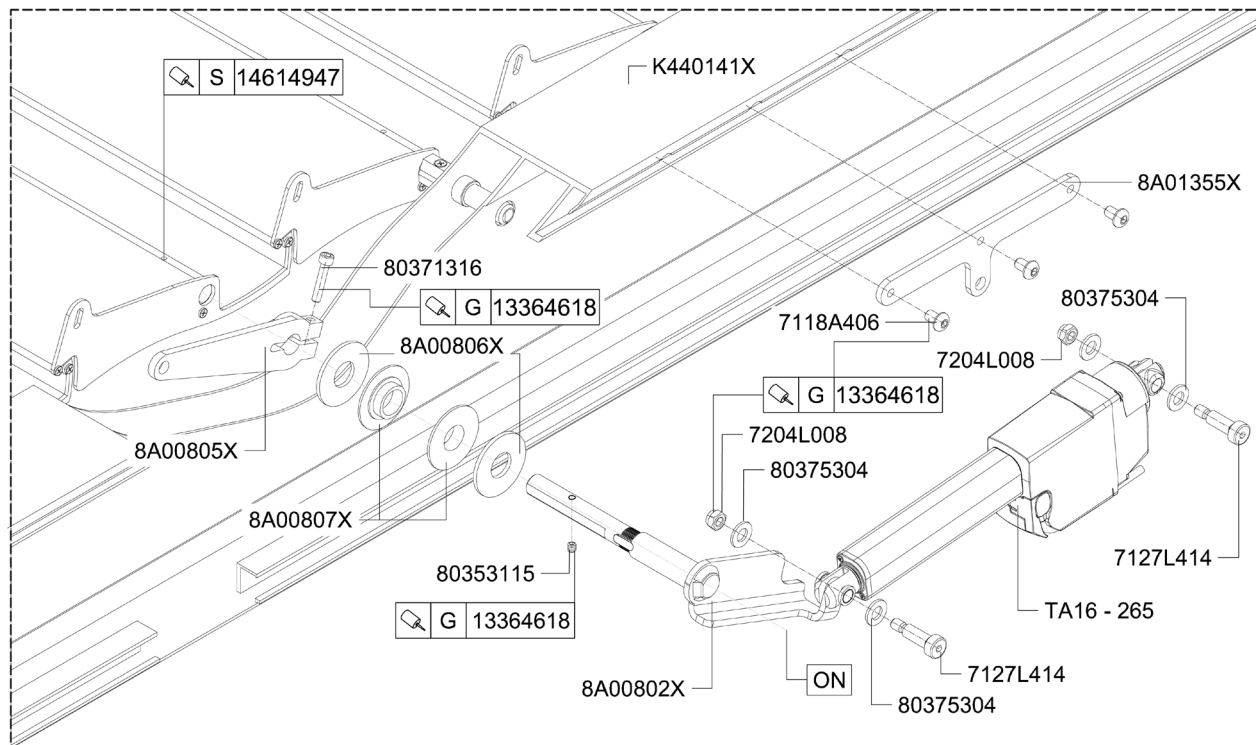
PERGOLA SB 550
Drainage - cross-sections



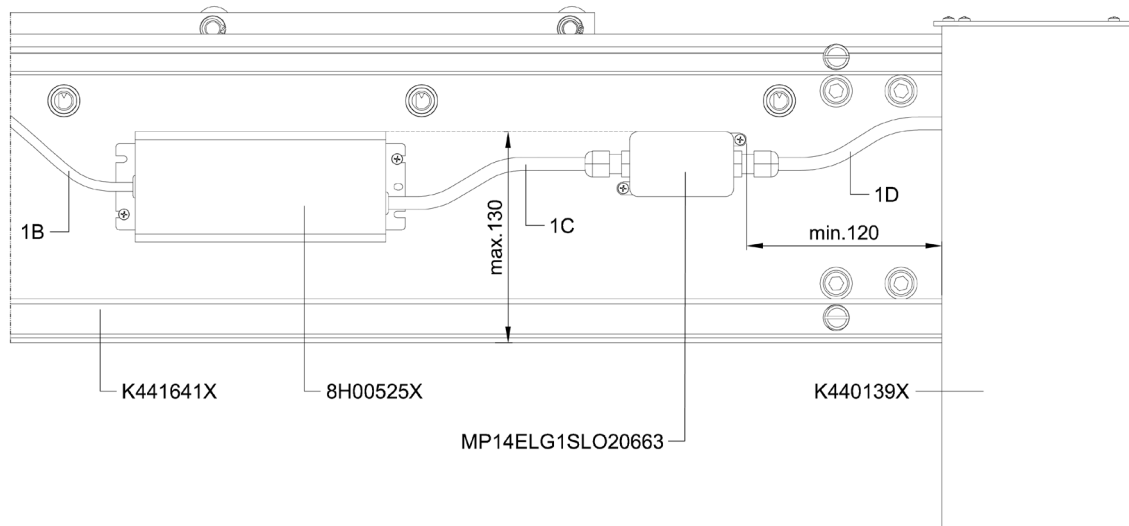
PERGOLA SB 550
Drainage - cross-sections



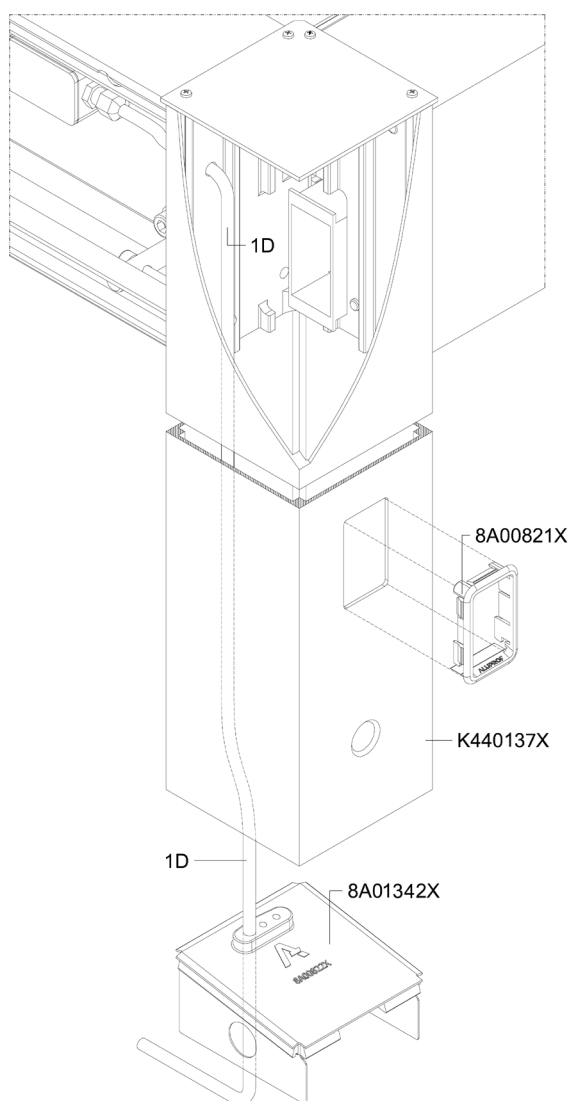
PERGOLA SB 550
Example of actuator installation



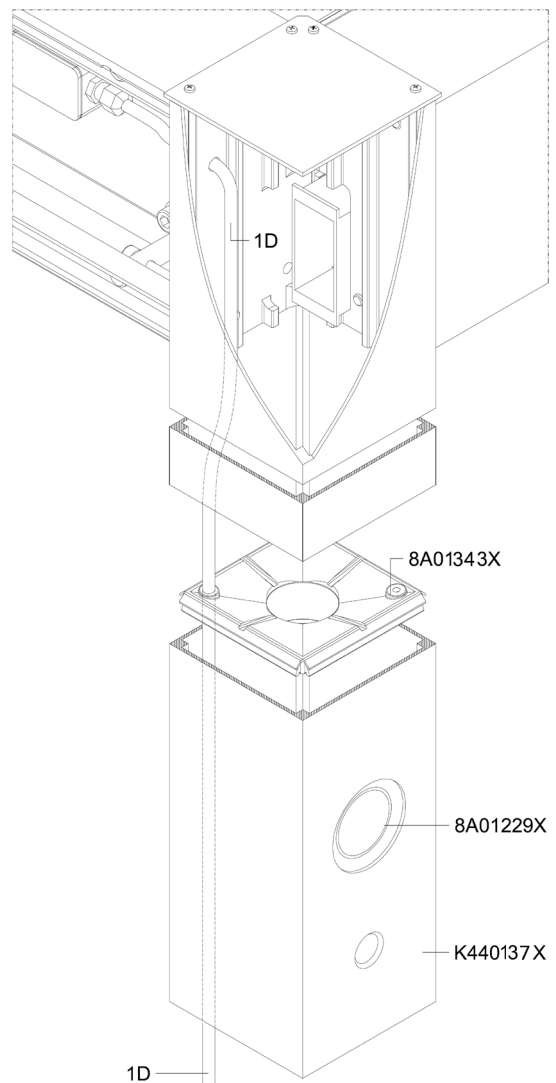
PERGOLA SB 550
Installation of power supply cables



PERGOLA SB 550
Installation of the power cable in the pole, drainage visible Type A

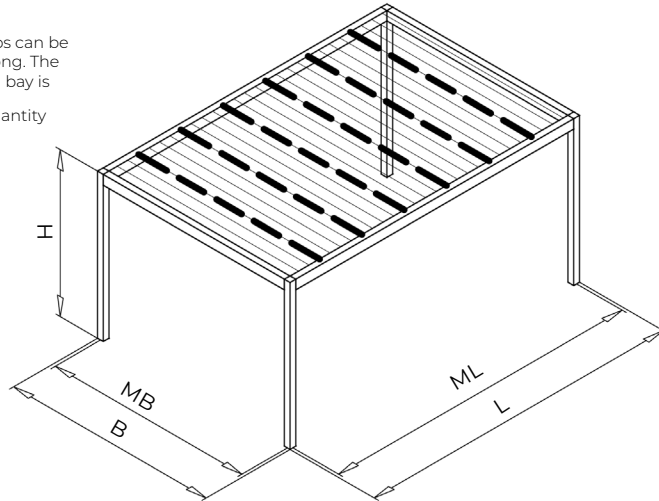


PERGOLA SB 550
Installation of the power cable in the pole, drainage visible Type B



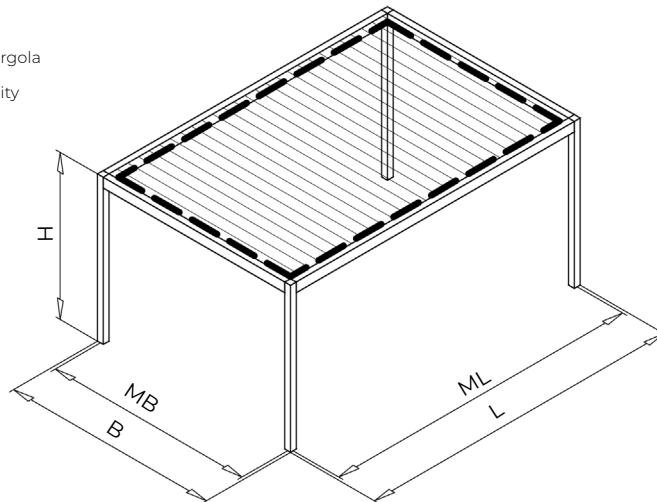
PERGOLA SB 550
LED strips for slats: K441198X

Note:
To ensure optimal light intensity, LED strips can be fitted to a maximum of 4 slats, each 4m long. The maximum length of LED strip per pergola bay is 40m.
For a double-bay pergola, the available quantity and length of LED strip are counted twice



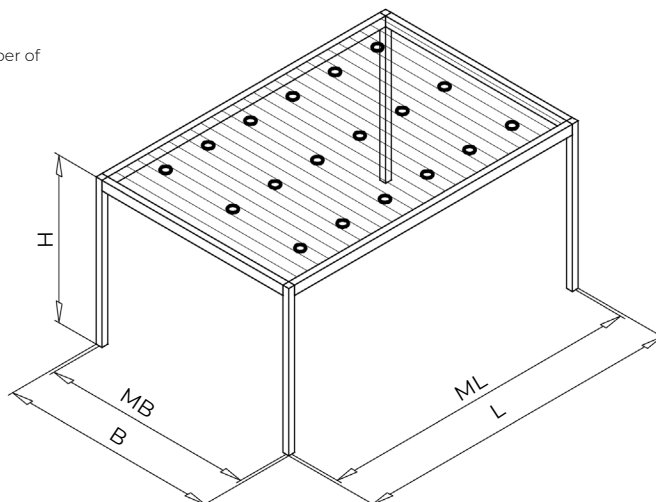
PERGOLA SB 550
LED strips for the pergola crown

Note:
The length of the LED strip installed in the pergola crown is 24 m.
For a double-bay pergola, the available quantity and length of LED strip are counted twice

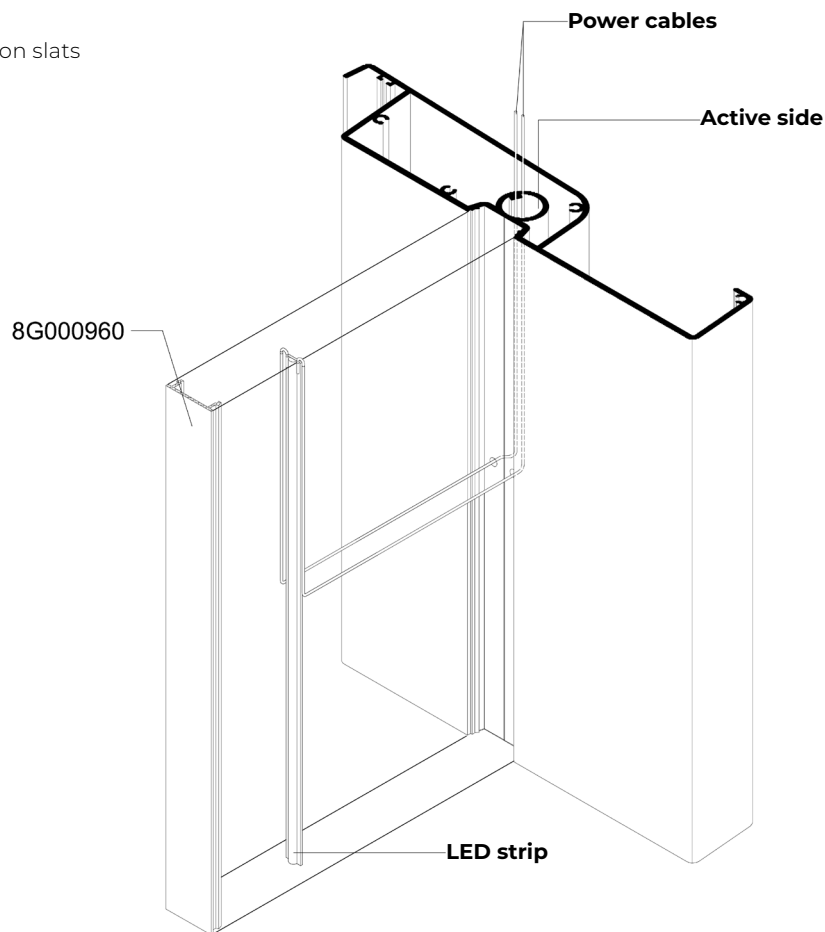


PERGOLA SB 550
LED spotlights for slats K441197X

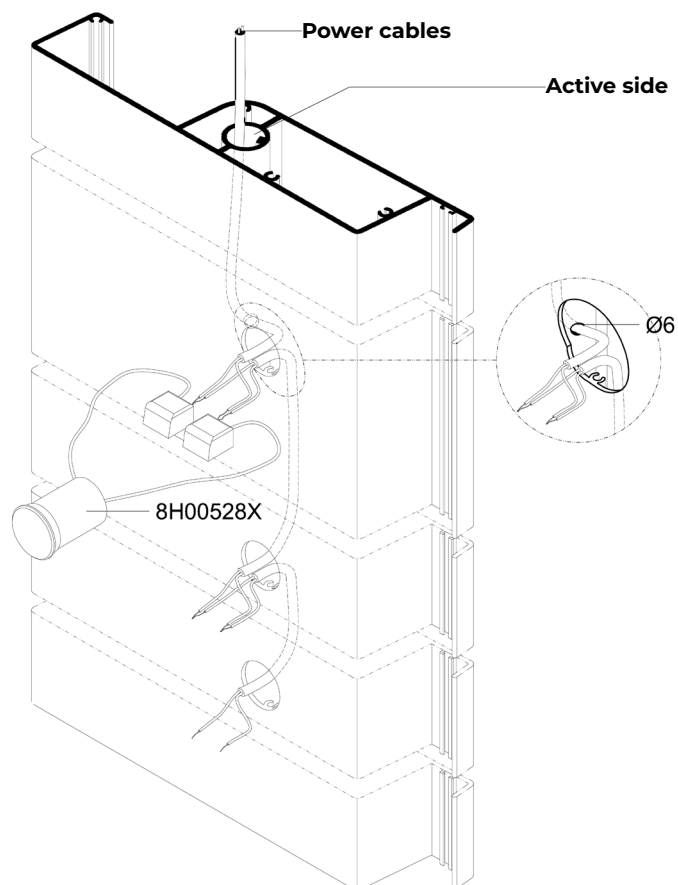
Note:
Number of points: 4 to 12
Number of points in the blade: 2 to 3
For a double-bay pergola, the available number of LED points is counted twice



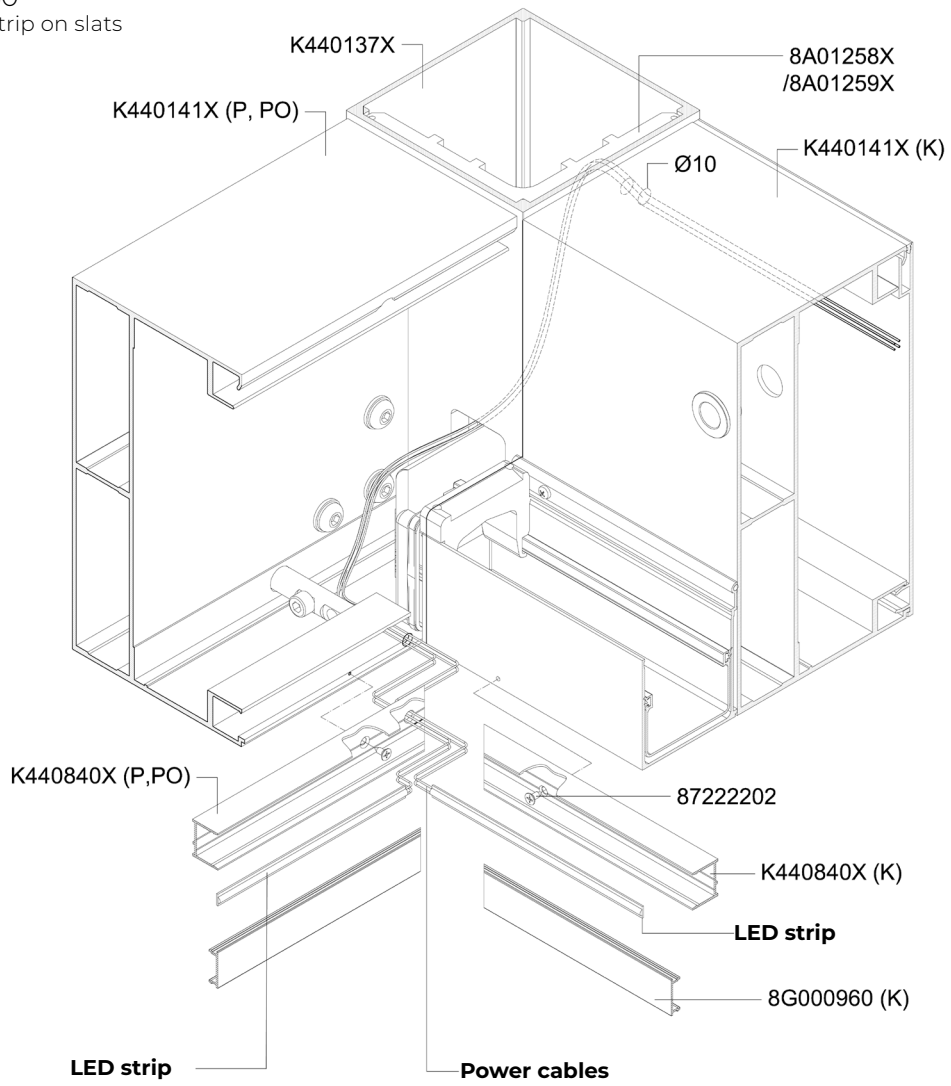
PERGOLA SB 550
Installation of LED strip on slats



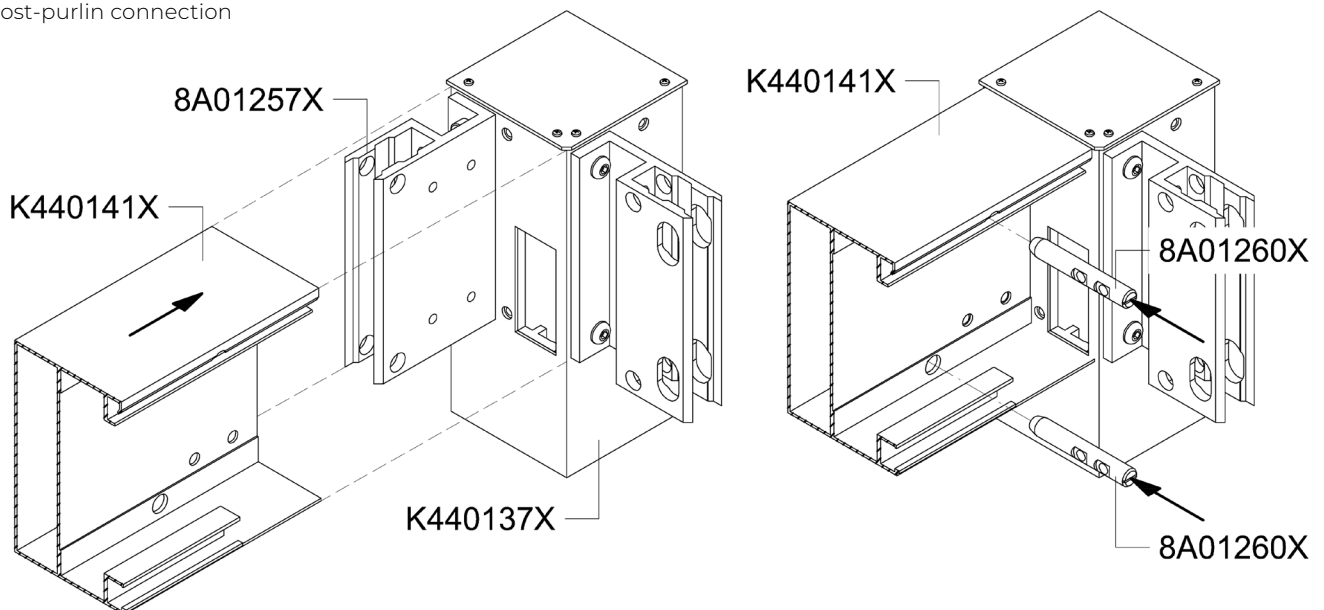
PERGOLA SB 550
Installation of LED strip on slats



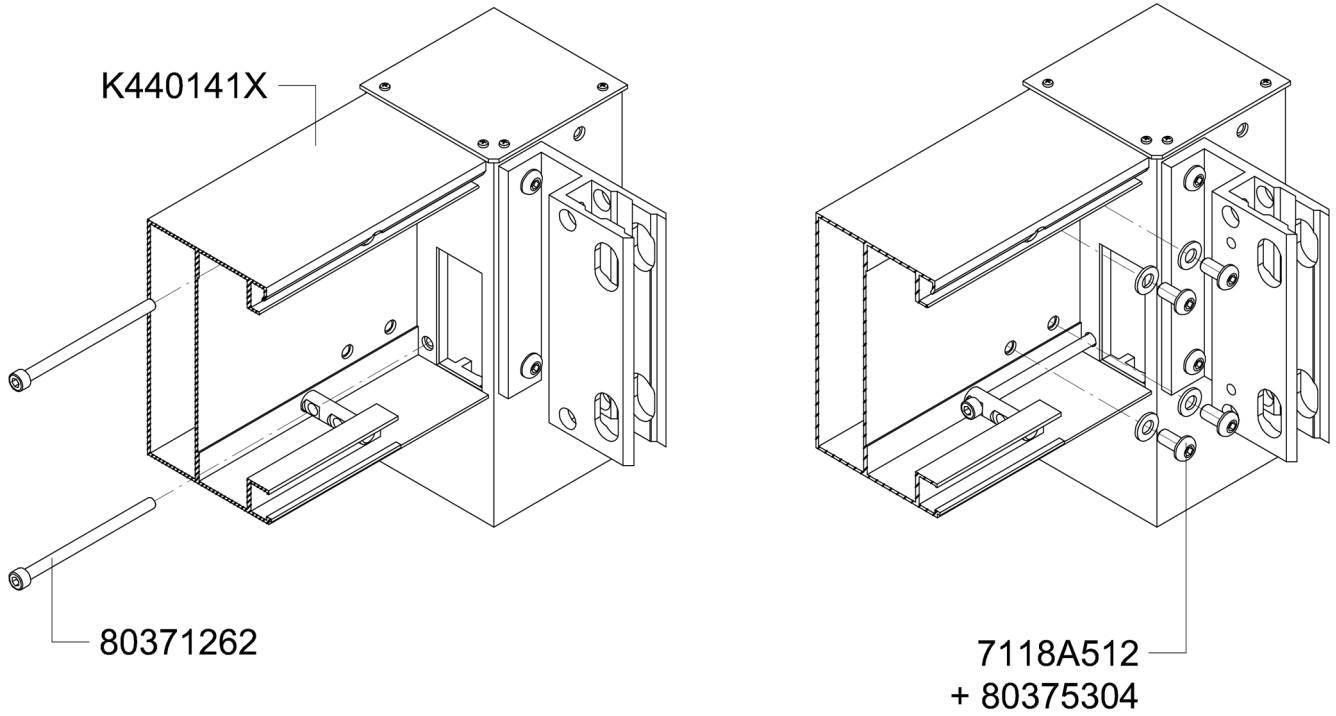
PERGOLA SB 550
Installation of LED strip on slats



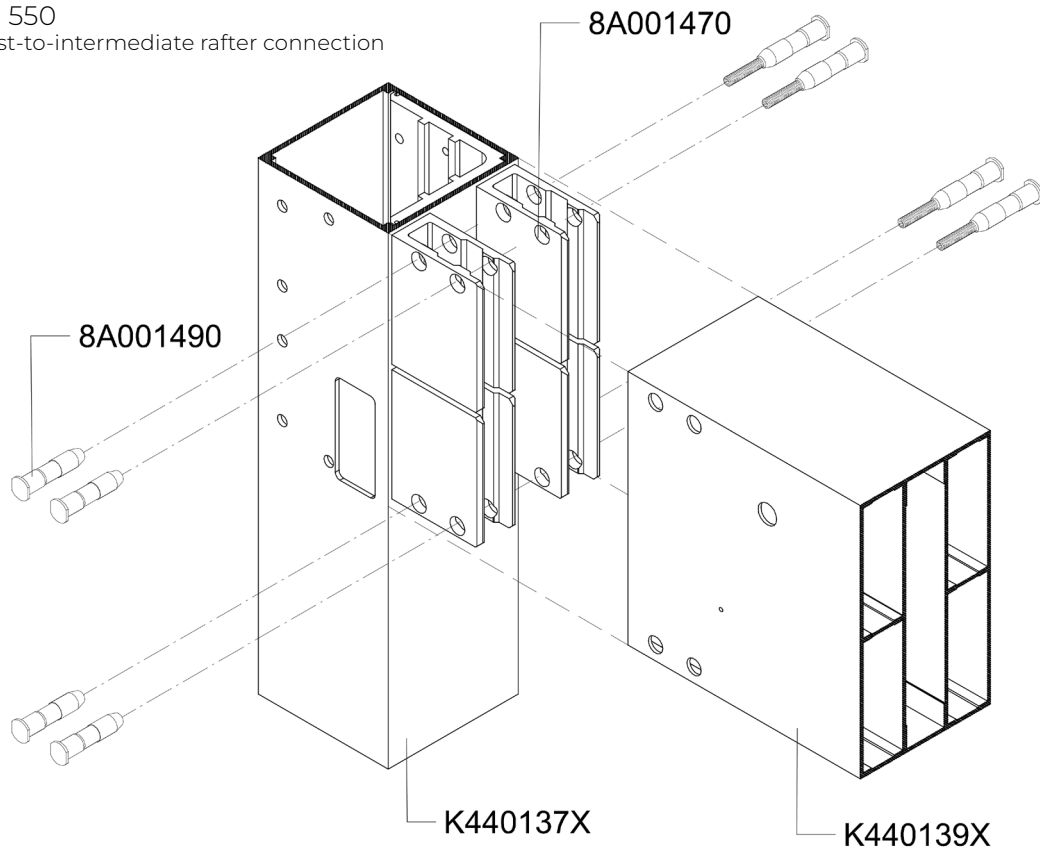
PERGOLA SB 550
Post-purlin connection



PERGOLA SB 550
Post-purlin connection

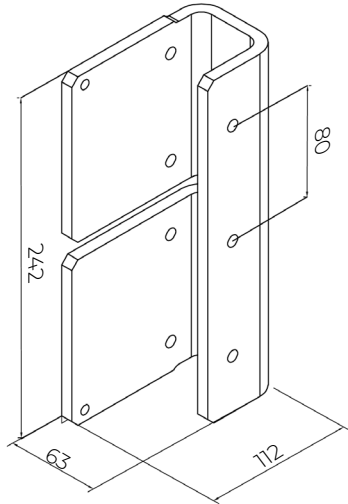


PERGOLA SB 550
Intermediate post-to-intermediate rafter connection

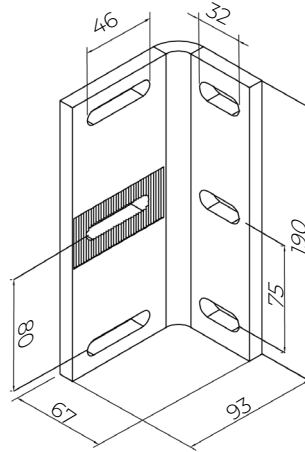


PERGOLA SB 550
Wall connections – accessories

8A01412X



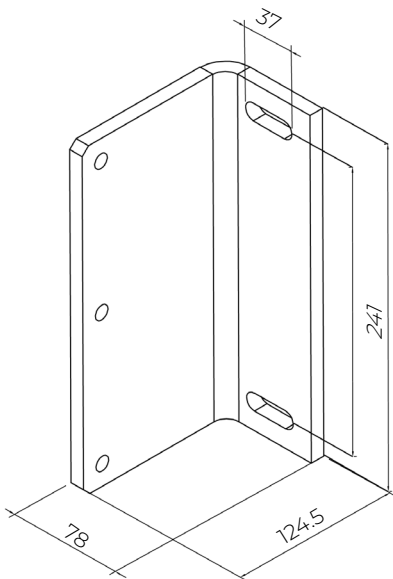
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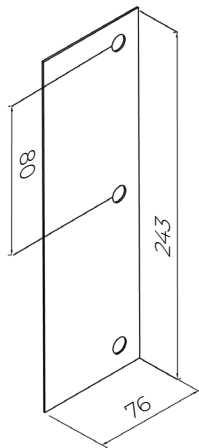
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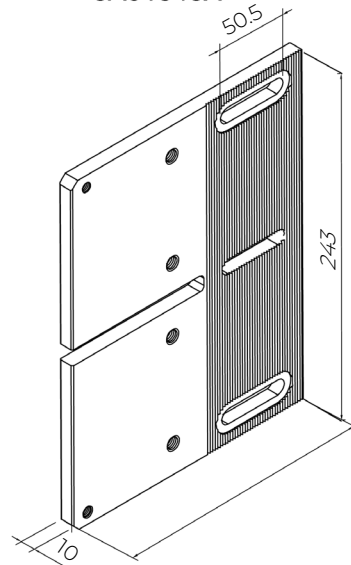
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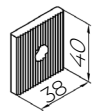
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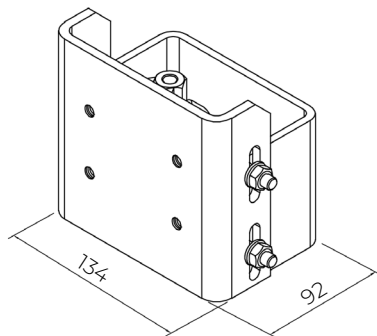
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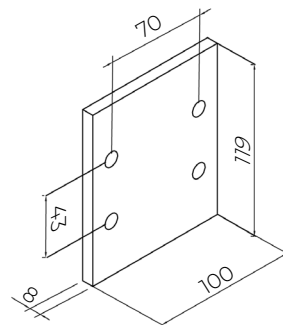
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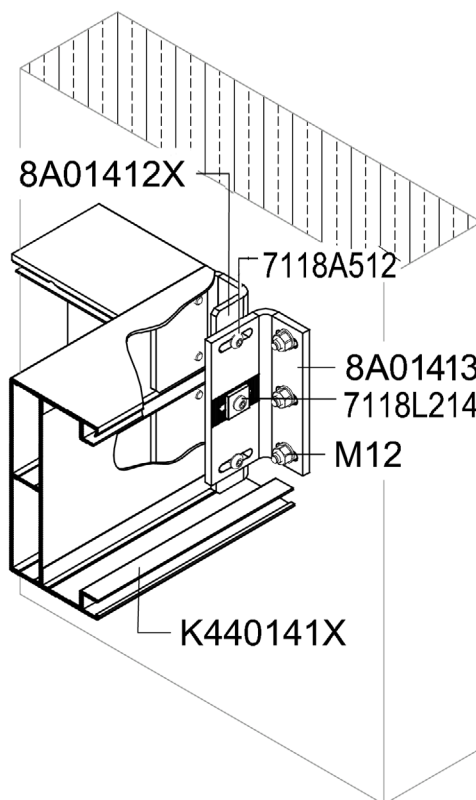
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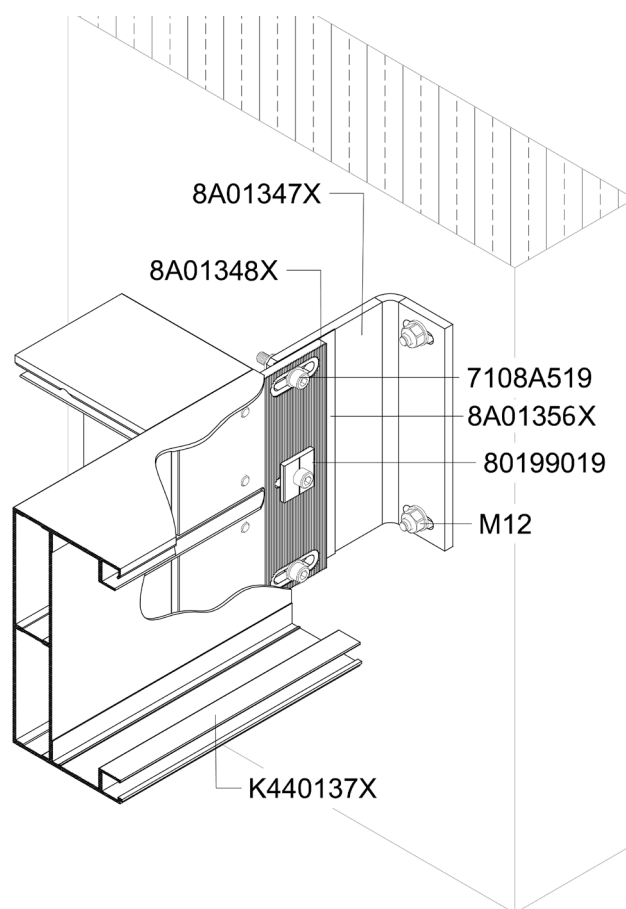
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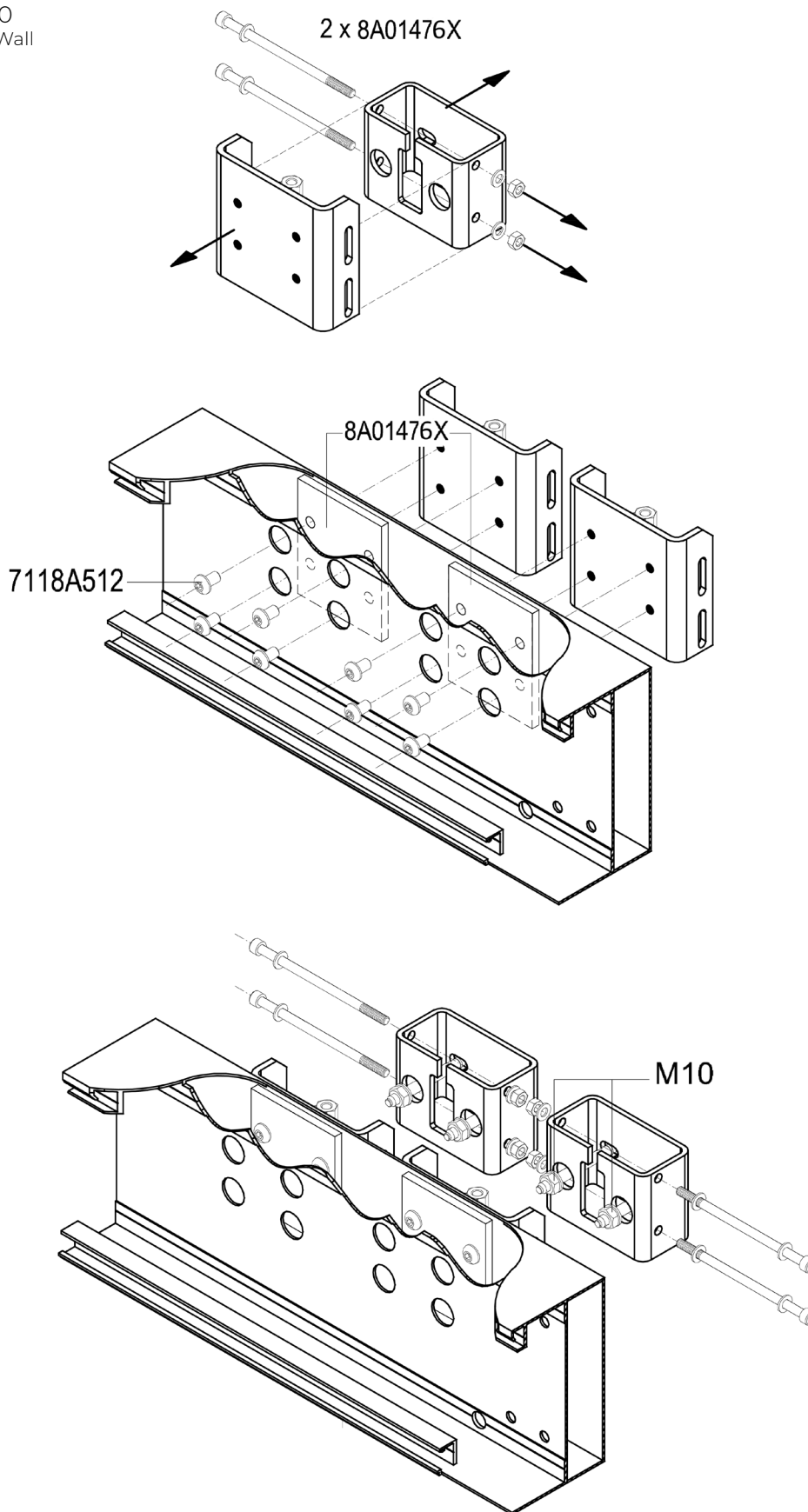
PERGOLA SB 550
Rafter connection - Wall



PERGOLA SB 550
Rafter connection - Wall



PERGOLA SB 550
Purlin connection - Wall



PERGOLA SB 350

THE SB 350 pergola is a functional, attractive prefabricated kit with a fixed roof consisting of rotating slats, which provides protection from both sun and rain. The system is available as a single-module freestanding version. Designed for self-assembly.

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and stainless steel components
- Structure equipped with a drainage system
- Drive and cable concealed within the beam
- No roof pitch
- Electrically controlled rotation of roof slats
- Waterproofing of the retractable roof and aesthetic water drainage via integrated side gutters and posts, with the option to block the gutter outlet at the selected end
- Limits sunlight depending on requirements
- Protects against the effects of weather conditions: rain and wind
- Protects against snow loads of up to 30 kg/m² (uniform load)
- Does not emit toxic substances during operation
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort
- Roof louvre rotation can be operated via remote control
- Access panel for cable routing and automation components
- New flat blade design
- Square-section posts with a width adapted to ZiiiP cassettes
- Suitable for self-assembly

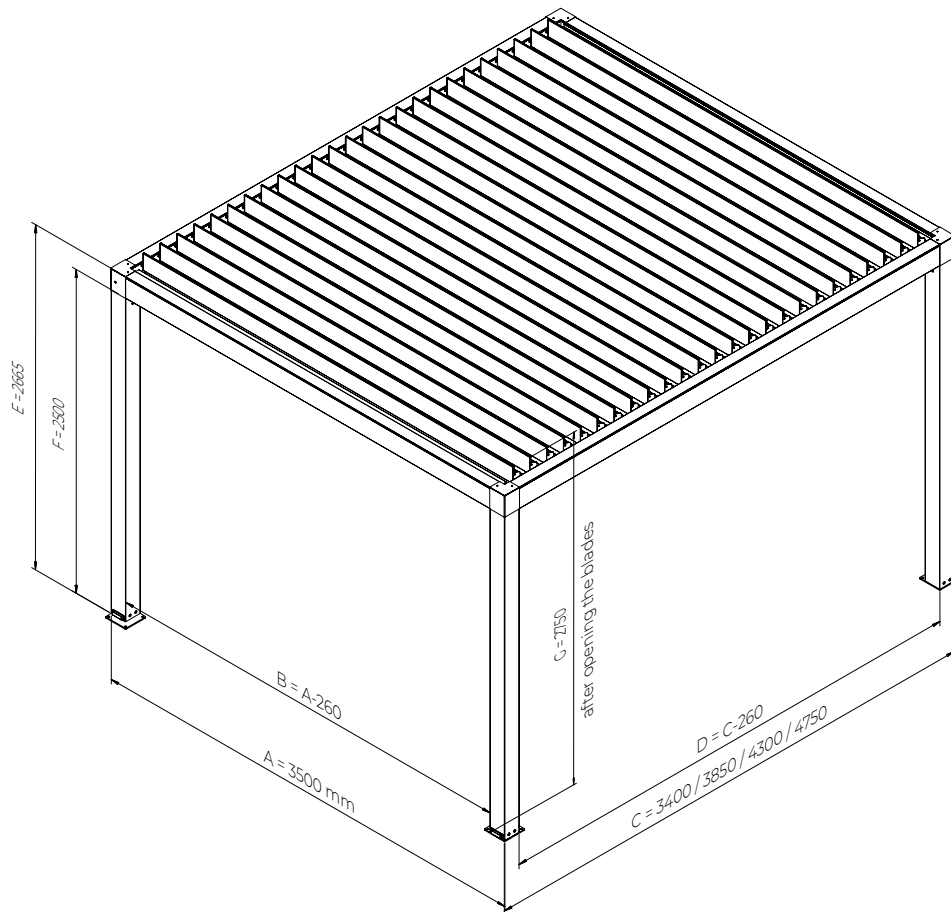
TECHNICAL PARAMETERS

- Fixed module width 3500 mm
- Fixed projection in 4 selected sizes: 3400 mm, 3850 mm, 4300 mm, 4750 mm
- Fixed clear height of roof beams 2500 mm
- Max. structure height 2665 mm, including the blade rotation mechanism 2750 mm
- Free-standing or wall-mounted design, single or multi-module, created by joining individual modules – made of extruded aluminium profiles and stainless steel components, equipped with a water drainage system
- Roof pitch 0°
- No transverse slope at the blade ends
- Slats spacing 150 mm
- Blade rotation range 0° to 120°
- Roof wind resistance class 3 (100 Pa ~10 kg/m²)
- Maximum drainage capacity handles rainfall with an intensity of up to 0.05 l/s/m² (for 4 drainage holes) or up to 0.025 l/s/m² (for 2 drainage holes) for a maximum duration of 5.3 minutes
- Drainage with 2 gutters, 88 mm wide (with bottom drains at each end and the option to cap one end) and drainage directly into the mullions and out through holes at the bottom of the mullions
- Water drainage system – for all 4 posts with optional gutter outlet block
- Electric drive, 24V DC linear motor
- Frame colour - RAL 9016, RAL 7016
- Outdoor use
- Structure compliant with PN-EN 1090 and PN-EN 13659

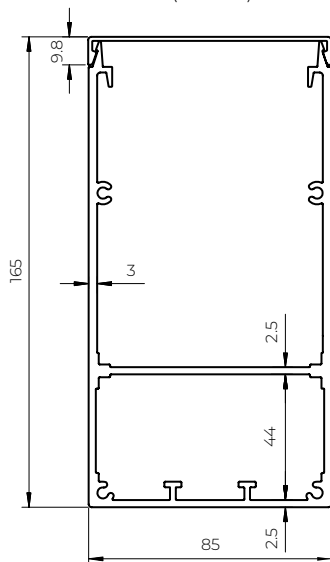
PERMISSIBLE MANUFACTURING TOLERANCES FOR THE EXTERNAL DIMENSIONS OF PERGOLAS ARE +/- 10 mm.

PERGOLA SB 350
Single free-standing version

Note:
The foot outline and drain cover may protrude beyond the posts. The spacing between the slats is 15 cm.



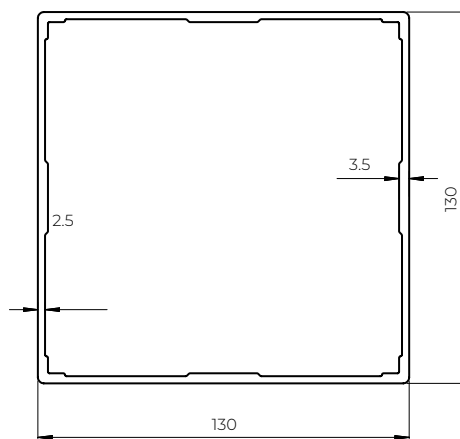
Beam cross-section
(85x165)



Material: EN AW6060 T66
Static characteristics:
Ground: 4.07 kg/m
Country: 15.071 cm²
 I_x 373.239 cm⁴
 I_y 196.751 cm⁴

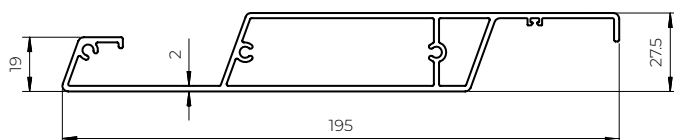
PERGOLA SB 350
Profile cross-section

Cross-section of a post
(130x130)



Material: EN AW6060 T66
Static characteristics:
Ground: 3.84 kg/m
Country: 14.238 cm²
 I_x 382.699 cm⁴
 I_y 382.699 cm⁴

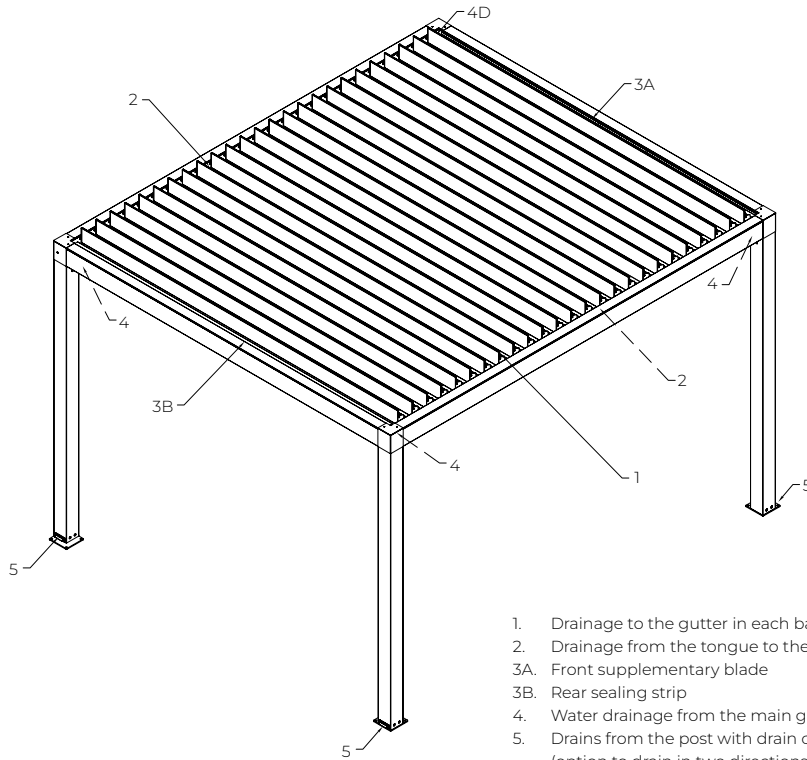
Tongue cross-section
(195x27.5)



Material: EN AW6063 T66
Static characteristics:
Ground: 2.1 kg/m
Country: 7.75 cm²
 I_x 7.496 cm⁴
 I_y 226.068 cm⁴

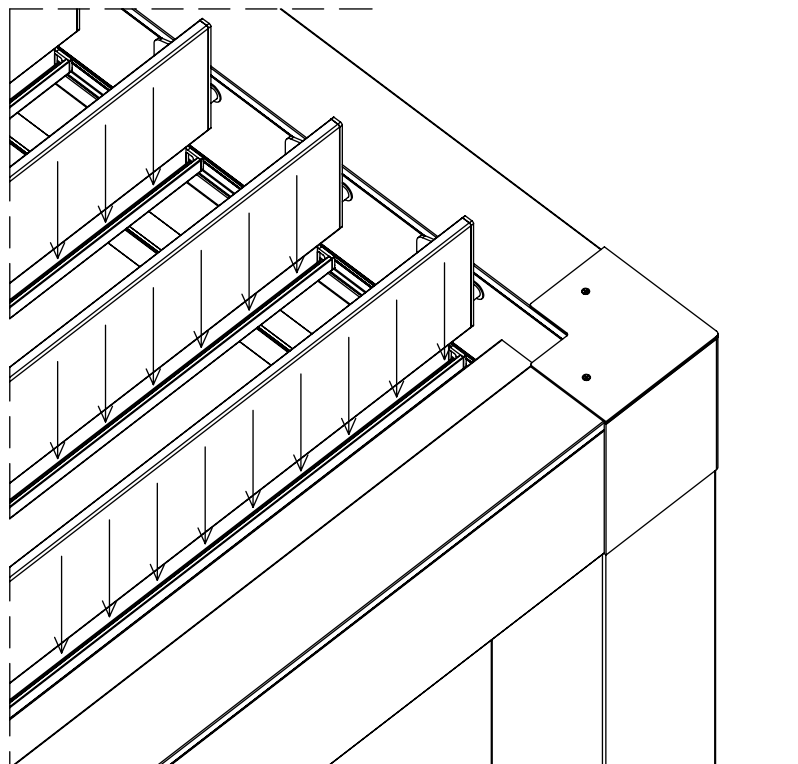
PERGOLA SB 350
Pergola drainage

Note:
Min. 2 posts with water drainage required



1. Drainage to the gutter in each batten
2. Drainage from the tongue to the main gutter (zawsze dwie rynny)
- 3A. Front supplementary blade
- 3B. Rear sealing strip
4. Water drainage from the main gutter at the ends to the post (at the four corners)
5. Drains from the post with drain cover for 4 posts
(option to drain in two directions: forwards or to the side)

Detail no. 1

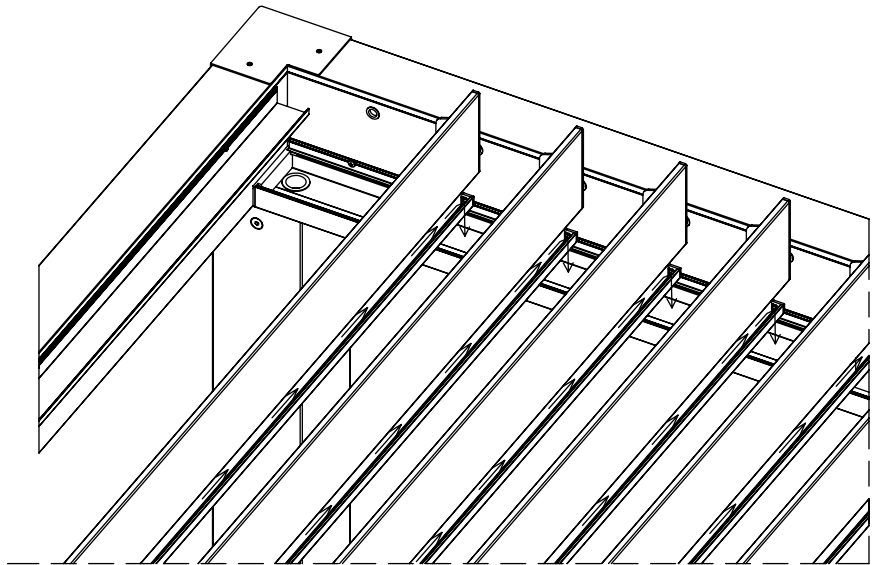


Drainage to the gutter in each slat (horizontal slats)
Cross-section of a gutter with a tongue of approx. 53x17 mm

PERGOLA SB 350
Pergola drainage

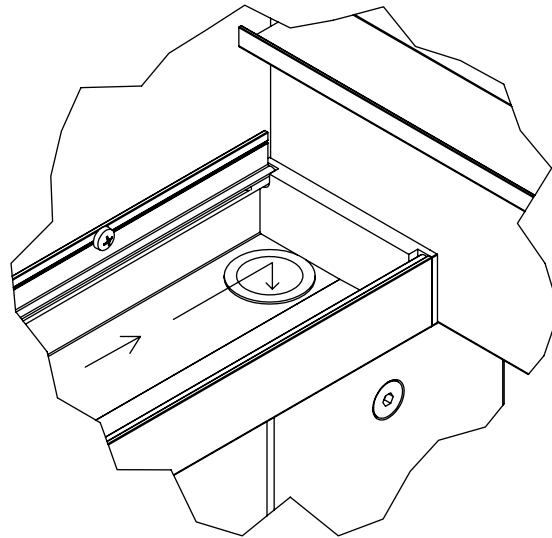
Detail no. 2

Drainage from the tongue gutter to the main gutter
(through the window in the tongue end cap)



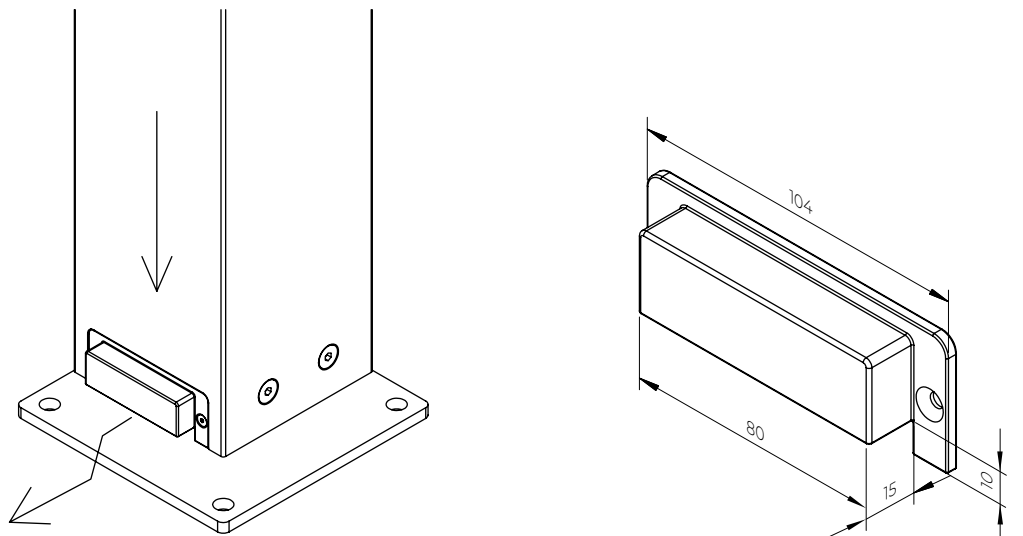
Detail no. 3

Drainage from the main gutter at both ends through
a $\varnothing 26$ mm hole in the base of the post. Note: you can
block one drain outlet from each gutter to the post with
a plug (which reduces drainage capacity)

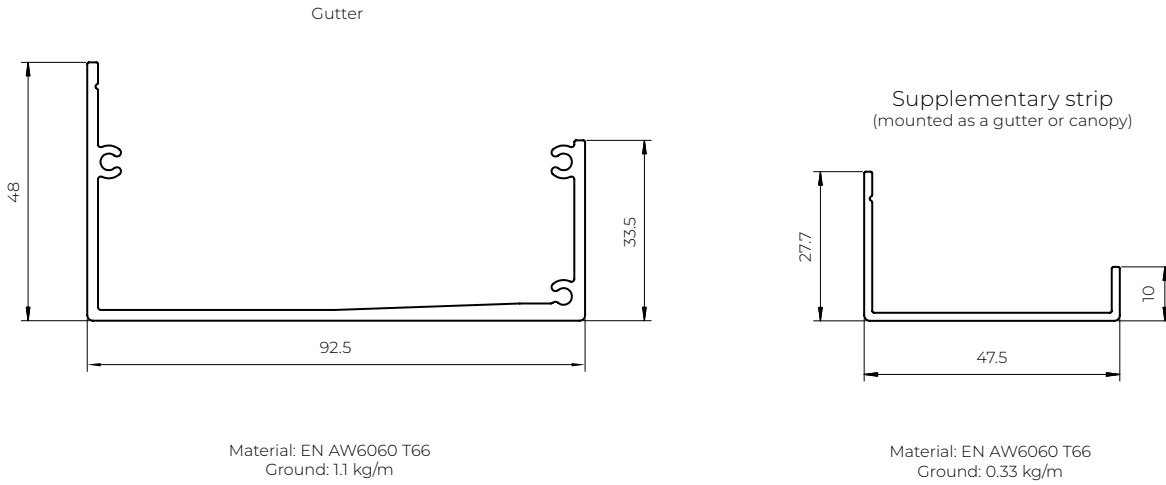


Detail no. 4

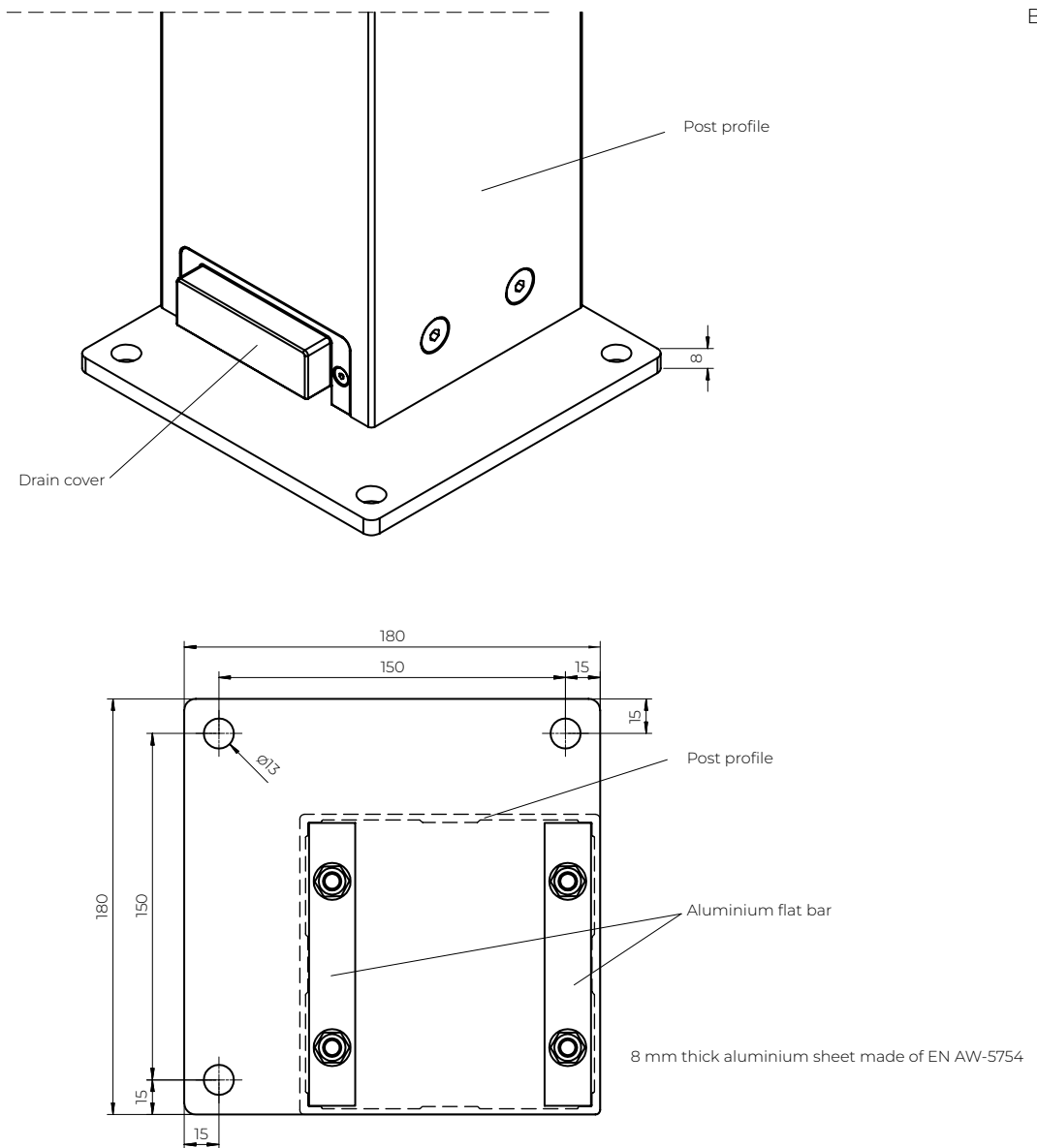
Drainage along the post profile. Drainage
through a hole in the post wall. A plastic
cover is fitted over the drainage hole.
Drainage slot 74x10 mm.



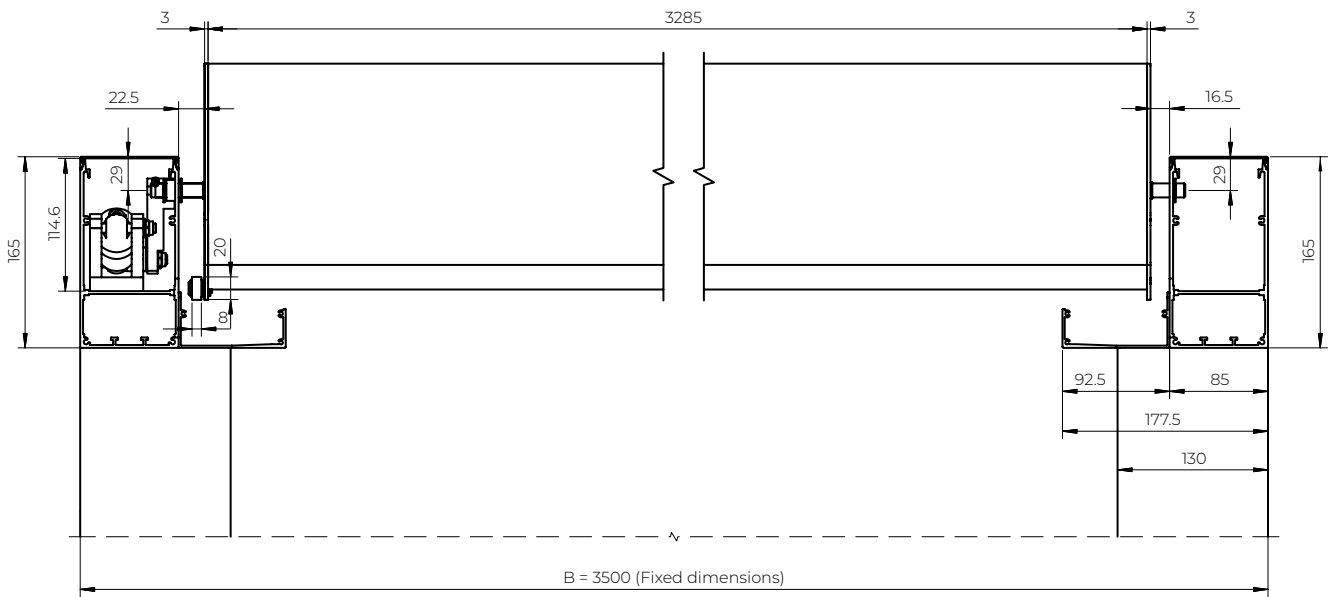
PERGOLA SB 350
Cross-sections of drainage gutters



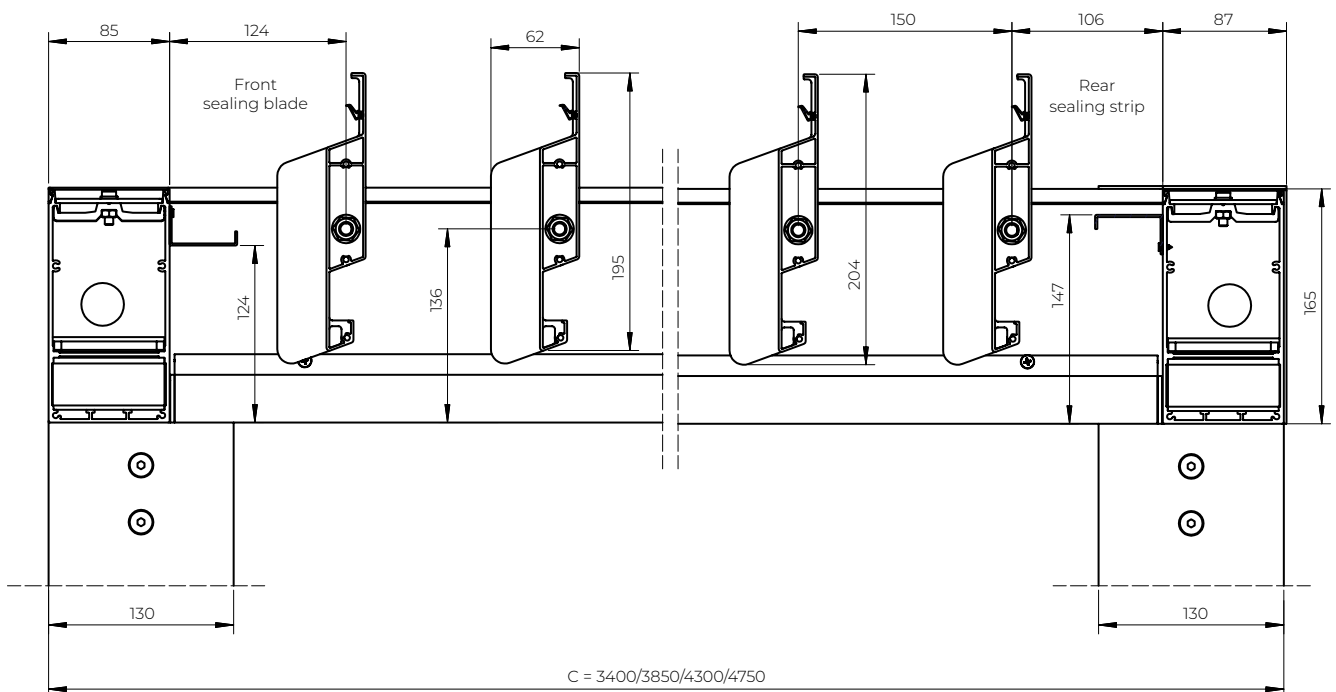
PERGOLA SB 350
Base

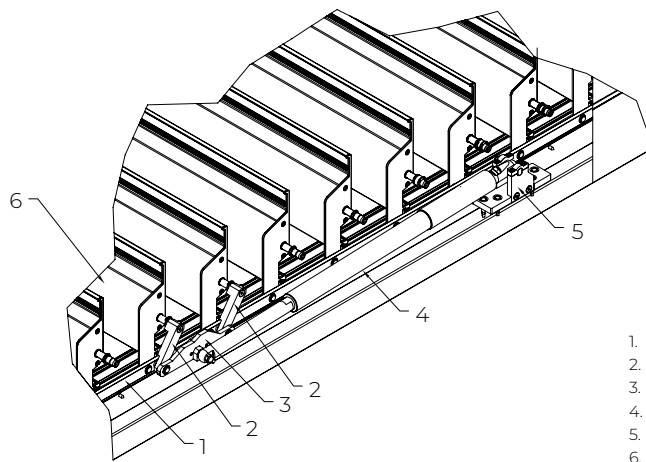


PERGOLA SB 350
Cross-section (otwarte pióra)



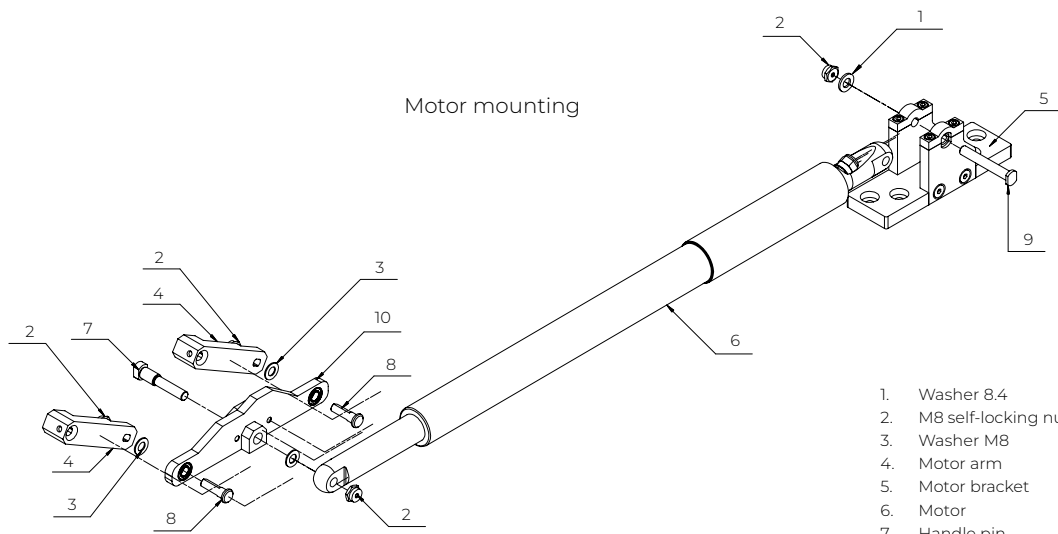
PERGOLA SB 350
Longitudinal section (bearing side)





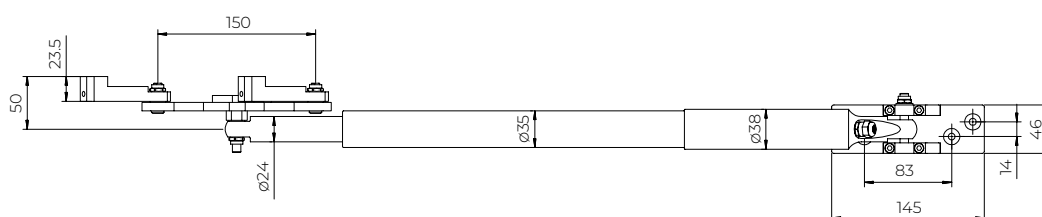
1. Tension rod 8x20 mm
2. Motor arm
3. Guide bracket
4. Linear motor 24V DC
5. Motor bracket
6. Pen

Motor mounting



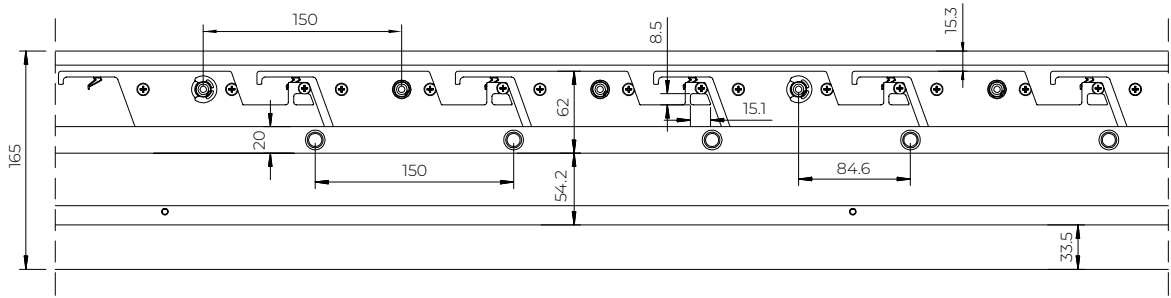
1. Washer 8.4
2. M8 self-locking nut
3. Washer M8
4. Motor arm
5. Motor bracket
6. Motor
7. Handle pin
8. Guide handle pin
9. Motor handle pin
10. Guide bracket

Top view

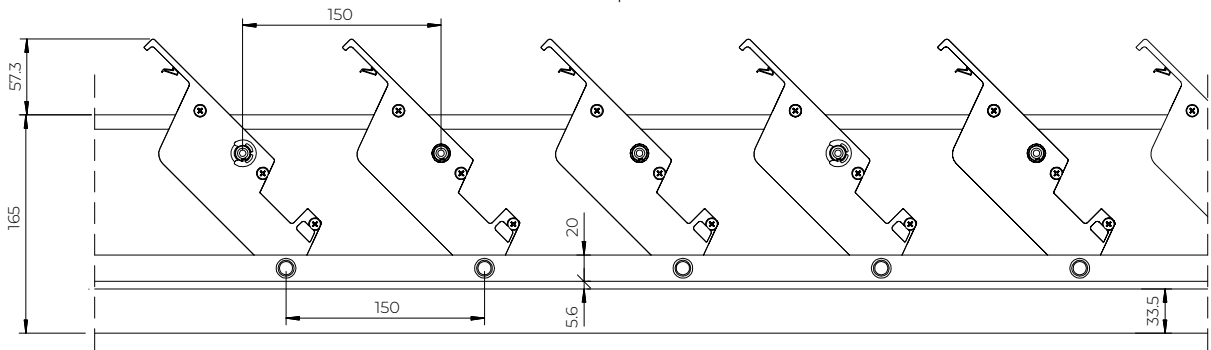


PERGOLA SB 350
Blade rotation range

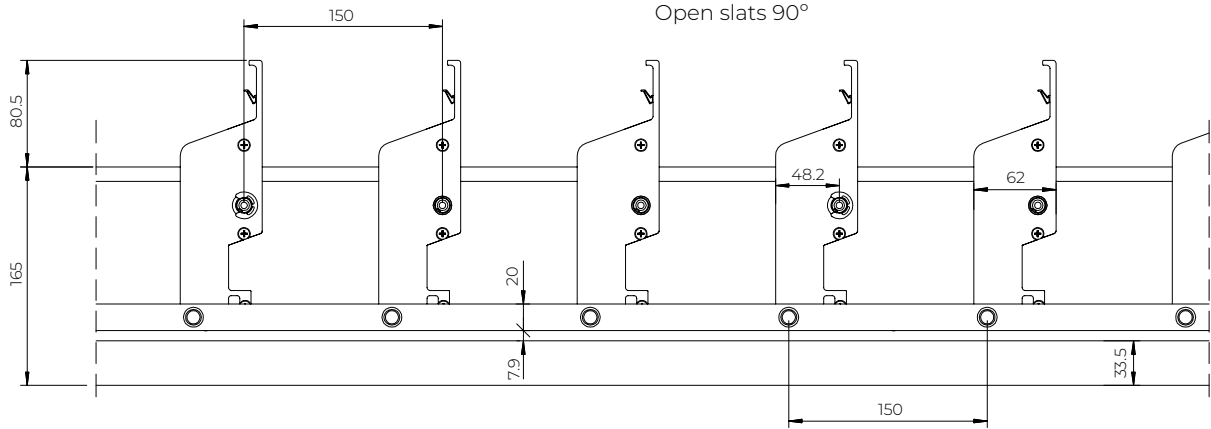
Blades closed



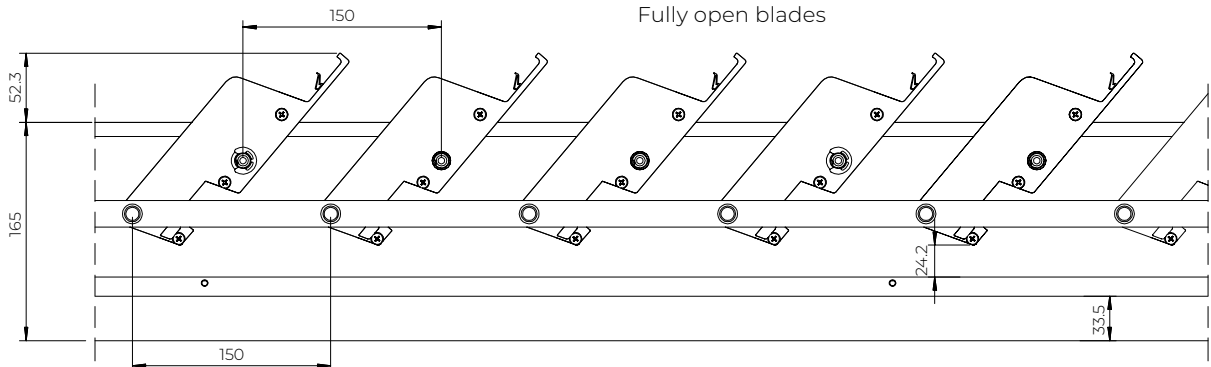
Open slats 45°



Open slats 90°



Fully open blades



ROOF MODULE SB 400MD

The **SB 400MD** ROOF MODULE is a functional, aesthetically pleasing construction kit comprising guides and rotating slats with a drive mechanism, forming a fixed roof that protects against both sun and rain. The system is not self-supporting. To achieve a watertight function, the use of gutters and sealing slats (available as an option) is required. The system is designed to fill the recesses of horizontal openings or to be mounted on top of them. The upper surface of the guides must be flush with the top of the substructure due to the motor mounting protruding beyond the product's outline.

APPLICATION:

- Sun protection and shading of surfaces (horizontal openings)
- Rain protection (water drainage when fitted with an optional gutter system)

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and stainless steel components
- No roof pitch
- Simple design and low weight
- Requires an external load-bearing substructure (for fixing the guides)
- Drainage is available as an option and is not structurally linked to the roof module
- Electrically controlled louvre rotation
- Option to use weather-dependent automation
- Limits sunlight depending on requirements
- Protects against the effects of weather conditions: rain (optional) and wind (up to the declared wind class)
- Does not protect against snowfall
- Does not emit toxic substances during operation
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort
- Roof blade rotation can be activated manually via a switch or remotely
- Easy access to the motor
- The motor mounting protrudes beyond the product outline and requires partial fixing to the substructure
- Gutters (optional) without a cross-slope at the bottom, without water drainage (to be made in-house)
- For sealing (optional), sealing strips are required for the end roof strips or cross gutters with overflow caps

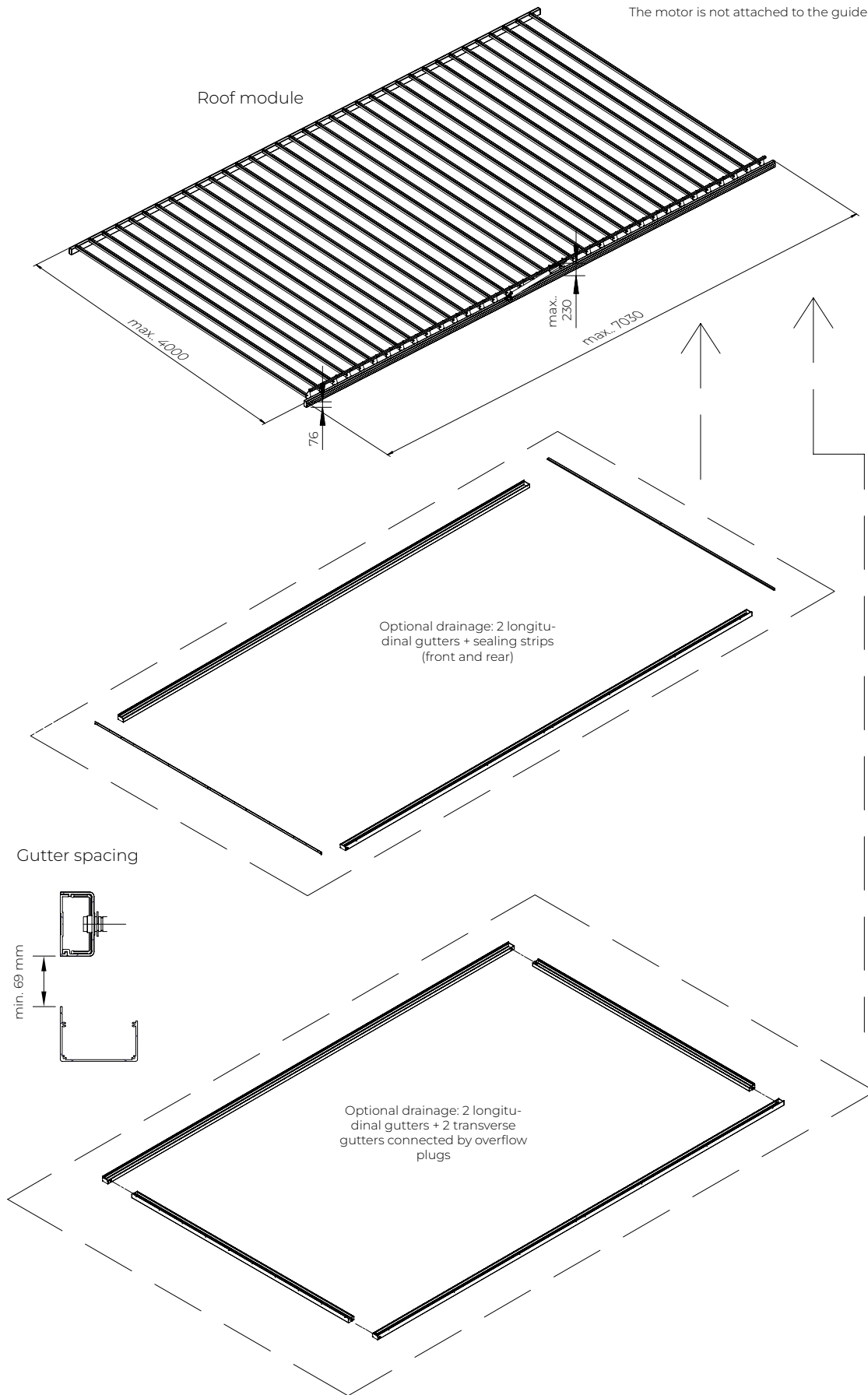
TECHNICAL PARAMETERS:

- Maximum module width (with guides) – 4000 mm (minimum 1000 mm)
- Maximum length: 7030 mm (minimum 1230 mm)
- Guide rail height 76 mm
- 200 mm slat spacing
- Required height above the guide rail – min. 130 mm
- Roof pitch 0°
- Electric drive – Elero Picolo XL linear motor
- Blade rotation range: 0–120 degrees
- Outdoor use
- Wind resistance class 6 (400 Pa) according to PN-EN 13659

PERMISSIBLE MANUFACTURING TOLERANCES FOR THE EXTERNAL DIMENSIONS OF PERGOLAS ARE +/- 10 mm.

ROOF MODULE SB 400MD
Assembly view

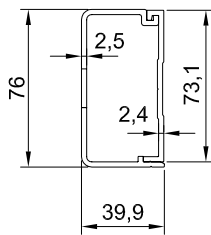
Note:
The motor is not attached to the guide rail upon delivery



ROOF MODULE SB 400MD

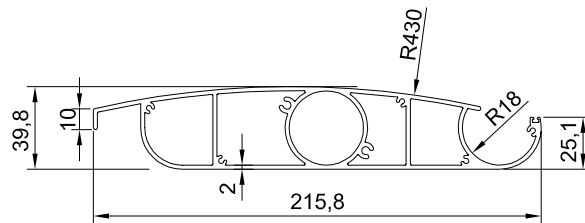
Profile and gutter cross-sections

Guide section (two-piece 40x76)



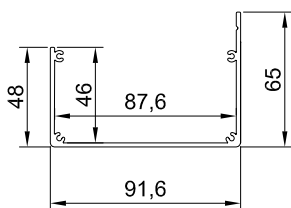
Material: EN AW6063 T66
Total mass: 1.64 kg/m

Tongue cross-section (216x40)



Material: EN AW6063 T66
Static characteristics:
Ground: 3.66 kg/m
Country: 13.57 cm²
J1 439.1 cm⁴
J2 27.16 cm⁴

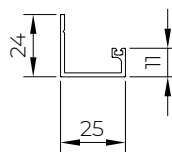
Cross-section of the gutter (2x65)



Material: EN AW6060 T66
Ground: 1.22 kg/m

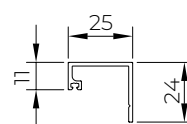
Optional on request

Front tongue cross-section



Material: EN AW5754
Ground: 0.25 kg/m

Rear tongue cross-section

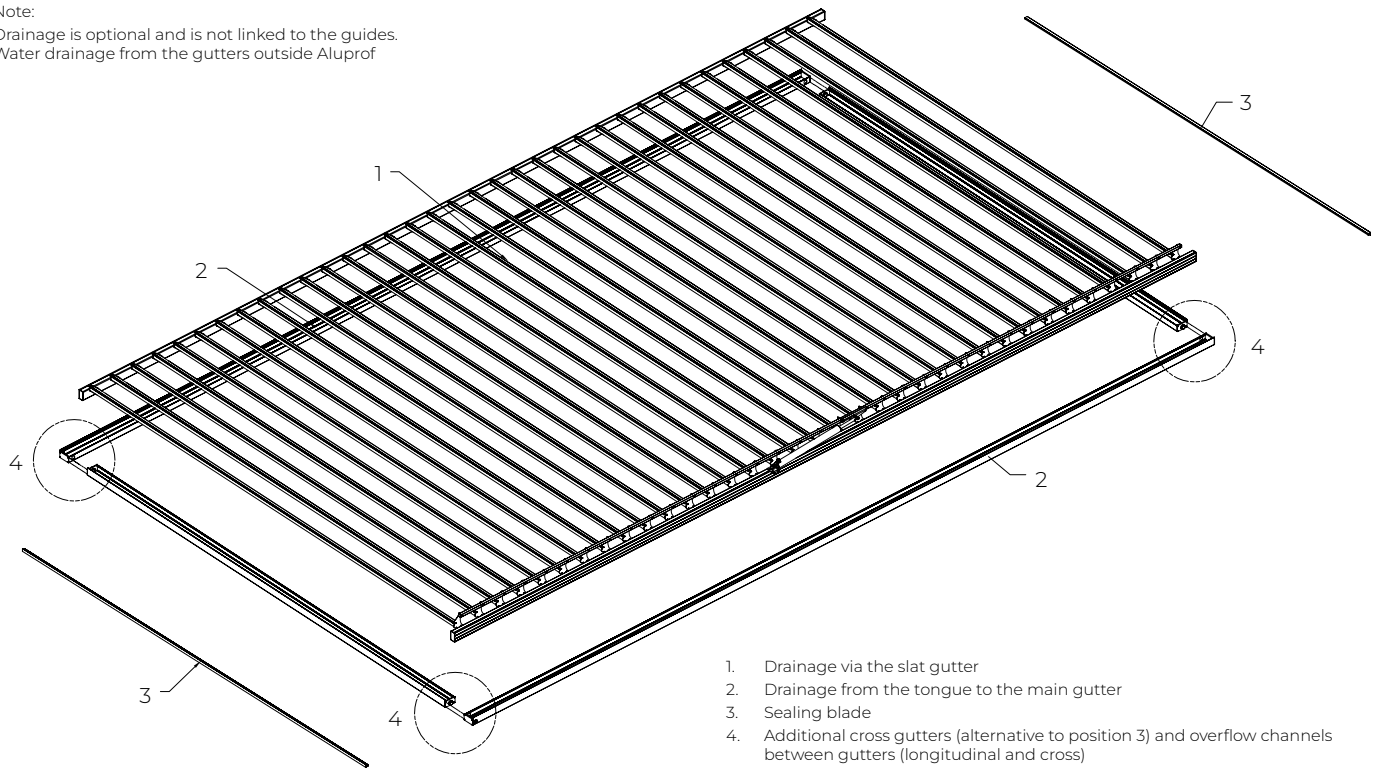


Material: EN AW5754
Ground: 0.25 kg/m

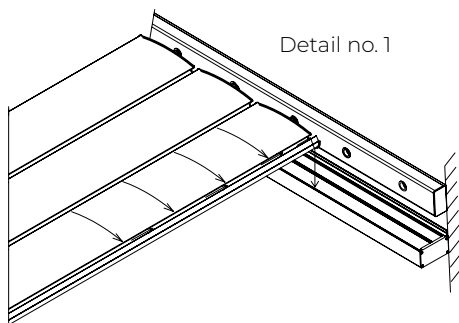
ROOF MODULE SB 400MD

Drainage module (optional)

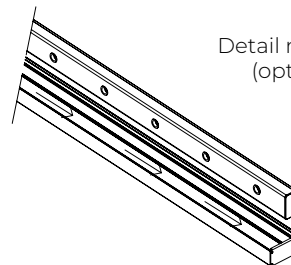
Note:
Drainage is optional and is not linked to the guides.
Water drainage from the gutters outside Aluprof



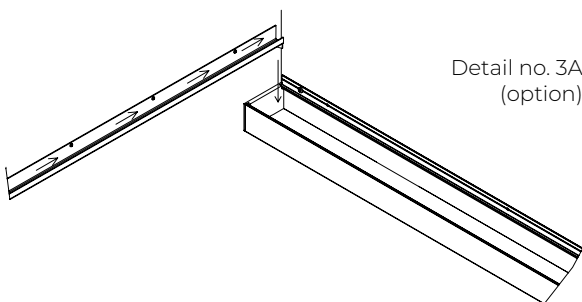
1. Drainage via the slat gutter
2. Drainage from the tongue to the main gutter
3. Sealing blade
4. Additional cross gutters (alternative to position 3) and overflow channels (longitudinal and cross)



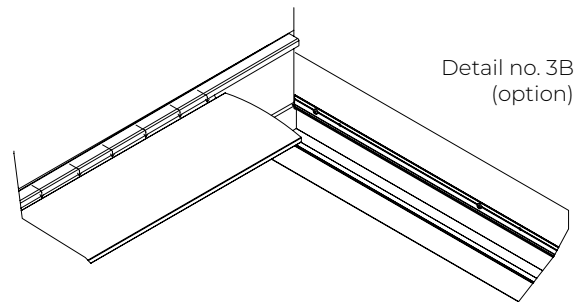
Detail no. 1
Drainage via the tongue gutter (no longitudinal slope of the tongue) Gutter diameter in the tongue 36 mm



Detail no. 2 (option)
Collector gutter drainage (flat bottom, no longitudinal slope)
Clear cross-section 87x46 mm



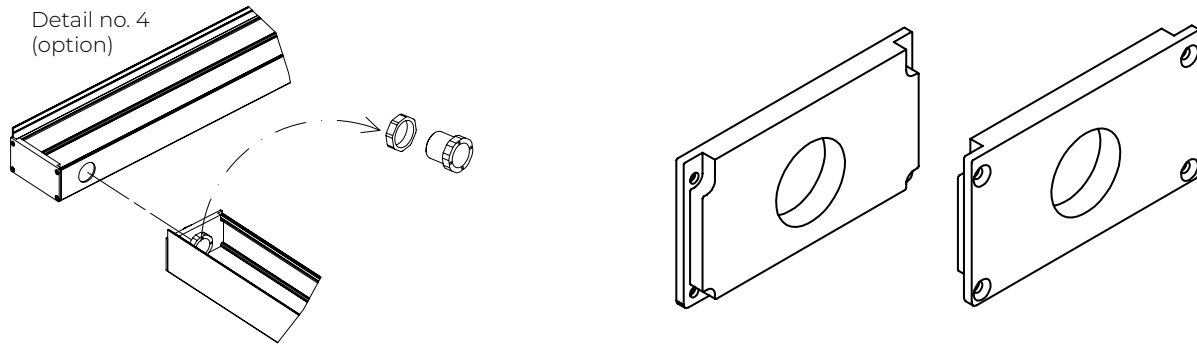
Detail no. 3A (option)
Drainage from the front tongue to the front sealing tongue (extruded gutter). Gutter without a slope. Drainage from the gutter at the ends to the main gutter.



Detail no. 3B (option)
Drainage from the rear sealing tongue (extruded gutter) to the gutter in the tongue. Gutter without a slope. Fixed independently to the substructure.

NOTE:
Gutter fixed independently of the substructure.

ROOF MODULE SB 400MD
Gutter end cap (overflow)

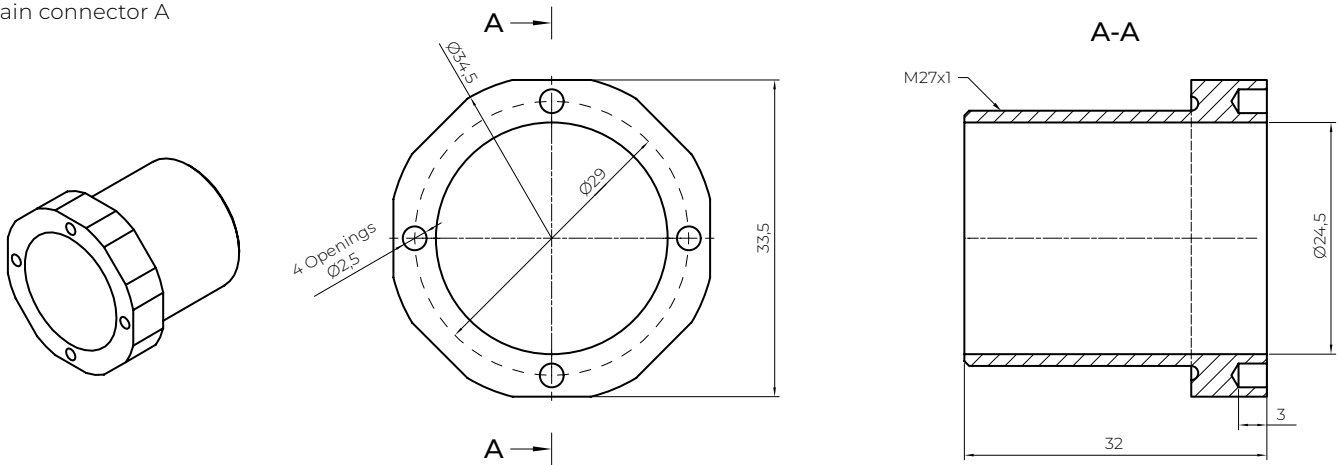


Detail no. 4
(option)

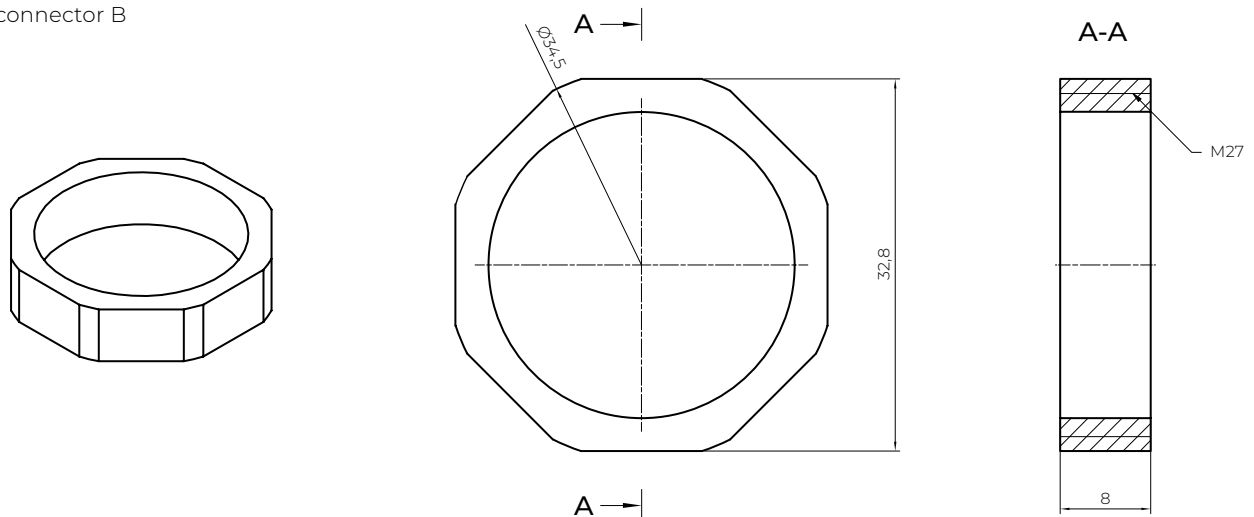
Overflow between gutters via a screw-on plastic flange $\varnothing 24.5$ mm

The diameter of the hole in the overflow cap is 27.6 mm

ROOF MODULE SB 400MD
Drain connector A

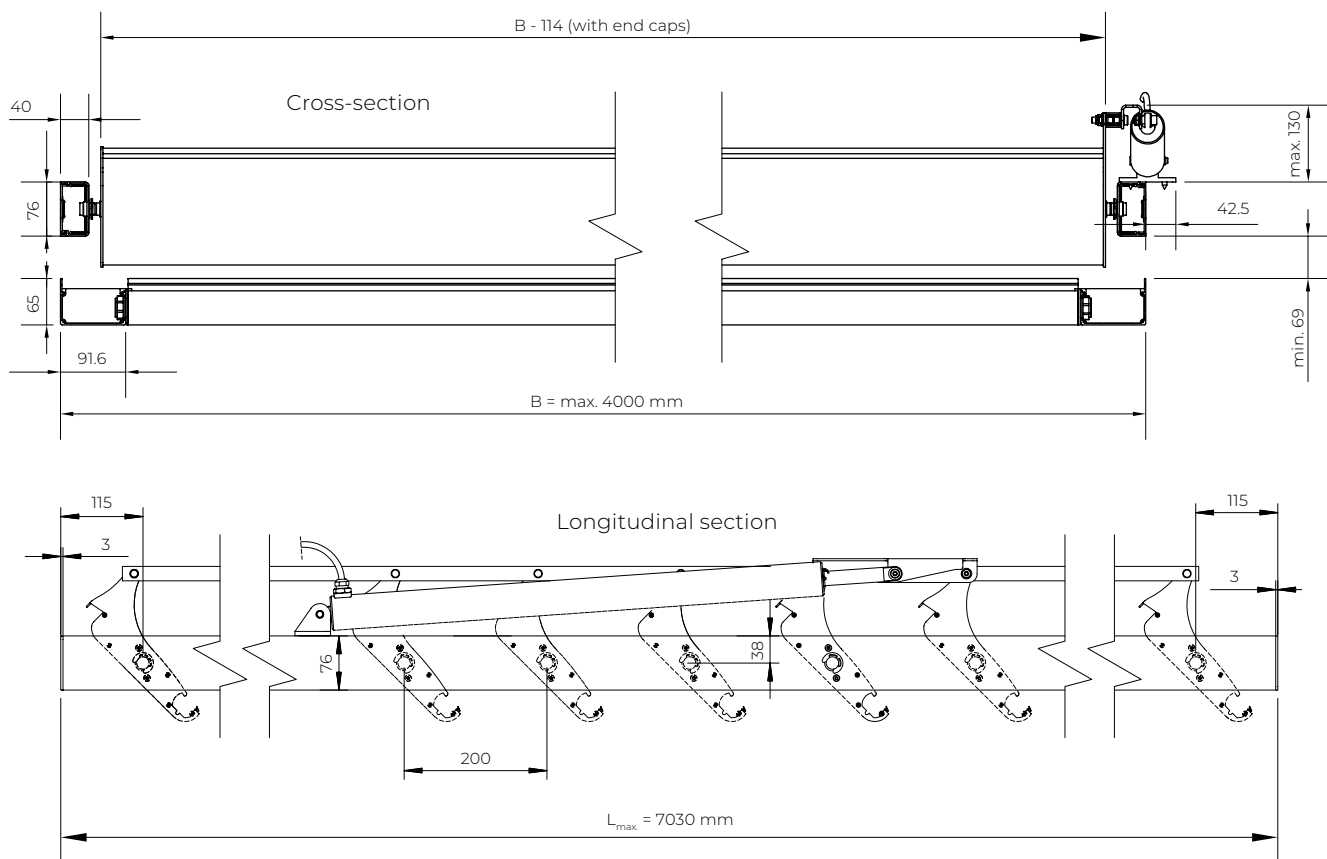


ROOF MODULE SB 400MD
Drain connector B

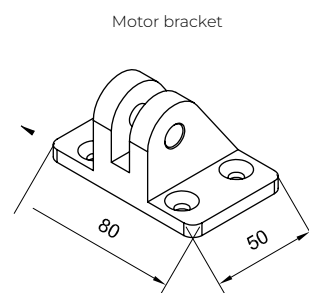
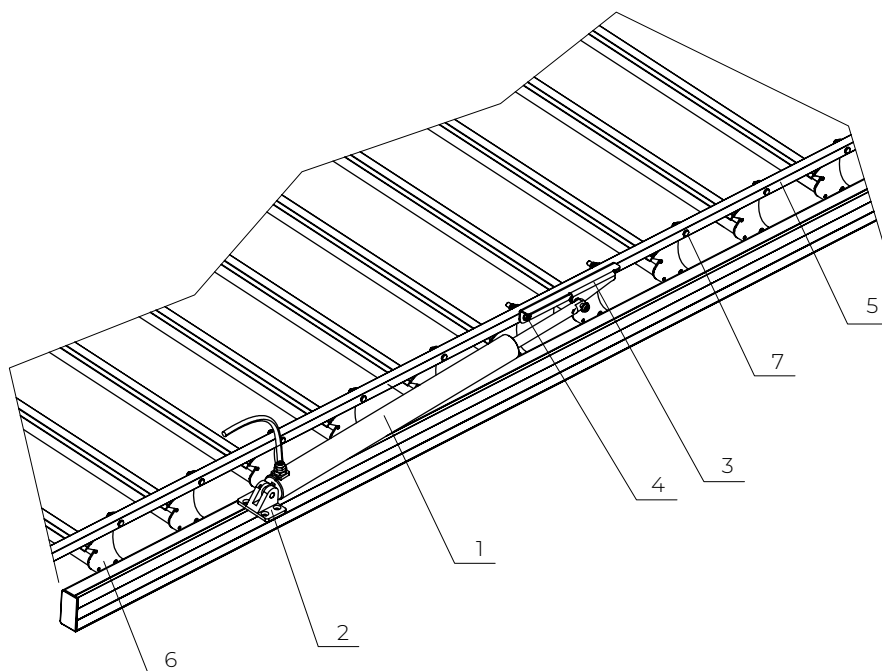


Note:
The motor bracket protrudes beyond the guide rail. ALUPROF does not drill holes in the guide rail for motor mounting. Optional channels

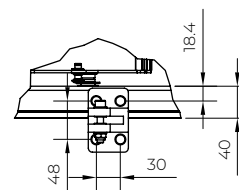
ROOF MODULE SB 400MD
Cross-section and longitudinal section



ROOF MODULE SB 400MD
Drive unit



Motor mounting



1. ELERO linear motor, force 1200N
2. Motor bracket
3. Guide bracket
4. Pin
5. Tension rod 20x20 mm
6. Feather cap (drive)
7. Guide handle pin - 02

PERGOLA SOLID

THE SOLID pergola is an attractive aluminium structure with a retractable roof. The roller system, operated by a built-in electric motor, ensures smooth operation of the roofing system. A water drainage system concealed within the structure makes the Solid a product characterised by high aesthetics and functionality. Optional LED lighting.

APPLICATION:

- Sun protection, surface shading and rain protection.

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and stainless steel components
- Structure equipped with a drainage system
- Electrically controlled movable roof slats
- Option to use weather-dependent automation
- Waterproofing of the movable roof and aesthetic water drainage via a gutter behind the eaves beam and front posts.
- Option to use LED lighting (from underneath the movable roof beams).
- Protects against the effects of weather conditions: rain and wind.
- Does not protect against snowfall.
- Does not emit toxic substances during operation.
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort.
- Easy access to the motor
- Wall-mounted and freestanding version
- Modular expansion option
- Structure compliant with PN-EN 1090 and PN-EN 13561

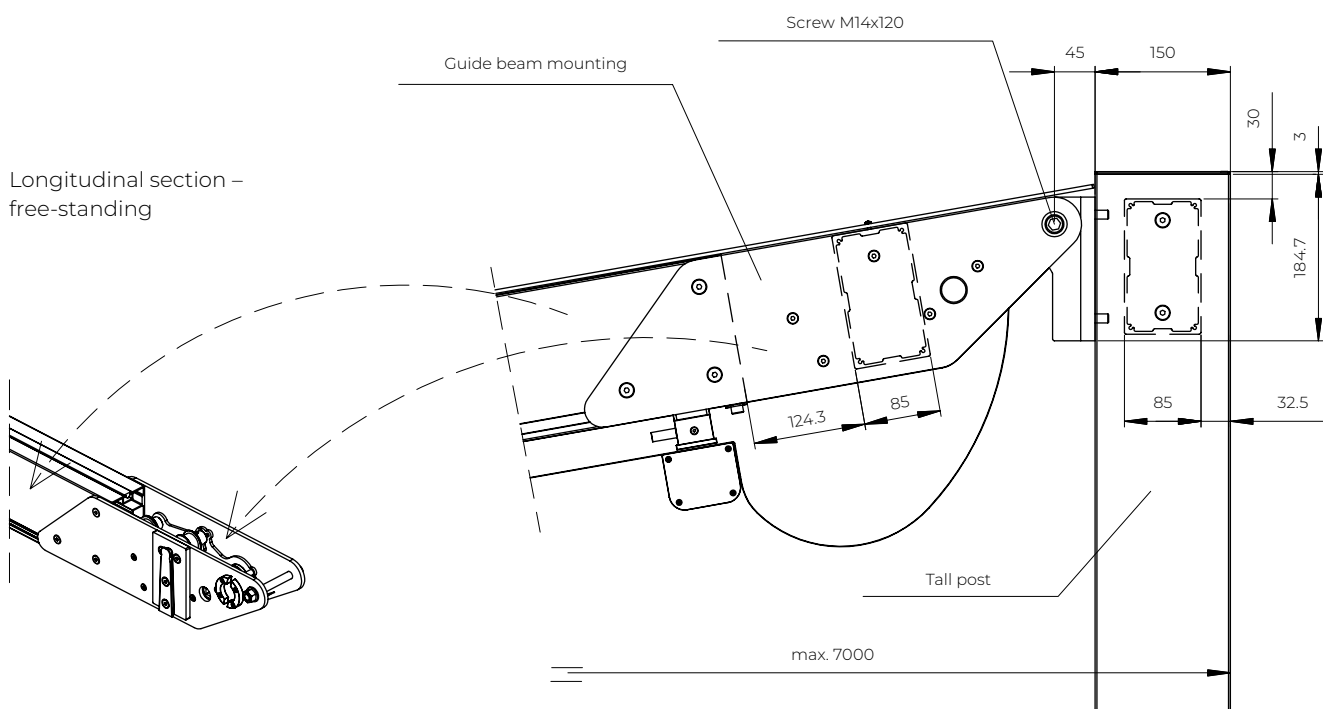
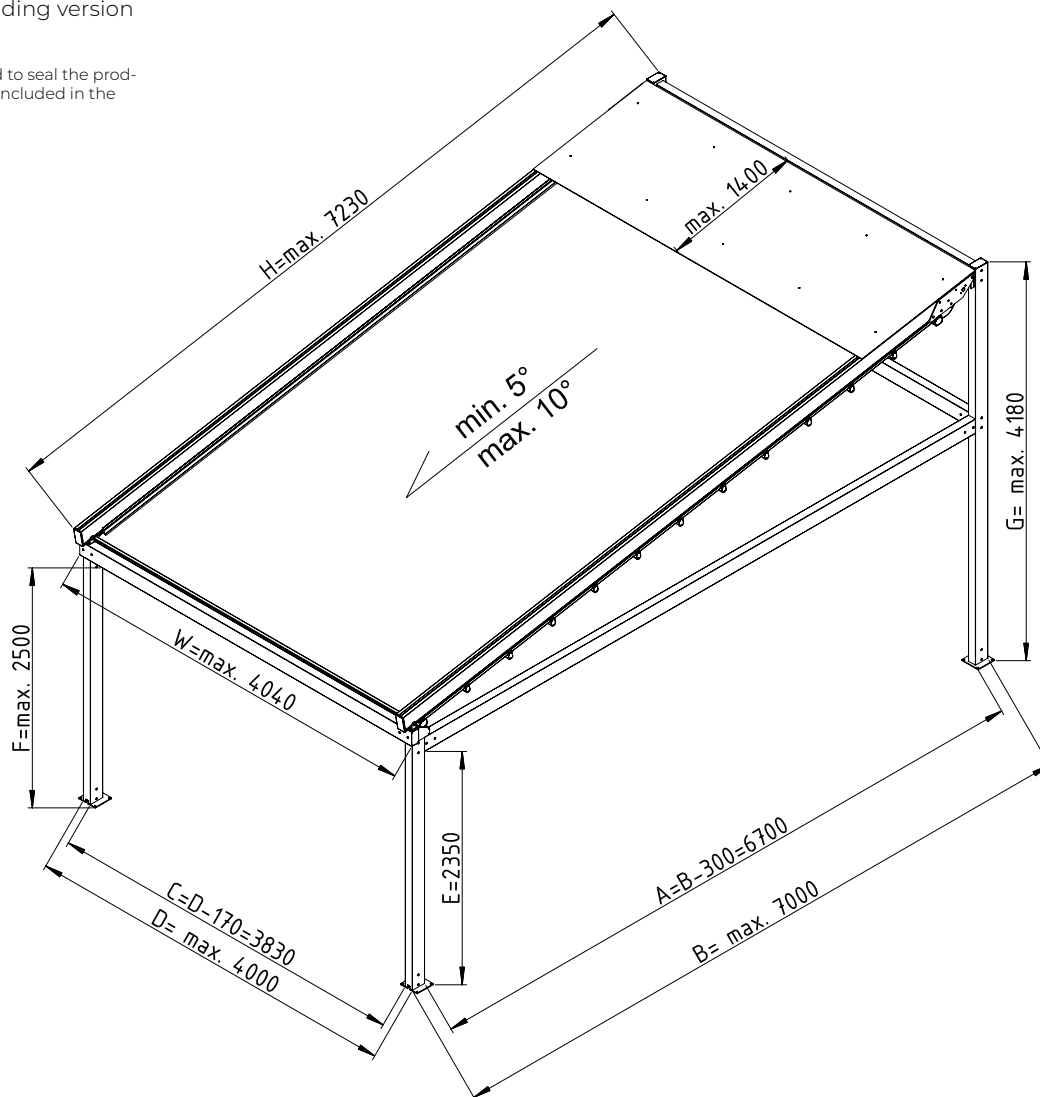
TECHNICAL PARAMETERS:

- Maximum module width - 4000 mm
- Maximum projection - 7000 mm
- Maximum clear height of the eaves beam 2500 mm
- Pitch angle 5°-10° (maximum pitch angle depends on the specified overhang)
- Electric drive – Geiger GJ5620 motor
- Outdoor use
- Covering – PVC fabric designed for the Solid system

PERMISSIBLE MANUFACTURING TOLERANCES FOR THE EXTERNAL DIMENSIONS OF PERGOLAS ARE +/- 10 mm.

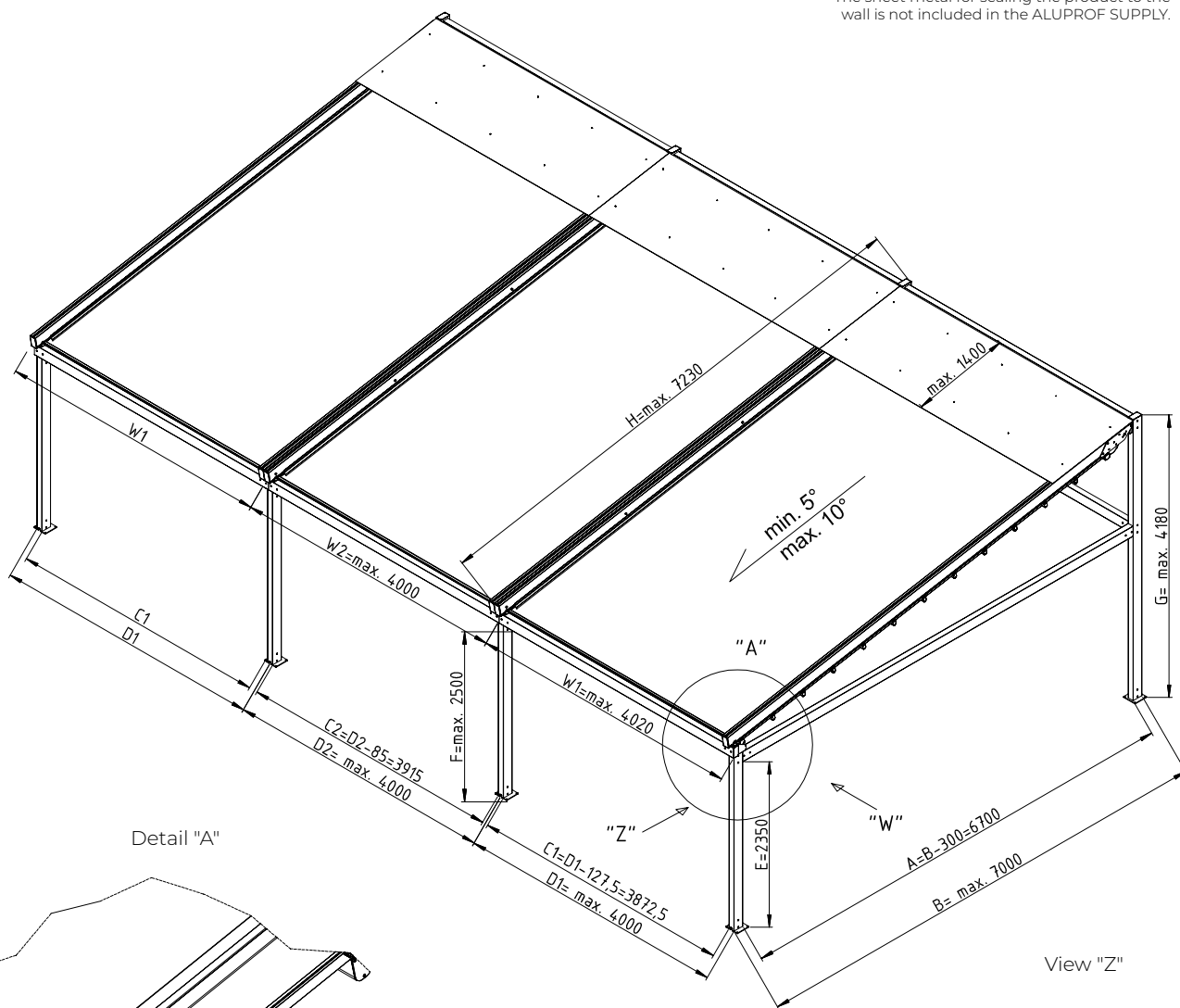
PERGOLA SOLID
Single free-standing version

Note:
The sheet metal used to seal the product to the wall is not included in the ALUPROF SUPPLY

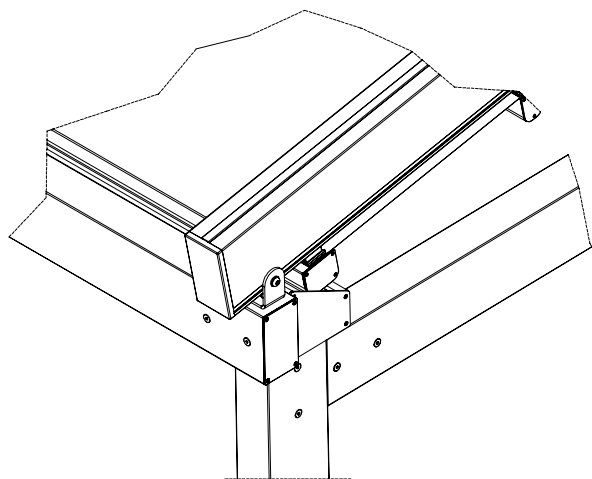


PERGOLA SOLID
Modular free-standing version

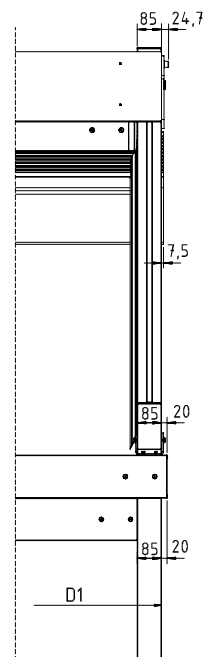
Note:
The sheet metal for sealing the product to the wall is not included in the ALUPROF SUPPLY.



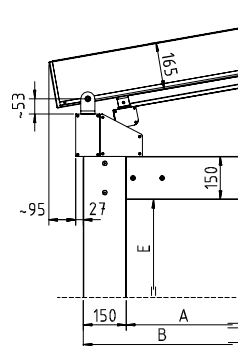
Detail "A"



View "Z"



View "W"



Alubond panel dimensions calculated using the formula:
Width= D-2 mm
Projection= Number of moving bars (65x45)*60+730 mm

PERGOLA SOLID

Single-module wall-mounted version

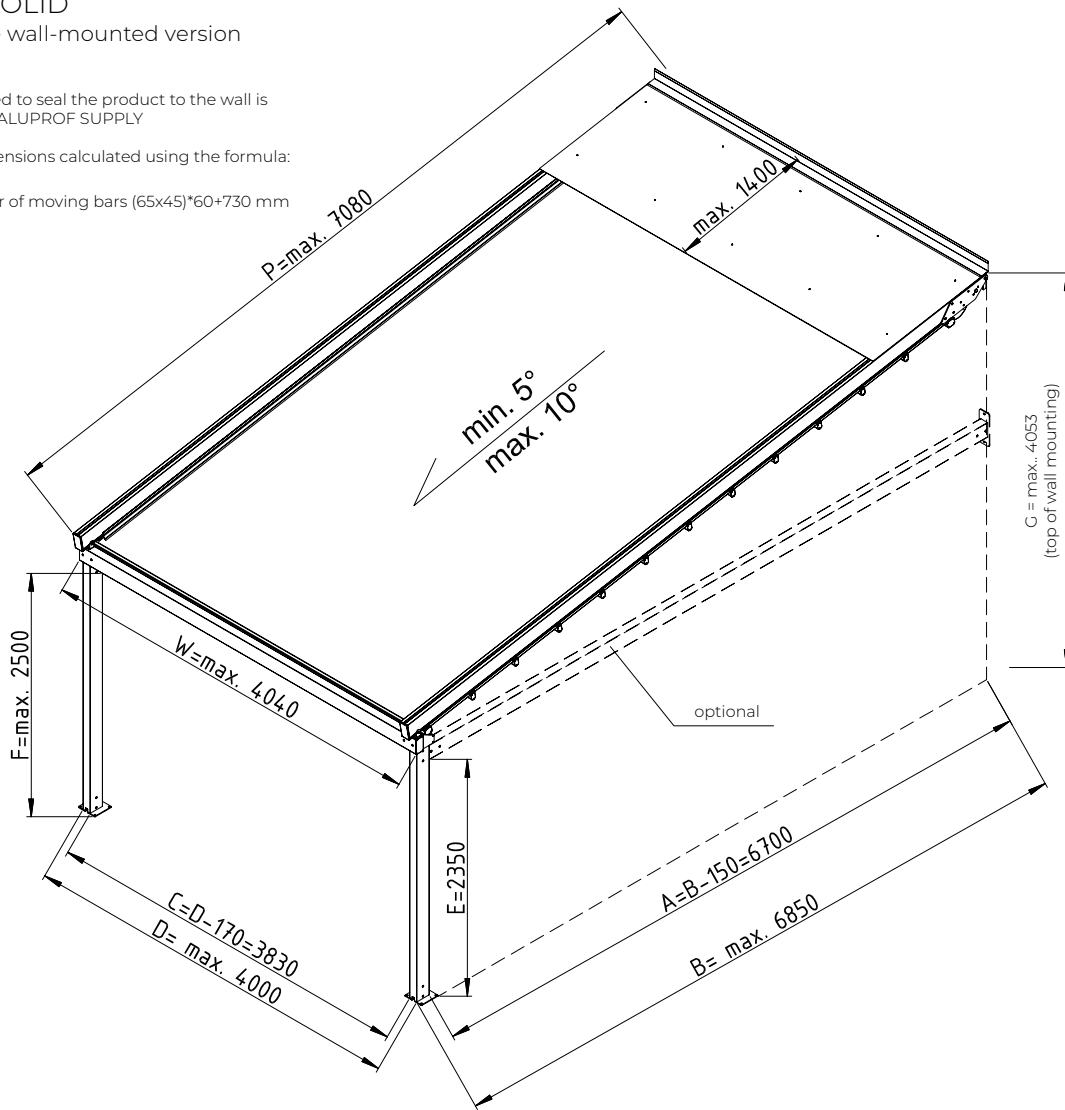
Note:

The sheet metal used to seal the product to the wall is not included in the ALUPROF SUPPLY

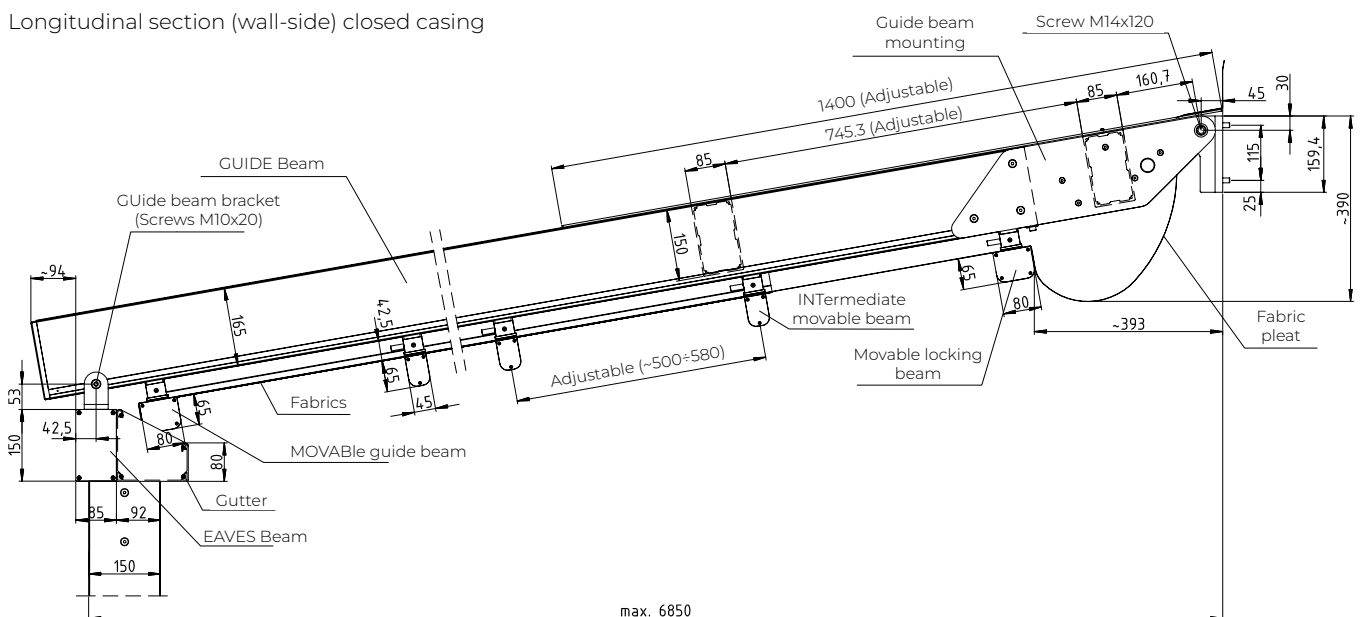
Alubond panel dimensions calculated using the formula:

Width = D-2 mm

Projection= Number of moving bars (65x45)*60+730 mm

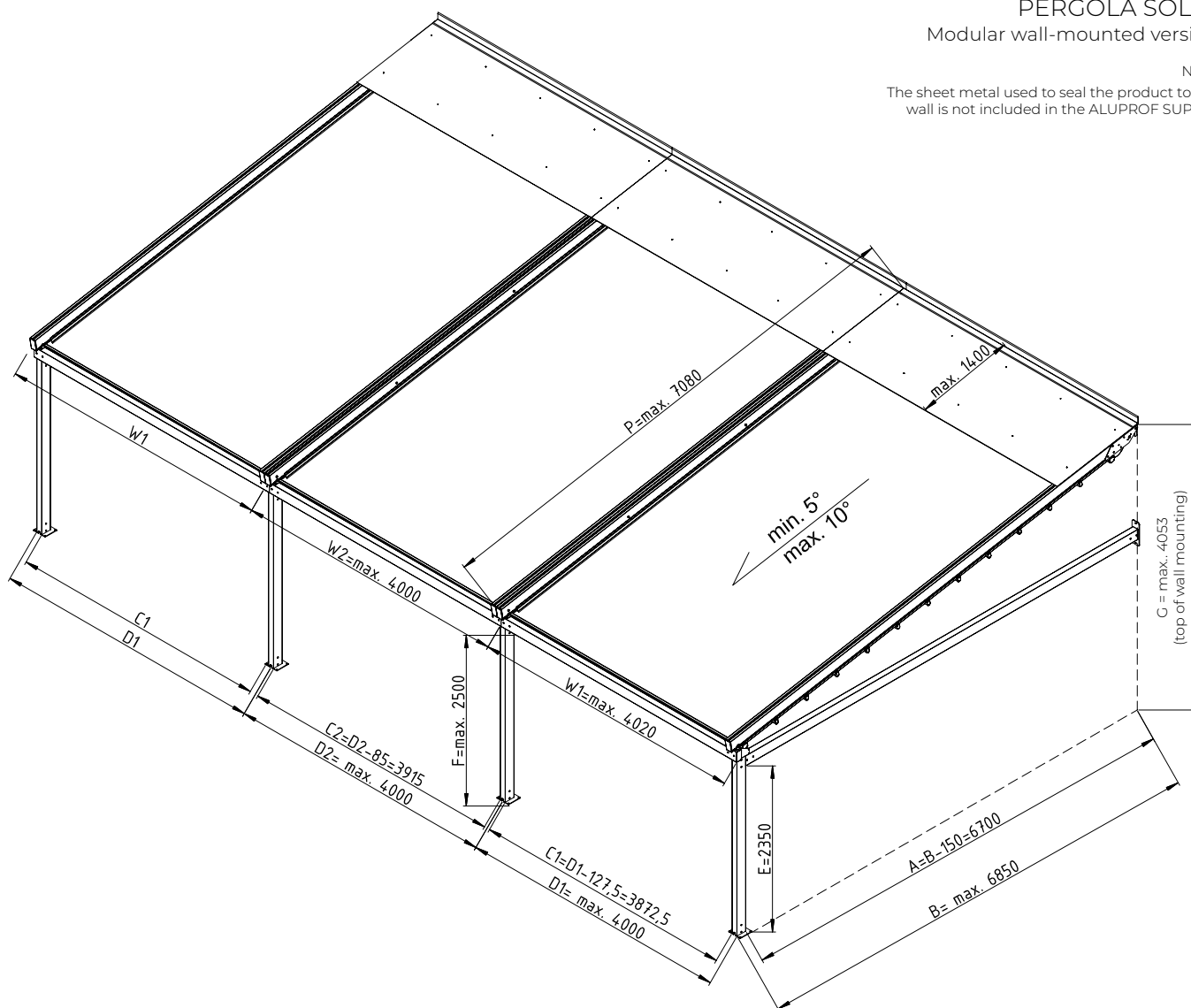


Longitudinal section (wall-side) closed casing

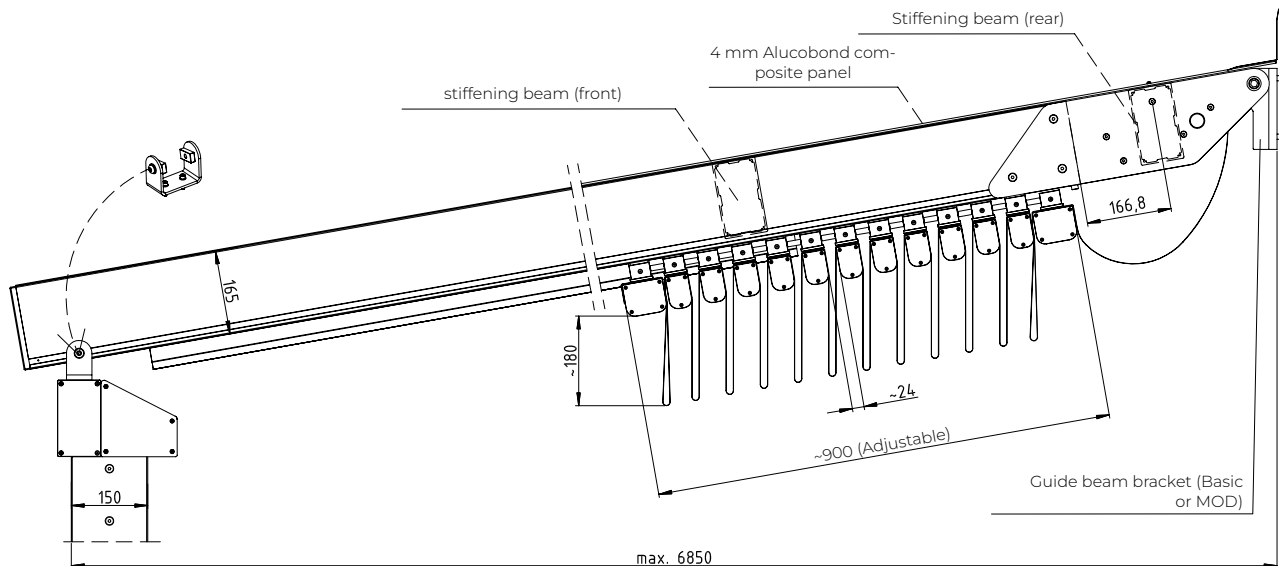


PERGOLA SOLID
Modular wall-mounted version

Note:
The sheet metal used to seal the product to the wall is not included in the ALUPROF SUPPLY



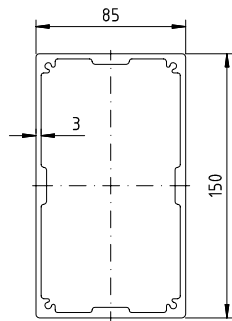
Longitudinal cross-section (wall-mounted) open cladding



PERGOLA SOLID

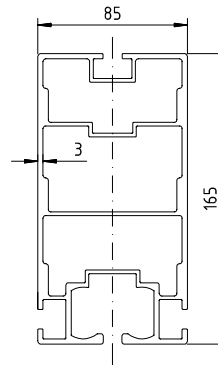
Cross-sections of profiles and gutters

Cross-section of post/
transom (85x150)



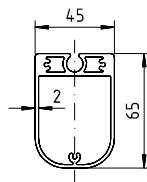
Material: EN AW6060 T66
 Static characteristics:
 Ground: 4.83 kg/m
 Country: 17.89 cm²
 J1 215.9 cm⁴
 J2 564.44 cm⁴

Cross-section of a
carriageway beam
(85x165)



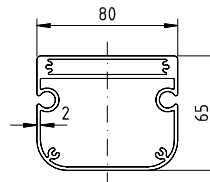
Material: EN AW6060 T66
 Static characteristics:
 Ground: 6.96 kg/m
 Country: 25.77 cm²
 J1 267.79 cm⁴
 J2 746.66 cm⁴

Cross-section of a roof intermedi-
ate beam (45x65)



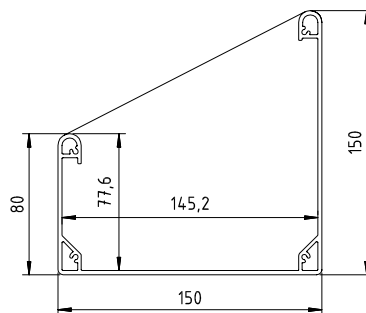
Material: EN AW6060 T66
 Static characteristics:
 Ground: 1.73 kg/m
 Country: 6.41 cm²
 J1 16.87 cm⁴
 J2 31.54 cm⁴

Cross-section of roof edge
beam (80x65)



Material: EN AW6060 T66
 Static characteristics:
 Ground: 2.54 kg/m
 Country: 9.40 cm²
 J1 81.37 cm⁴
 J2 48.93 cm⁴

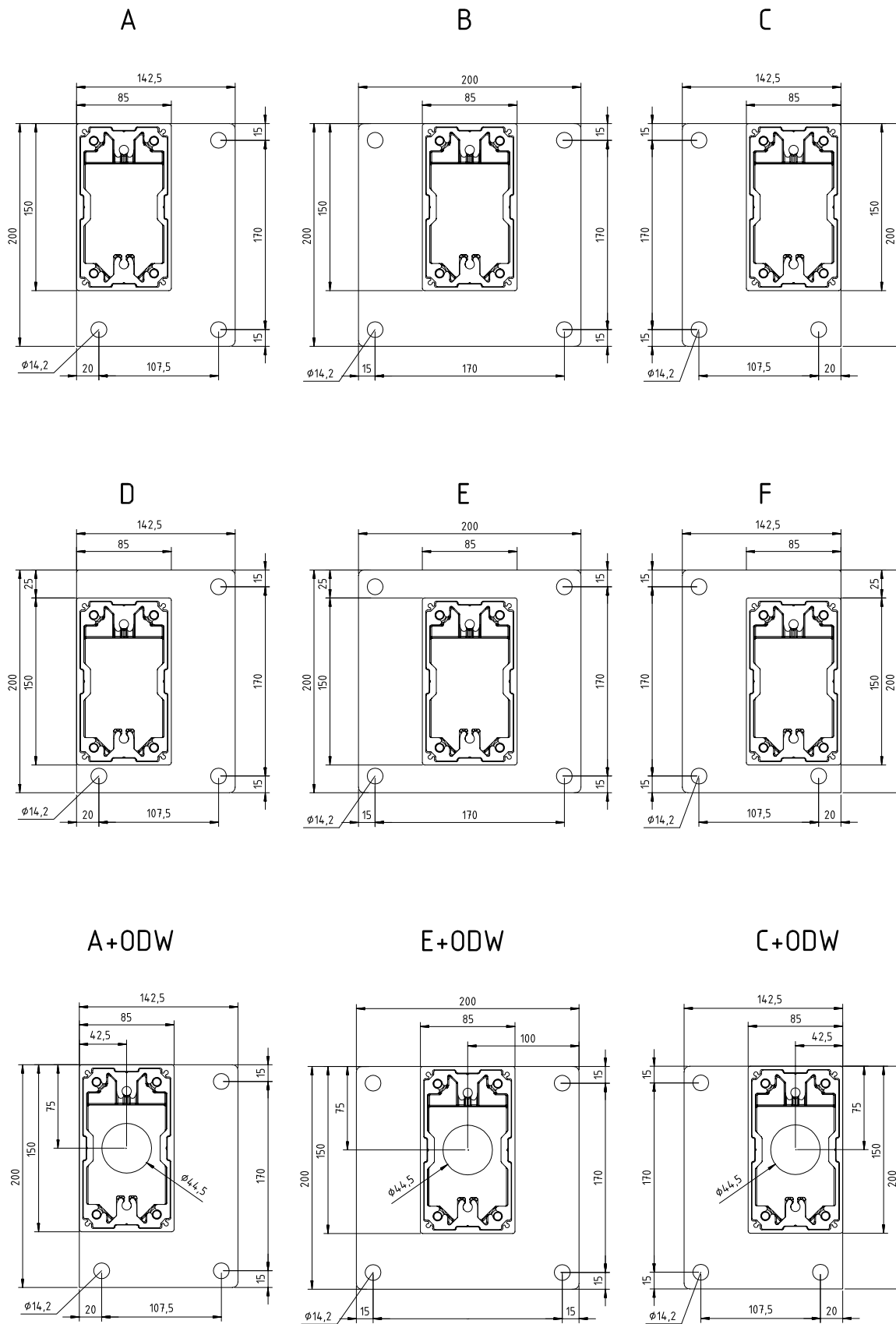
Cross-section of the gutter
(150x150)



Material: EN AW6060 T66
 Ground: 31 kg/m

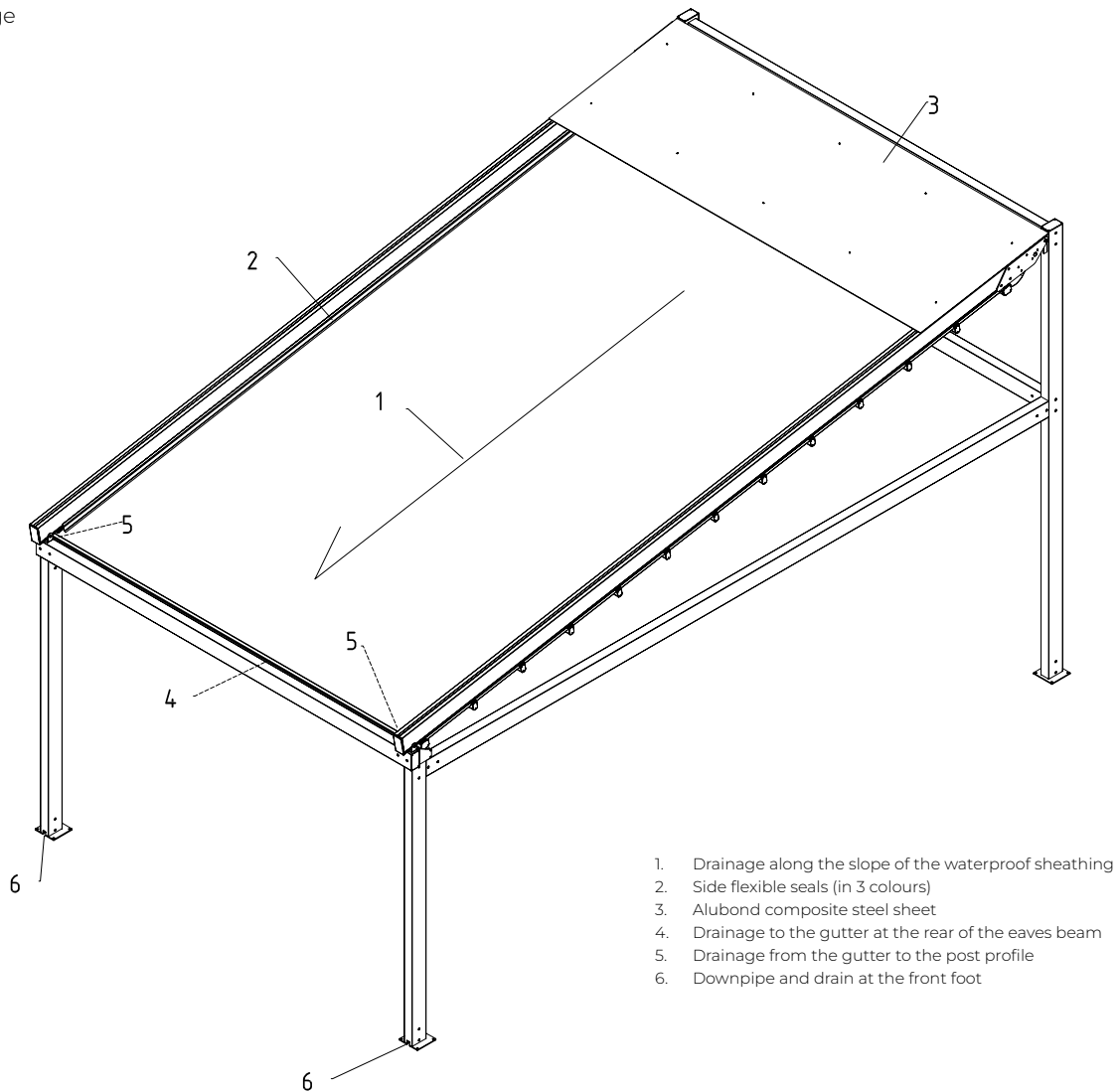
PERGOLA SOLID
Base plates without drainage

Note:
Each type of foot can be manufactured in a version with a drain. Feet A, C, E are also available in a version with drainage to the underside of the foot as: A+ODW, C+ODW, E+ODW.



Feet made of 8 mm thick EN AW-5754 aluminium sheet, powder-coated

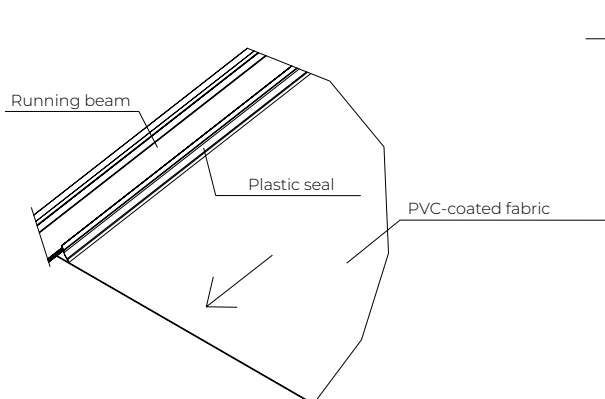
PERGOLA SOLID
Pergola drainage



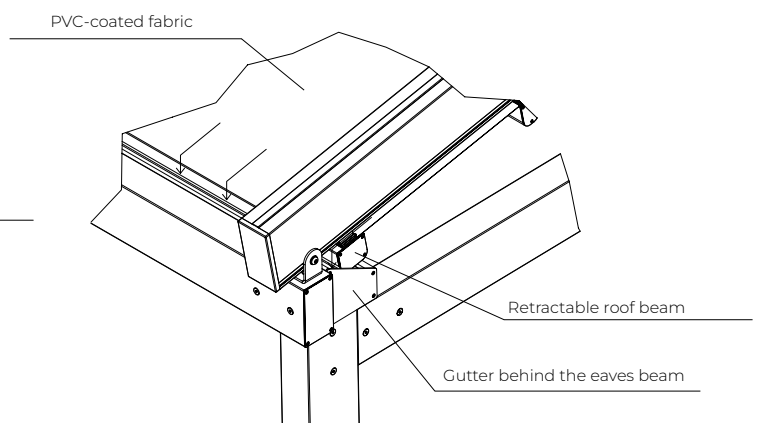
1. Drainage along the slope of the waterproof sheathing
2. Side flexible seals (in 3 colours)
3. Alubond composite steel sheet
4. Drainage to the gutter at the rear of the eaves beam
5. Drainage from the gutter to the post profile
6. Downpipe and drain at the front foot

Two front posts with water drainage required

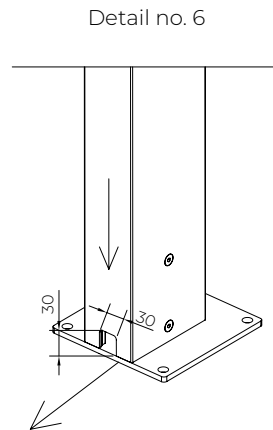
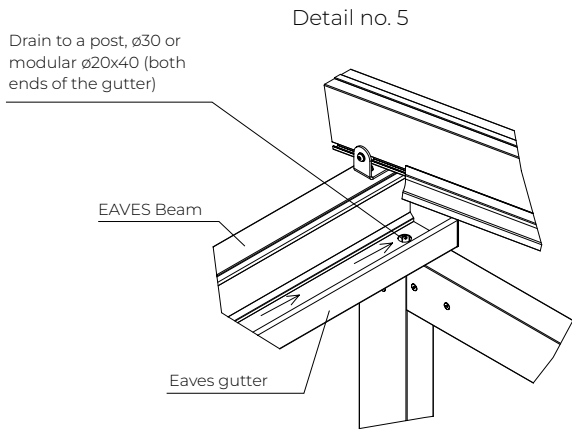
Detail no. 2



Detail no. 4



PERGOLA SOLID
Pergola drainage

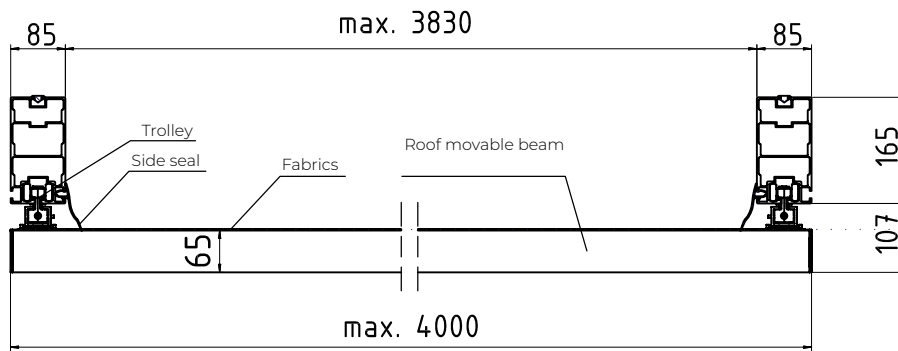


Note:
Gutter without pre-drilled holes – drill holes and fix with ST4.8x13 screws at intervals of approx. 50 cm

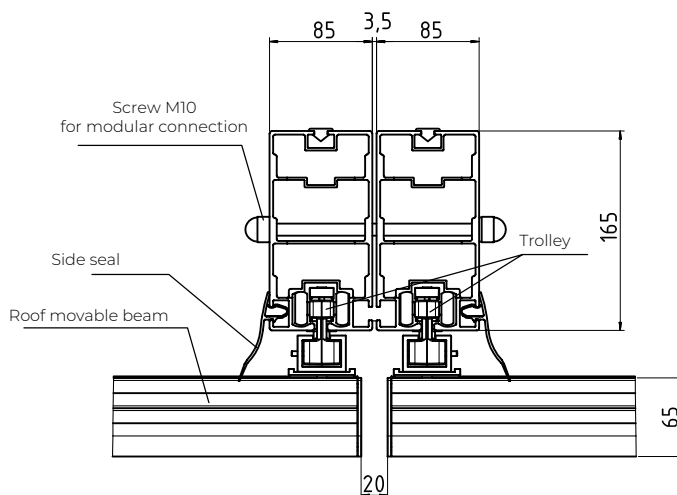
Drainage along the post profile and out through a hole in the post wall.

PERGOLA SOLID
Roof cross-sections

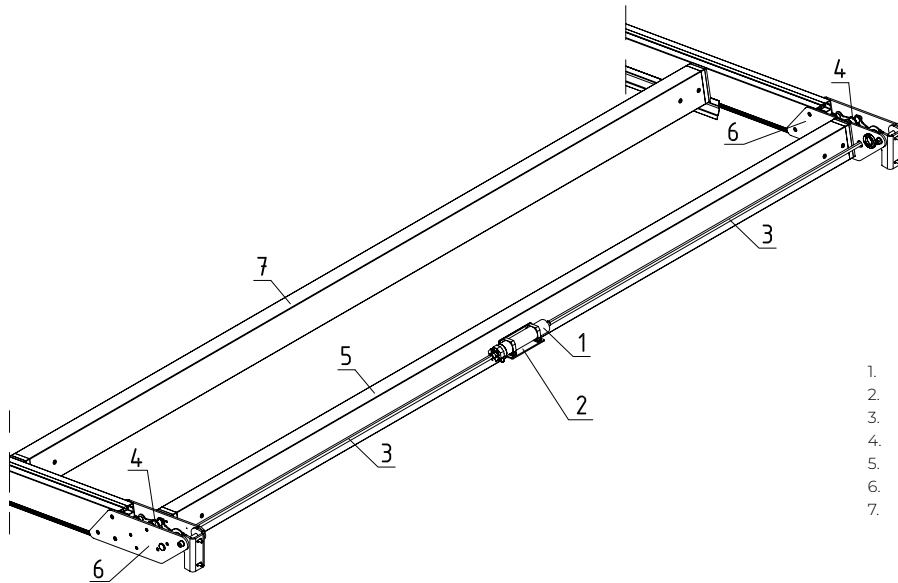
Roof cross-section
(Single version)



Roof cross-section
(Modular version)



PERGOLA SOLID
Plane skin drive unit



1. Motor GEIGER GJ56 (2 x 10 Nm)
2. Motor mounting
3. Square bar 12 (right/left)
4. Drive transmission
5. Stiffening beam (rear)
6. Guide beam mounting
7. stiffening beam (front)

PERGOLA SOLID
Approximate heights of Solid pergolas

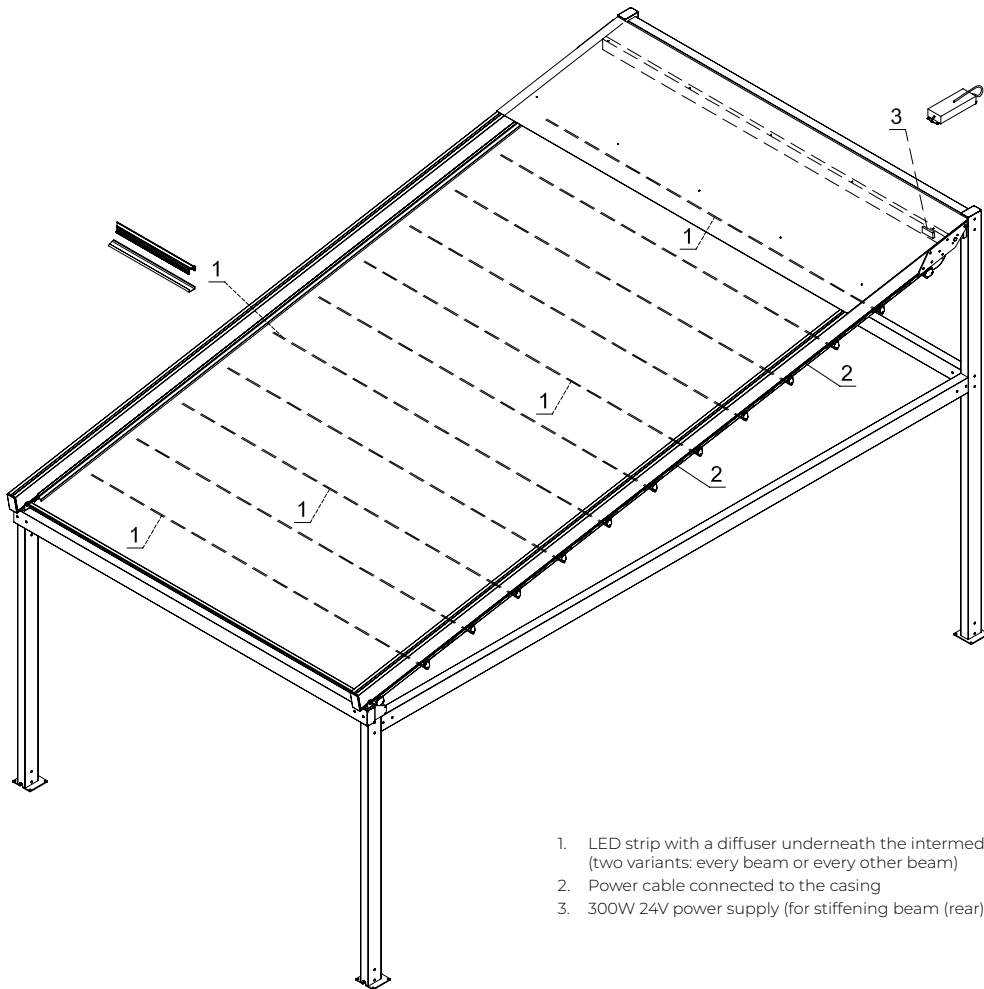
SOLID freestanding pergola						
Pergola projection	4000 mm		5000 mm		7000 mm	
Roof pitch	5 steps	10 steps	5 steps	10 steps	5 steps	10 steps
Clear height at the front	2500 mm					
Total height at the top*	3188 mm	3528 mm	3275 mm	3704 mm	3450 mm	4057 mm

*- approximate dimensions – subject to manufacturing technology

SOLID wall-mounted pergola						
Pergola projection	4000 mm		5000 mm		7000 mm	
Roof pitch	5 steps	10 steps	5 steps	10 steps	5 steps	10 steps
Clear height at the front	2500 mm					
Total height at the top*	3203 mm	3559 mm	3209 mm	3735 mm	3465 mm	4088 mm

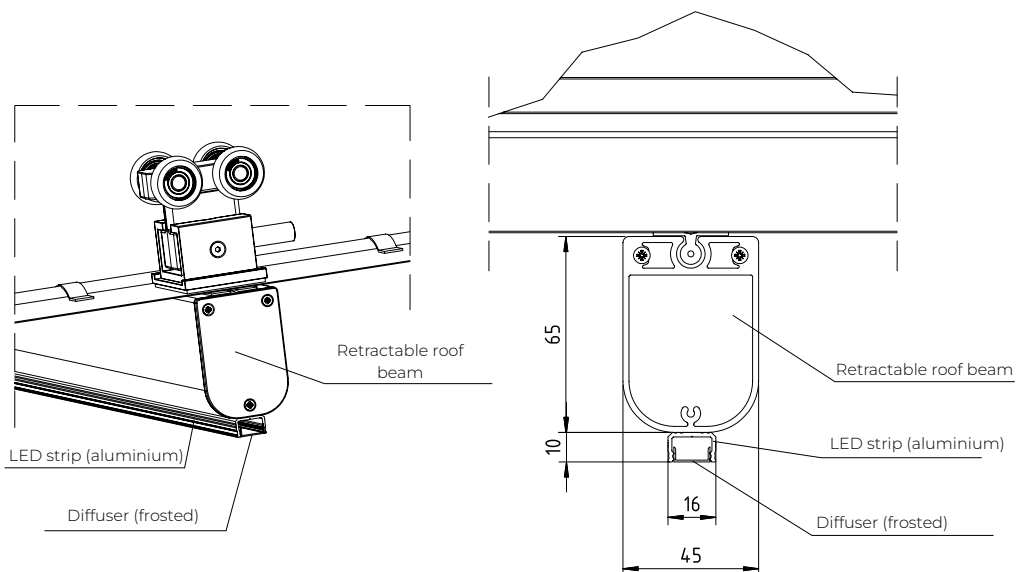
*- approximate dimensions – subject to manufacturing technology

SOLID - LED strip positioning	
Each beam	Every other beam
Each narrow movable beam 45x65mm	First narrow beam 45x65 mm from the gutter and every second beam thereafter



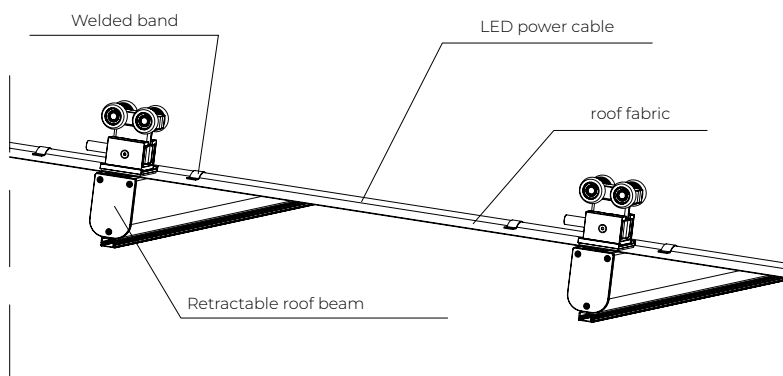
1. LED strip with a diffuser underneath the intermediate beams (two variants: every beam or every other beam)
2. Power cable connected to the casing
3. 300W 24V power supply (for stiffening beam (rear))

Detail no.1

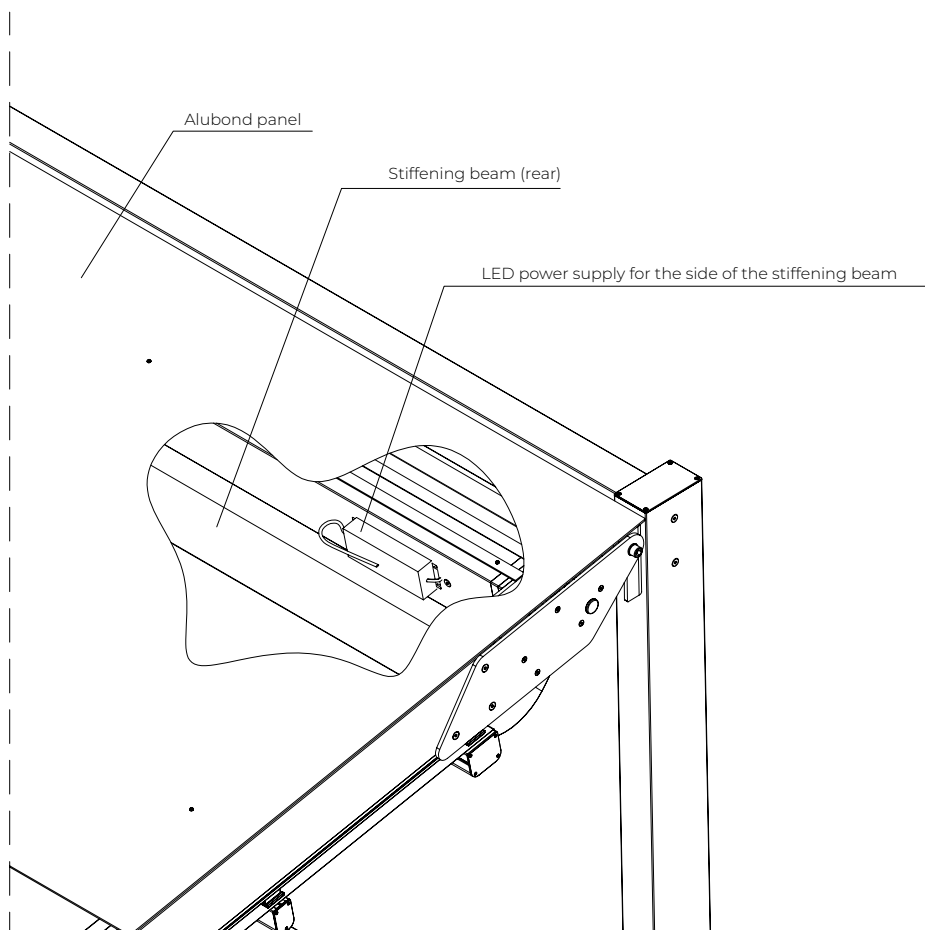


PERGOLA SOLID

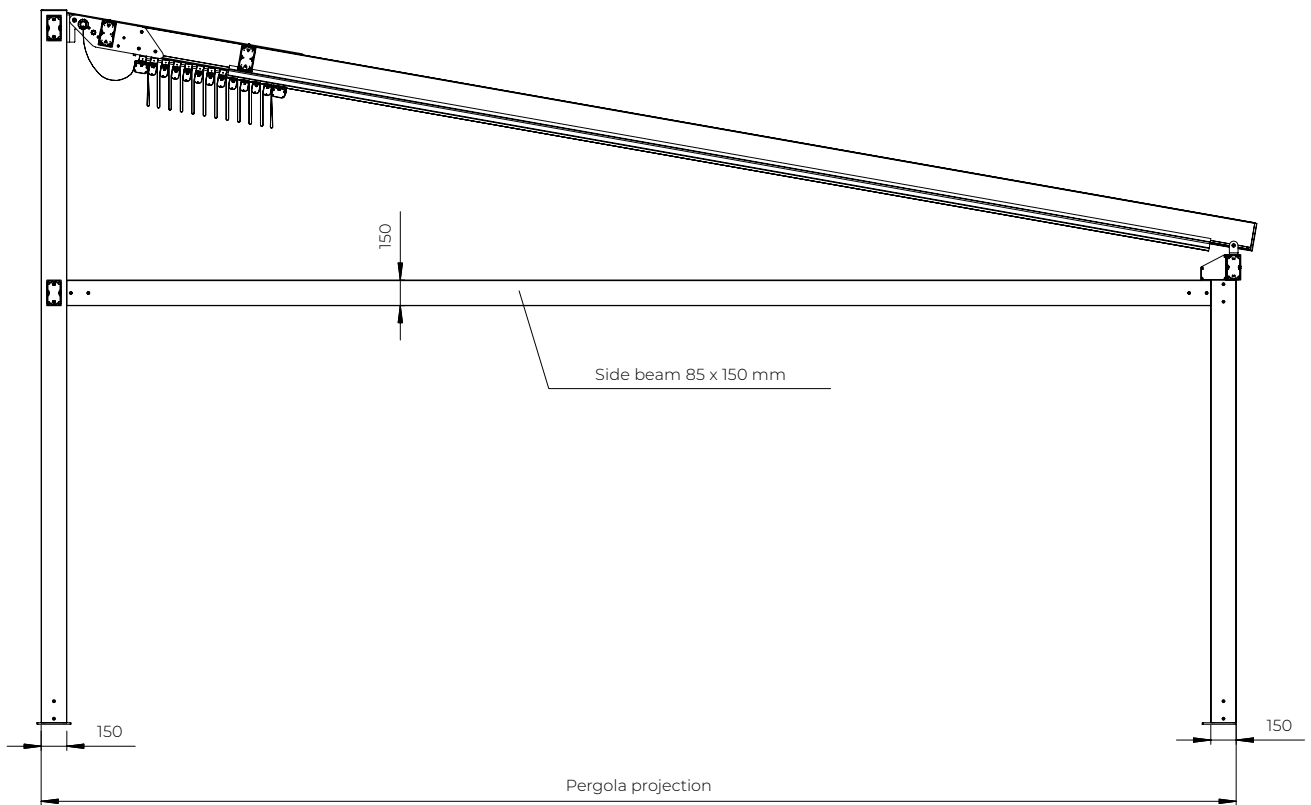
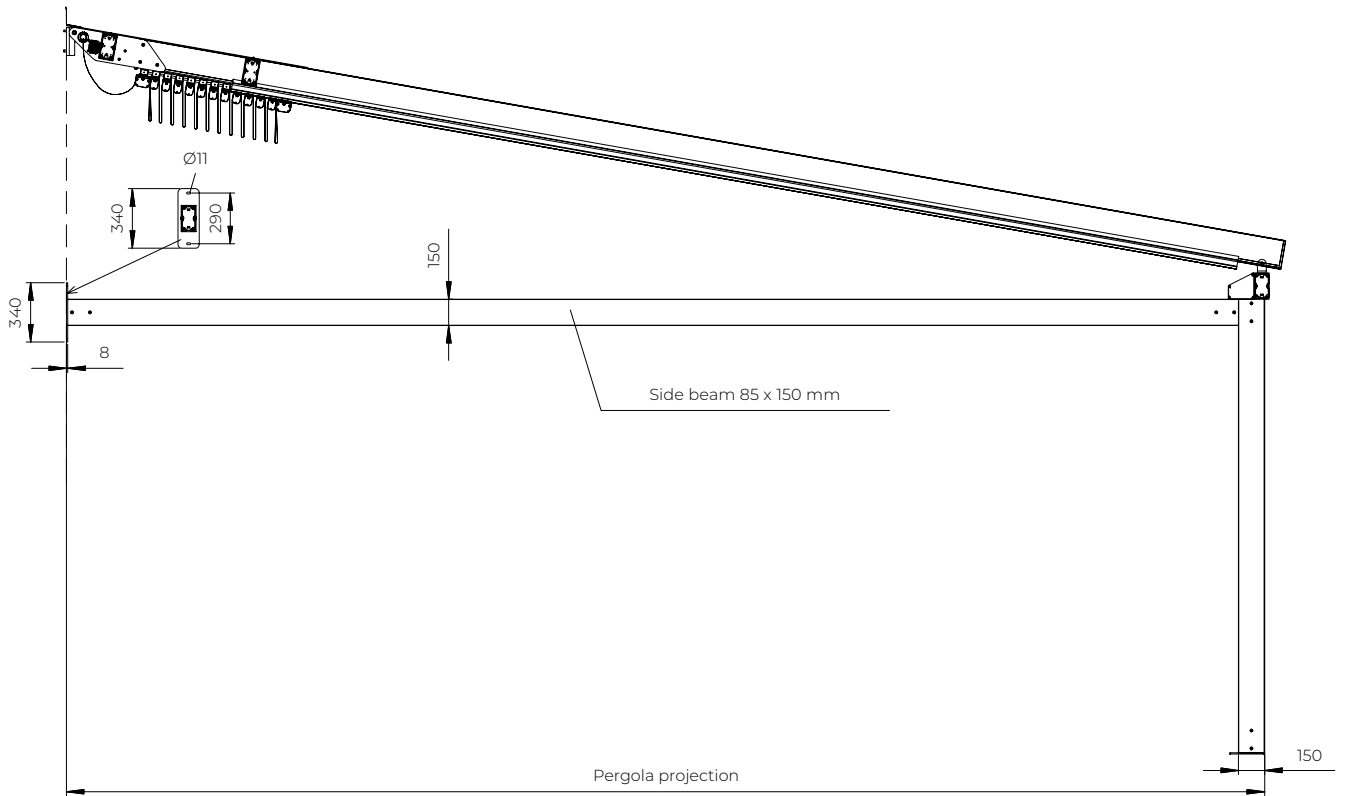
Detail no. 2



Detail no. 3

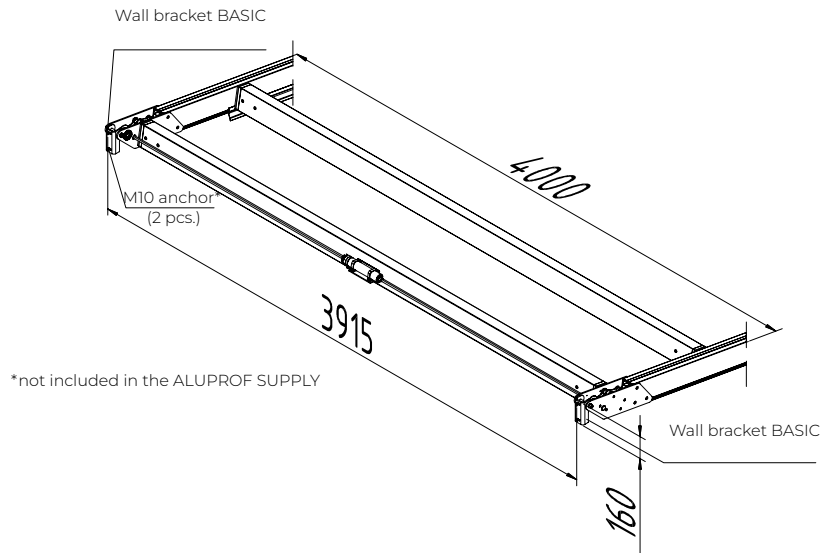


PERGOLA SOLID
Location of side bolt

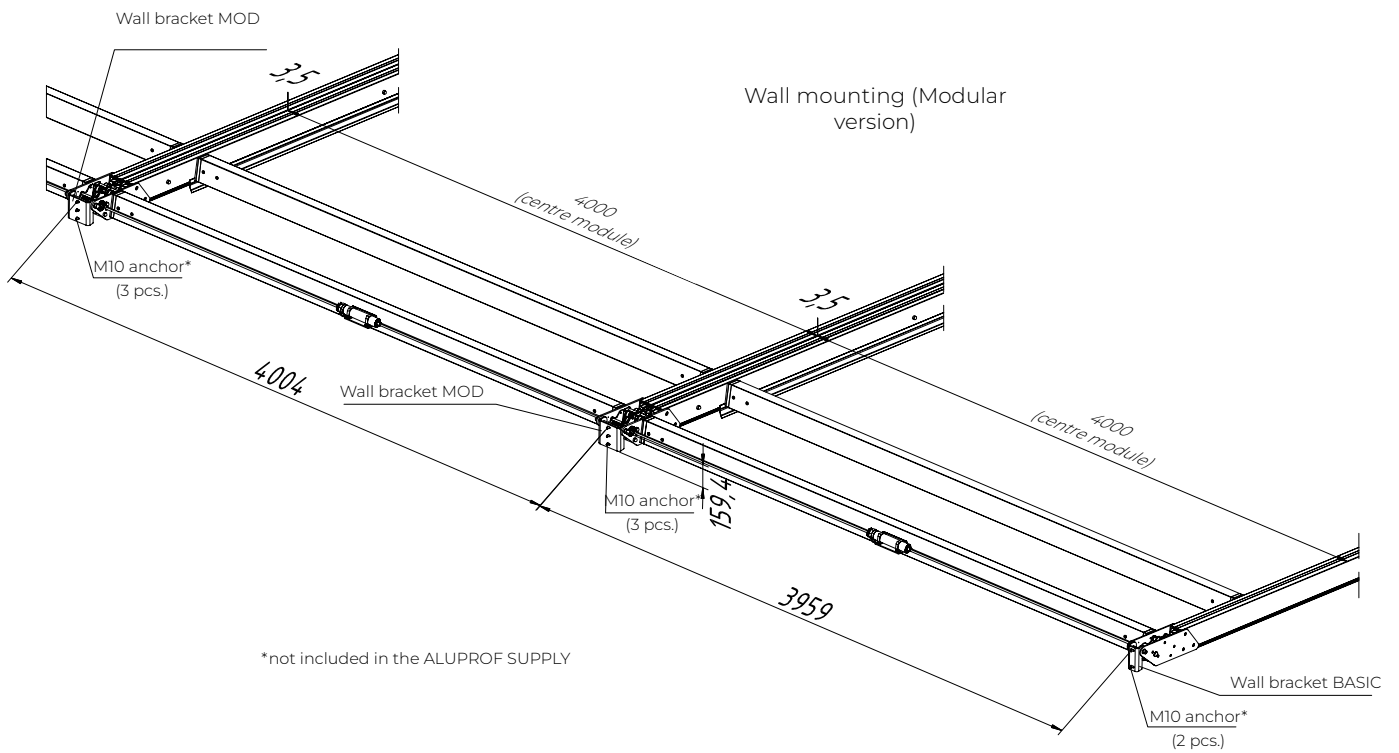


PERGOLA SOLID
Wall mounting

Wall mounting (Single version)

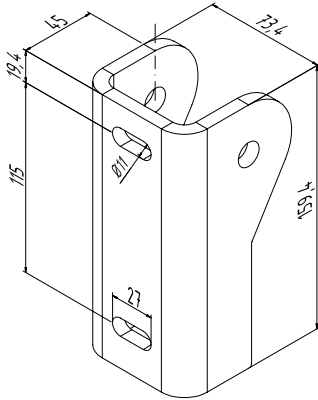


Wall mounting (Modular version)



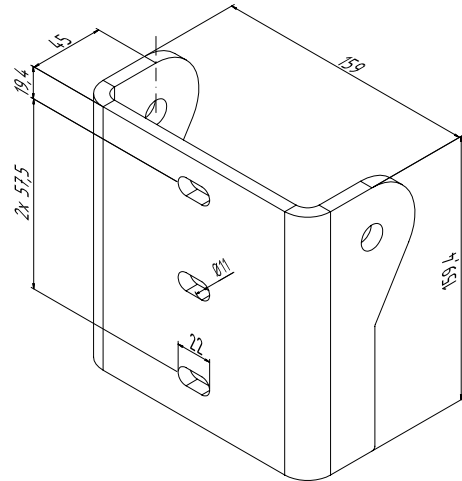
PERGOLA SOLID
Wall mounting

Wall bracket BASIC (single)



S235 steel, 8 mm thick

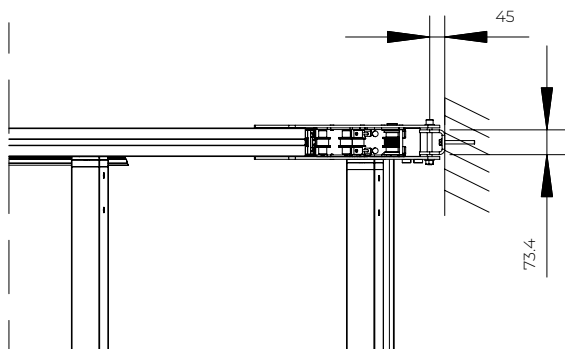
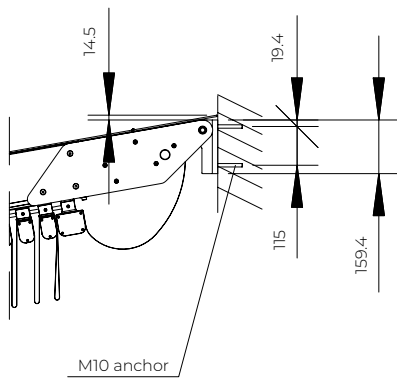
Wall bracket MOD (modular)



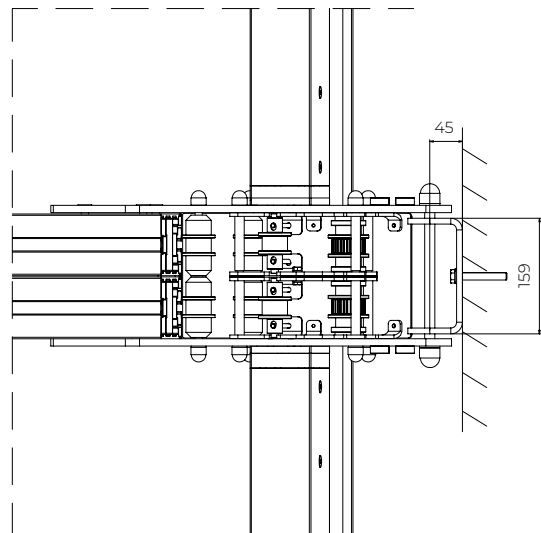
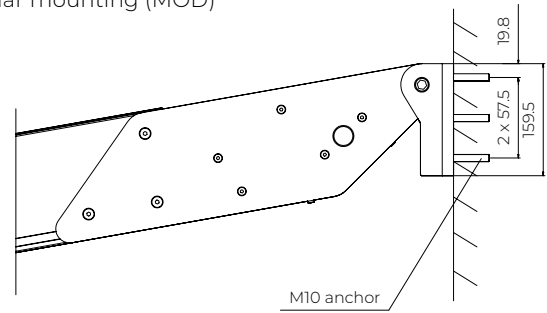
S235 steel, 8 mm thick

The number of anchors required depends on the type of substrate.
Use at least 2 anchors in the outer holes

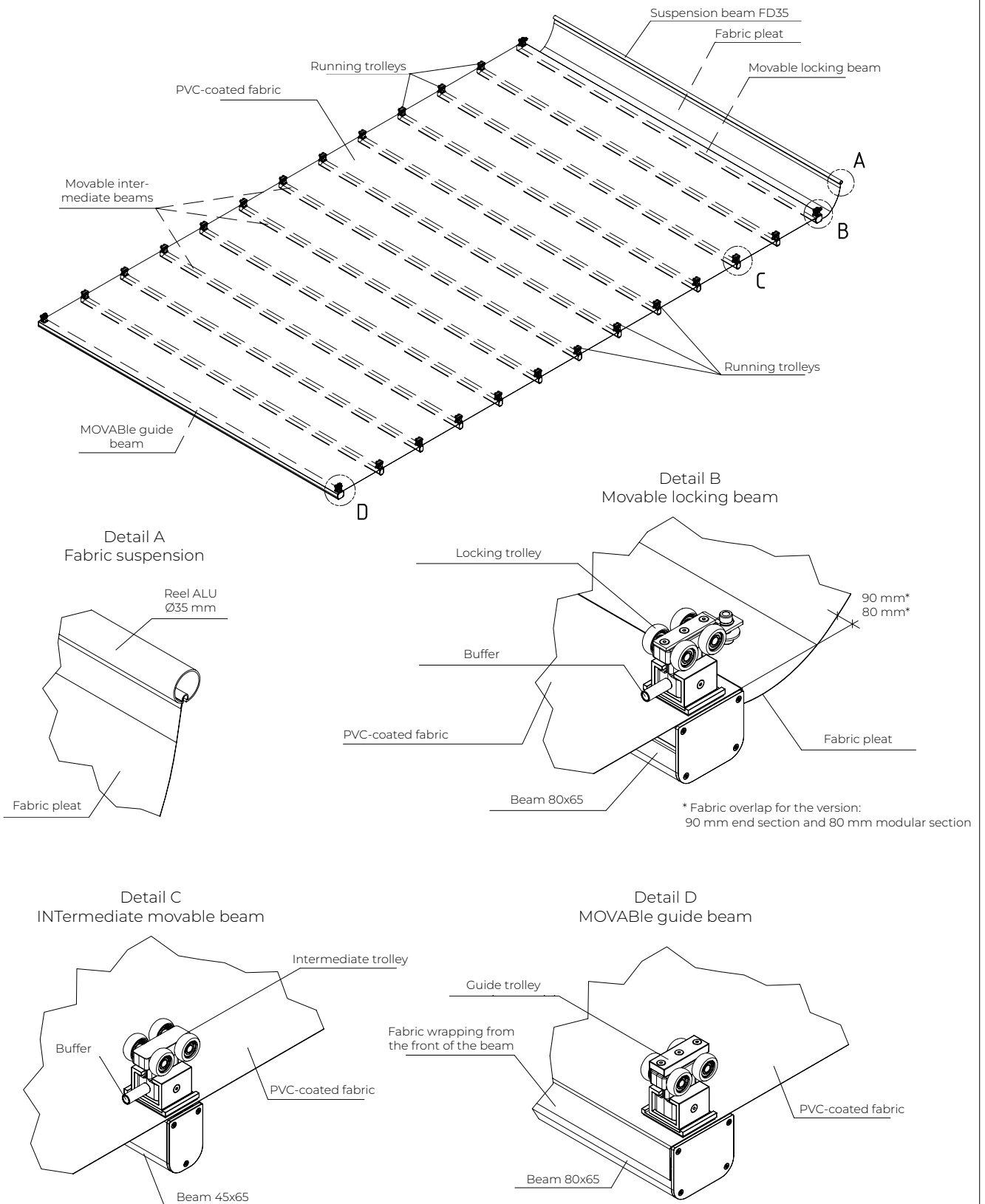
PERGOLA SOLID
Single mounting (Basic)



PERGOLA SOLID
Modular mounting (MOD)



PERGOLA SOLID
Roof cladding



SYSTEM SLIDE

SYSTEM SLIDE

External sunshade in the form of a system of segmented sliding panels, suspended on carriages from the top rail and guided in the bottom rail, filled with horizontal slats or fabric. Mounted vertically (with horizontally mounted guides) to the supporting structure, in front of a window, or within an opening in the external surface of the building. The system is not motorised.

APPLICATION:

- Sun protection and surface shading
- Immediate division of space

PRODUCT CHARACTERISTICS:

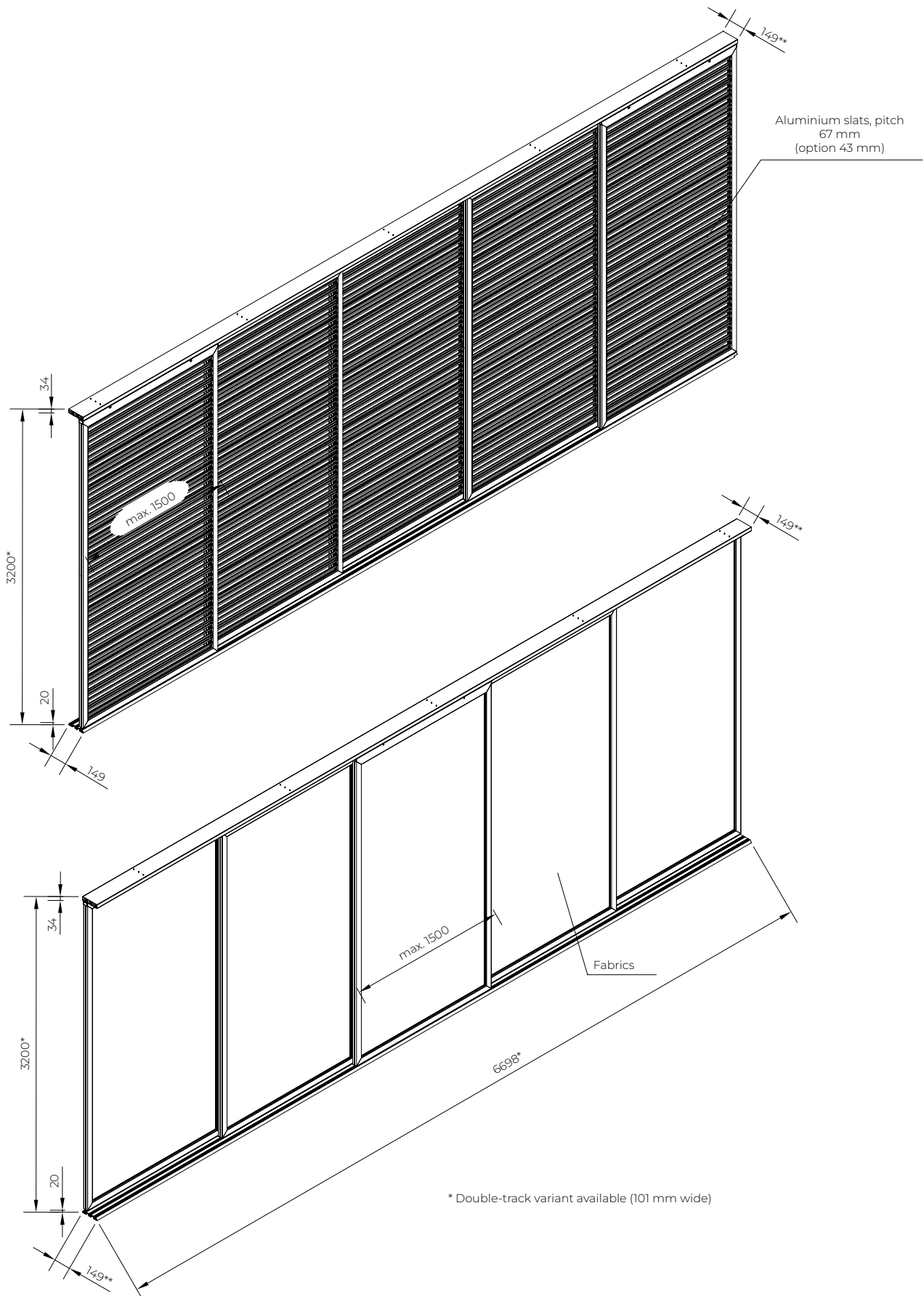
- Lightweight and durable aluminium sliding frames suspended on roller carriages
- Two frame filling options available: aluminium slats or fabric (Serge600 or Serge 1%).
- Fixes with a fixed angle
- Use of extruded aluminium guides allowing up to 3 frames to be guided in parallel next to each other (double and triple guides available)
- The trolley bodies, made as die-castings, each contain 4 ball-bearing wheels.
- They limit sunlight and provide privacy from view by passers-by.
- The Sunbreaker filling has a fixed slat angle.
- Suspension on ball-bearing trolleys allows for easy movement and stopping in any position.
- Does not emit toxic substances during operation.
- The system does not require a power supply.
- Requires a load-bearing and rigid substructure for installation (top suspension).

TECHNICAL PARAMETERS:

- Total height (with guides) 3200 mm
- Total length (of guides) 6698 mm
- Maximum frame width 1500 mm
- Maximum frame height 3125 mm
- Upper guide rail dimensions (running track) 149x34 mm (triple) or 101x34 mm (double)
- Lower guide rail dimensions (guide track) 149x20 mm (triple) or 101x20 mm (double)
- Number of tracks in a single guide: 3 or 2
- Filling with slats or fabric
- Wind resistance class 6 (400 Pa)
- Slats with a cross-section of 52x10 mm, inclined at 55 degrees from the horizontal, with a pitch of 67 mm (or optionally 43 mm)

THE TOLERANCE FOR VERTICAL STRAIGHTNESS OF FABRIC-FILLED FRAME UPRIGHTS IS UP TO 10 mm.

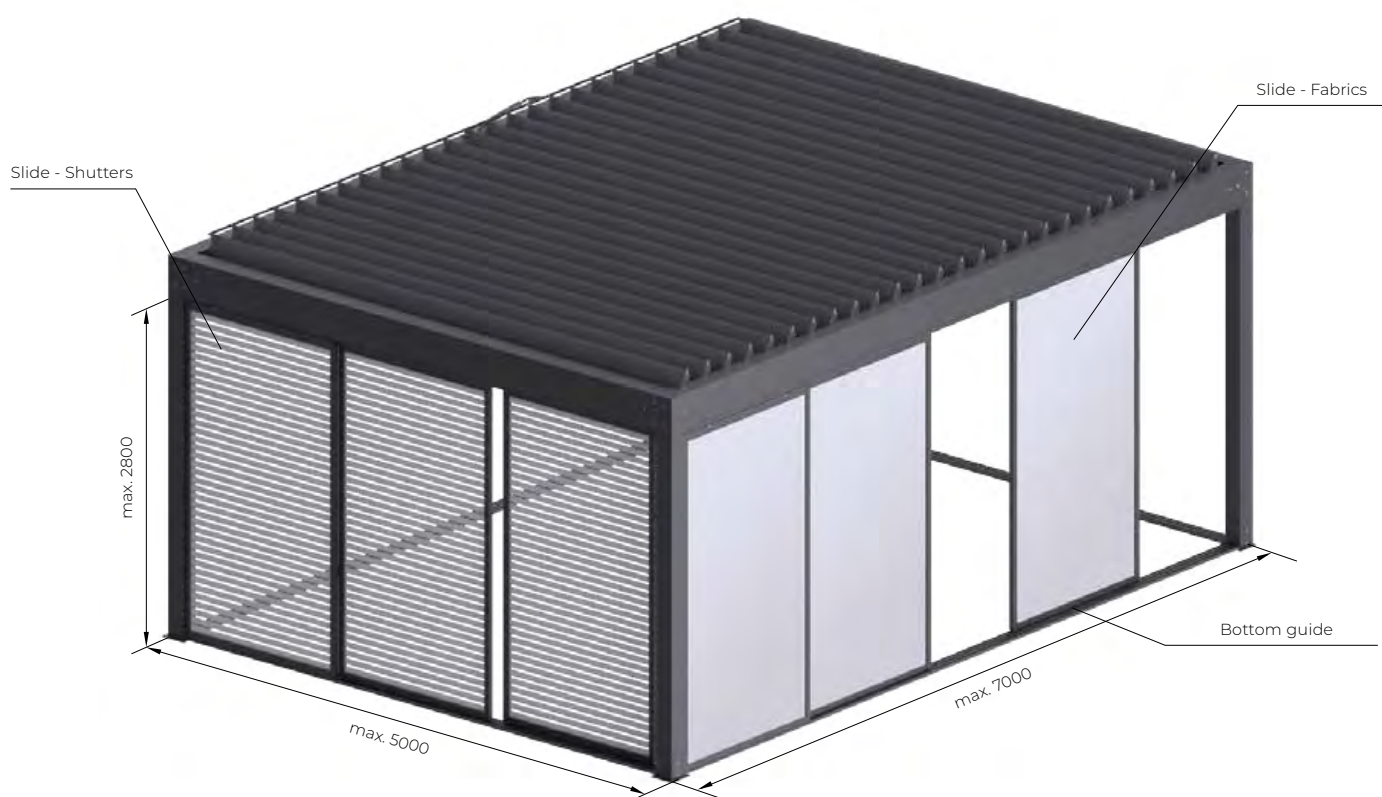
SYSTEM SLIDE

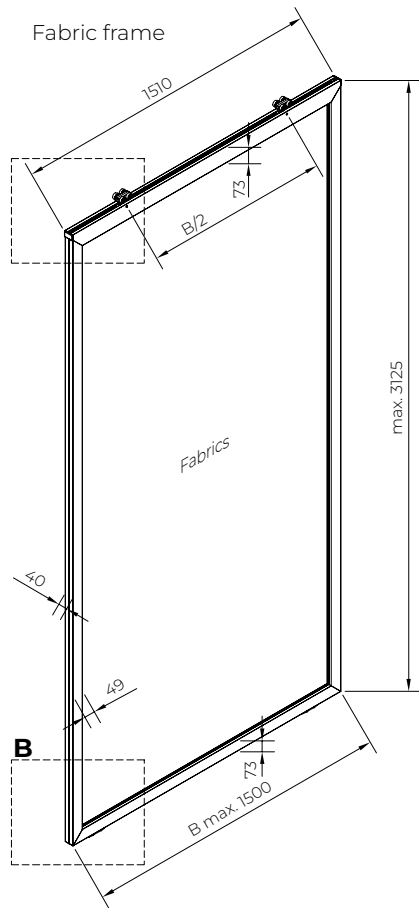


SYSTEM SLIDE

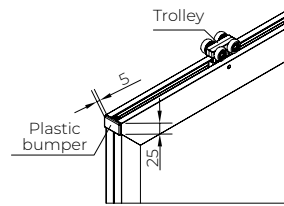
Slide system side panels

Note:
Max. 5 Slide frames on the side of a 7 m long pergola.

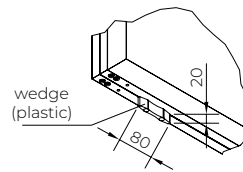




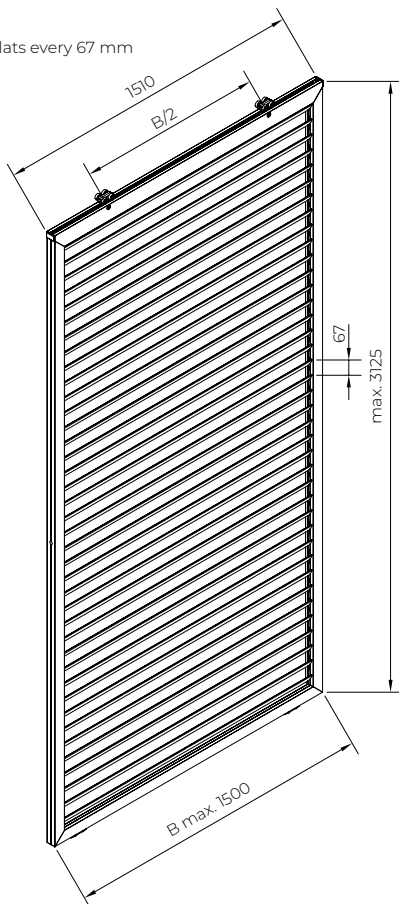
Detail A



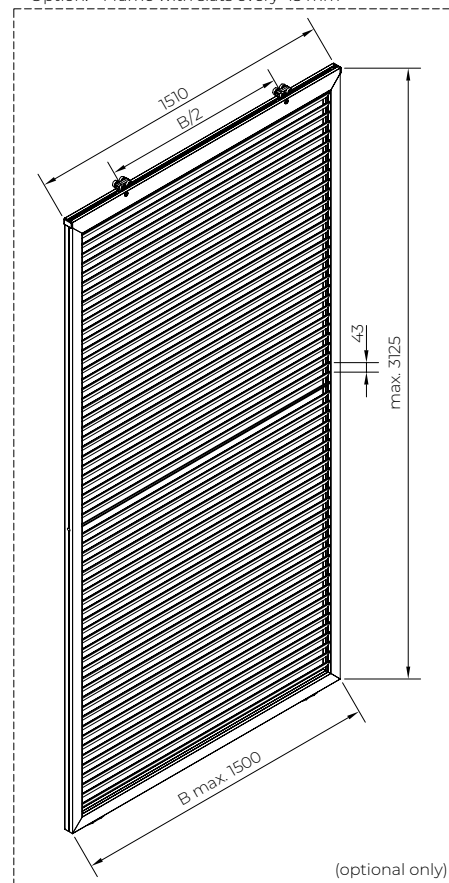
Detail B



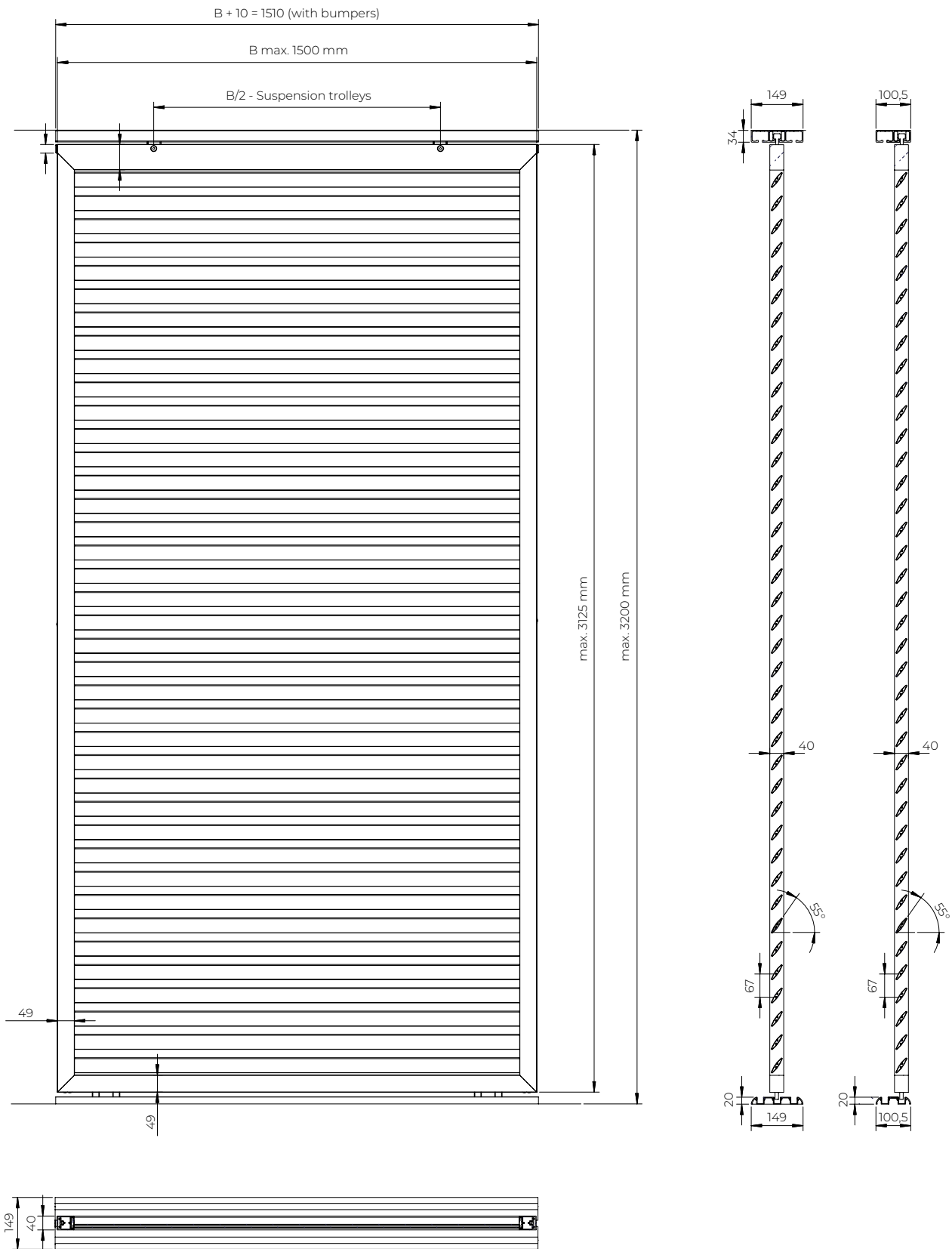
Frame with slats every 67 mm



Option: - Frame with slats every 43 mm

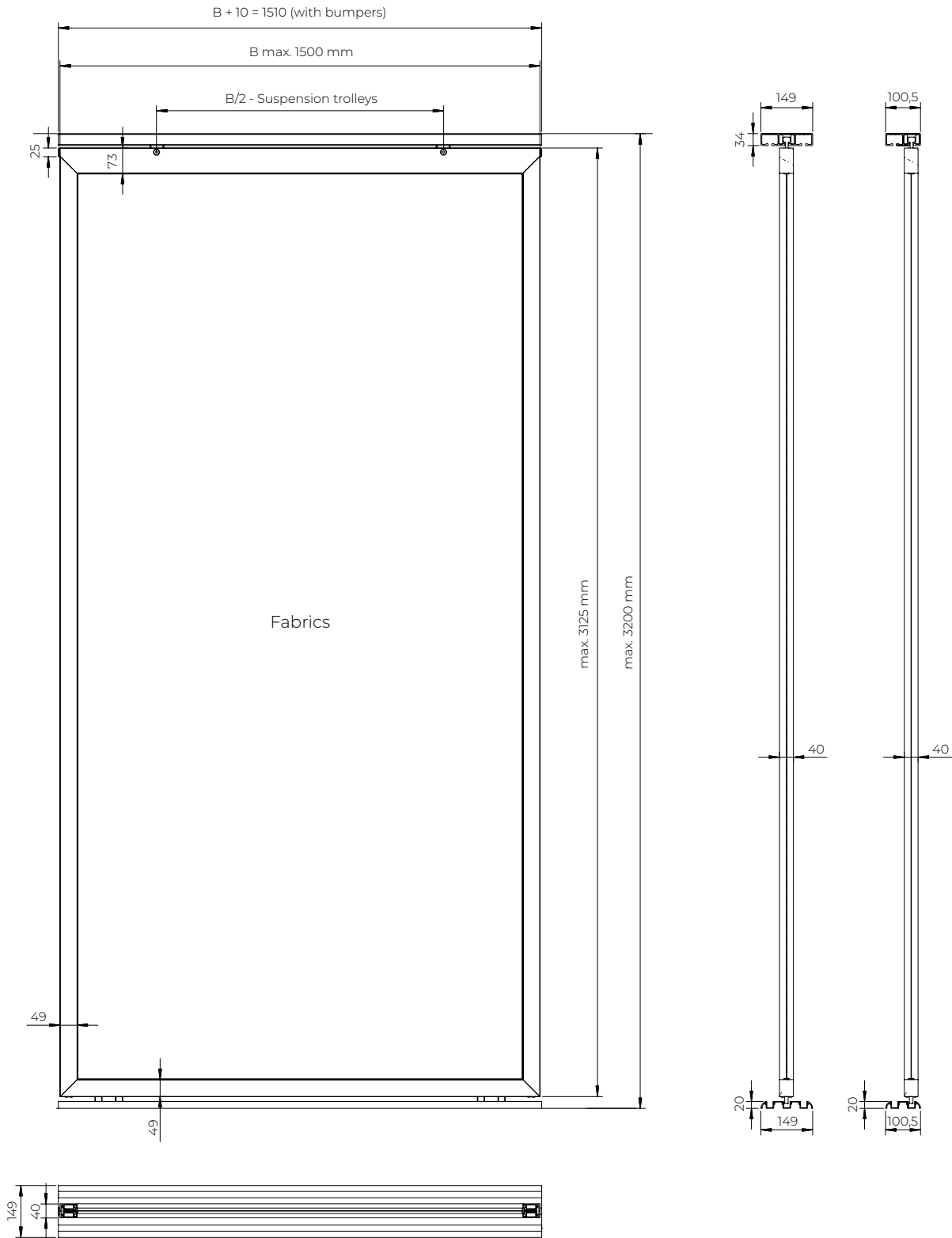


SYSTEM SLIDE
Feather filling



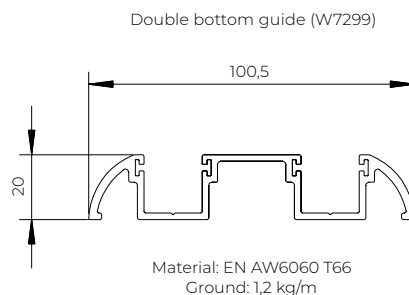
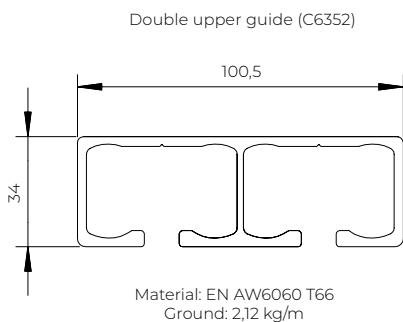
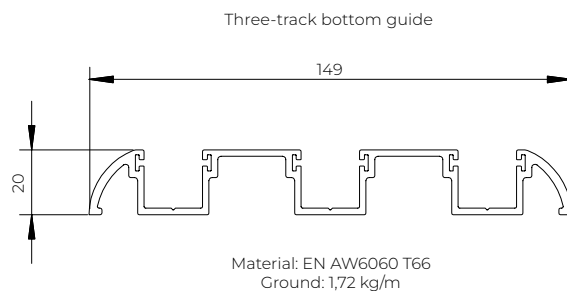
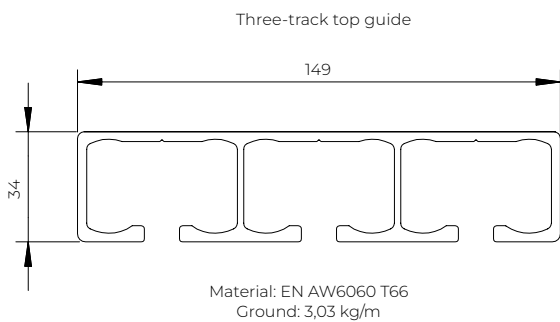
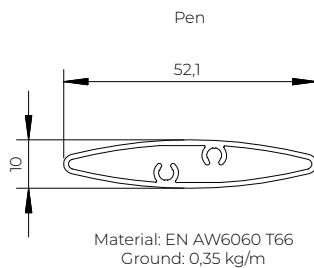
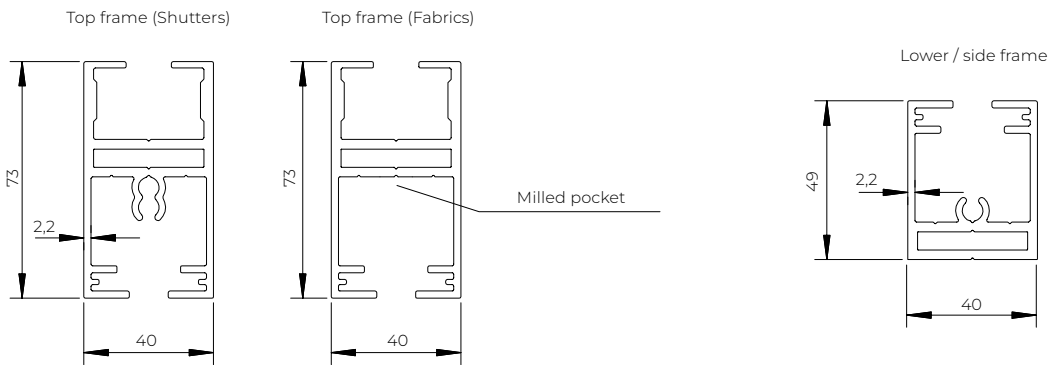
SYSTEM SLIDE
Fabric filling

Note:
The fabric may exhibit tension variations in the case of wider frames

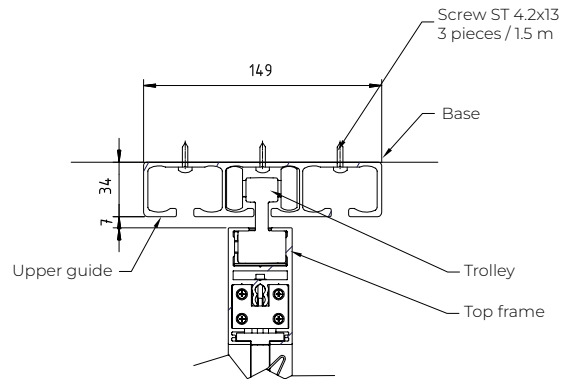


SYSTEM SLIDE

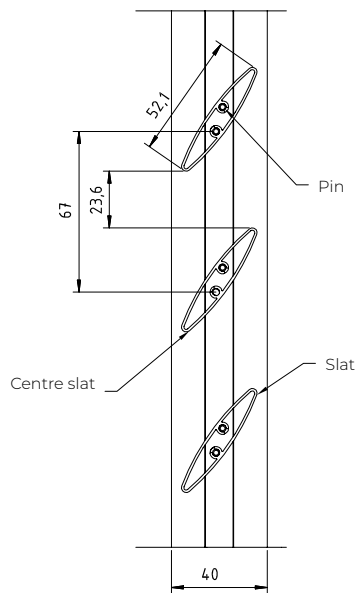
Profile cross-sections



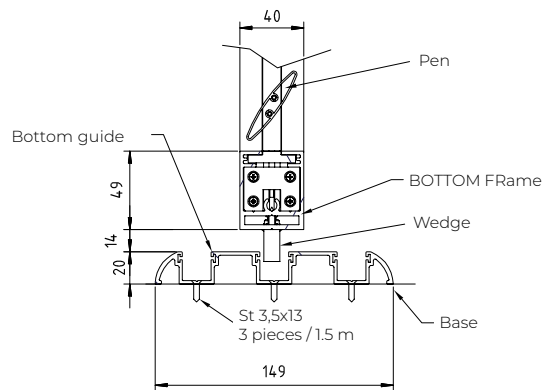
Detail of upper rail mounting



Blade arrangement



Details of bottom rail fixing



For Slide guides, select posts with feet that are flush with the post. Otherwise, you will need to trim a section of the lower guide to the thickness of the foot plate – there is also a risk of collision with the foot anchor.

MB-OpenSlide

SYSTEM MB - OpenSlide

The MB-OpenSlide system is designed for enclosing the side walls of pergolas or other unheated structures using sliding glass panels, providing effective protection against the elements.

ZASTOSOWANIE:

- Enclosing the side walls of a pergola or other unheated structures
- Immediate division of space

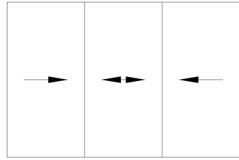
PRODUCT CHARACTERISTICS:

- The enclosures consist of 3 to 10 sliding segments made of tempered glass, which move along 3, 4 or 5-track guides
- The segments can be opened in two ways: either all segments slide to one side, left or right, or they slide from the centre of the wall to the left and right
- The enclosure has been designed to minimise the number of aluminium profiles and accessories required for installation, thereby eliminating labour-intensive processing and making prefabrication quick and easy
- The system solutions allow for the compensation of deflections caused by elements located above the sliding structure.
- The system is equipped with runners allowing vertical adjustment of the sash, handles: solid – adhesive-mounted on the glass or through-type fixed to the glass, and a surface-mounted lock fixed to the lower sash profile
- The MB-OpenSlide system offers both frameless and framed labyrinth connections between the sliding sashes. Rainwater is drained from the bottom guide via a side drainage system on both sides
- Frameless panels give sliding segments a particularly elegant appearance and maximum transparency. They are made from 12 mm thick tempered glass
- The visible widths of the top guide profiles are 50 mm, the mullions 30 mm, the labyrinth ~31 mm, and the movable mullion connection ~71 mm
- 19 mm high rail guides meet the safety criteria for kerbs on pedestrian walkways

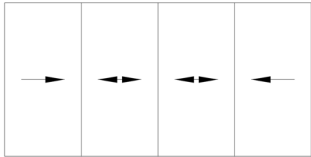
TECHNICAL PARAMETERS:

- Maximum segment height including top and bottom guides – 2810 mm
- Maximum sash height – 2767 mm
- Maximum sash width: 1200 mm
- Minimum sash width – 800 mm
- Maximum length of a single building segment: 6780 mm
- Recommended Hs : Ls ratio 3 : 1
- Carriages with a load capacity of 80 kg (8H00845X) and 160 kg (8H01383X) per leaf are available
- Filling: 12 mm thick tempered glass

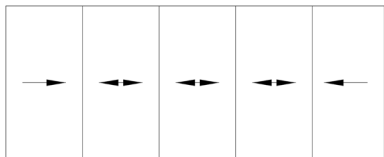
MB - OPENSIDE
Segment dimensions



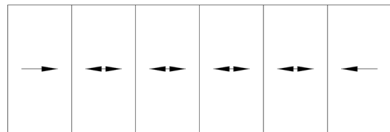
Segments 3-partial:
Width 2380 ÷ 3580 mm
Height 2000 ÷ 2810 mm



Segments 4-partial:
Width 3150 ÷ 4750 mm
Height 2000 ÷ 2810 mm



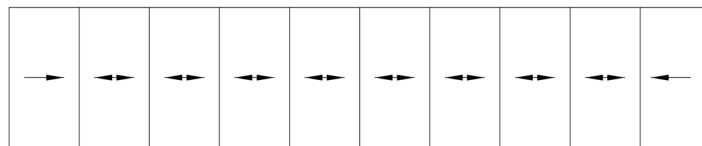
Segments 5-partial:
Width 3920 ÷ 5920 mm
Height 2000 ÷ 2810 mm



Segments 6-partial:
Width 4790 ÷ 7190 mm
Height 2000 ÷ 2810 mm



Segments 8-partial:
Width 6360 ÷ 9560 mm
Height 2000 ÷ 2810 mm

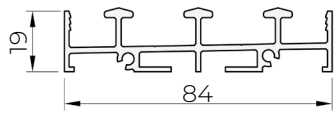


Segments 10-partial:
Width 7930 ÷ 11130 mm
Height 2000 ÷ 2810 mm

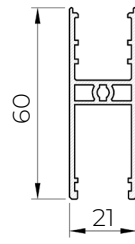


MB - OpenSlide
Profiles - structure

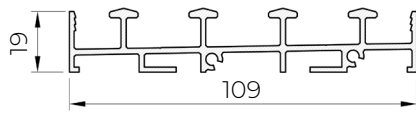
K440573X



K440851X



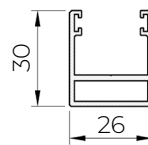
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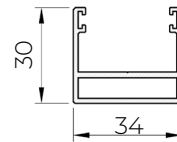
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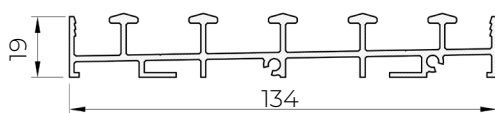
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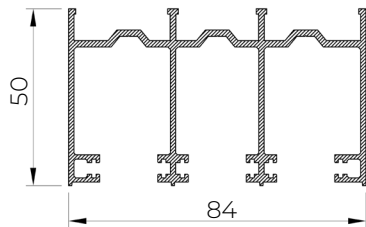
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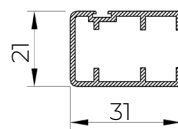
K440575X



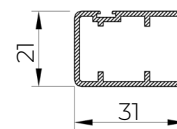
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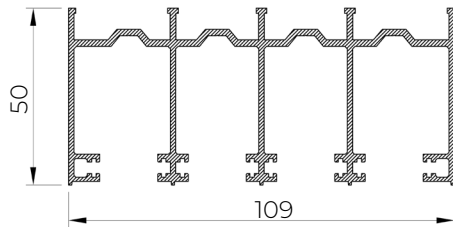
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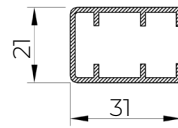
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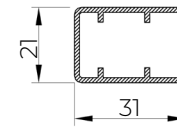
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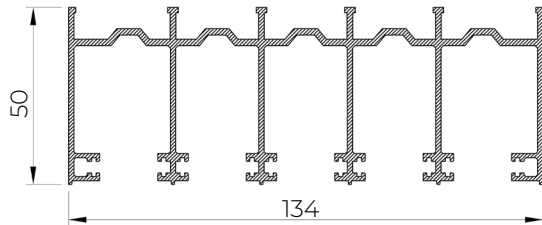
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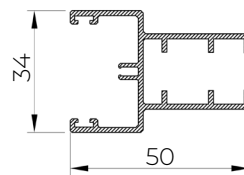
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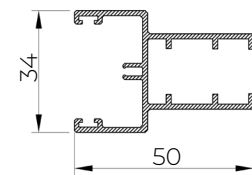
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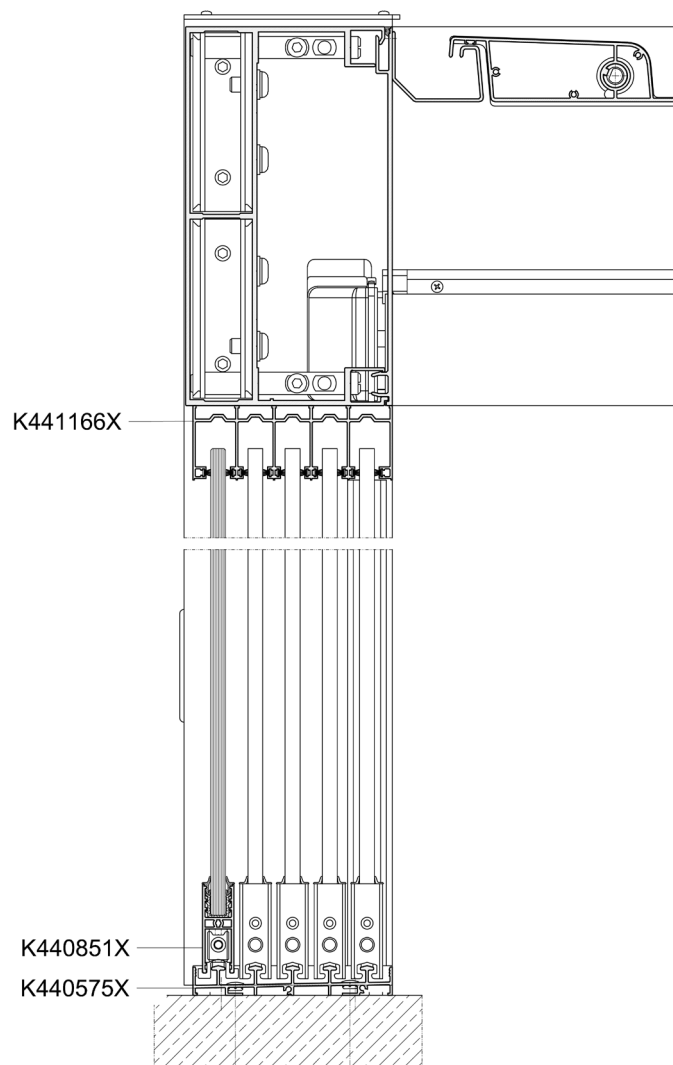
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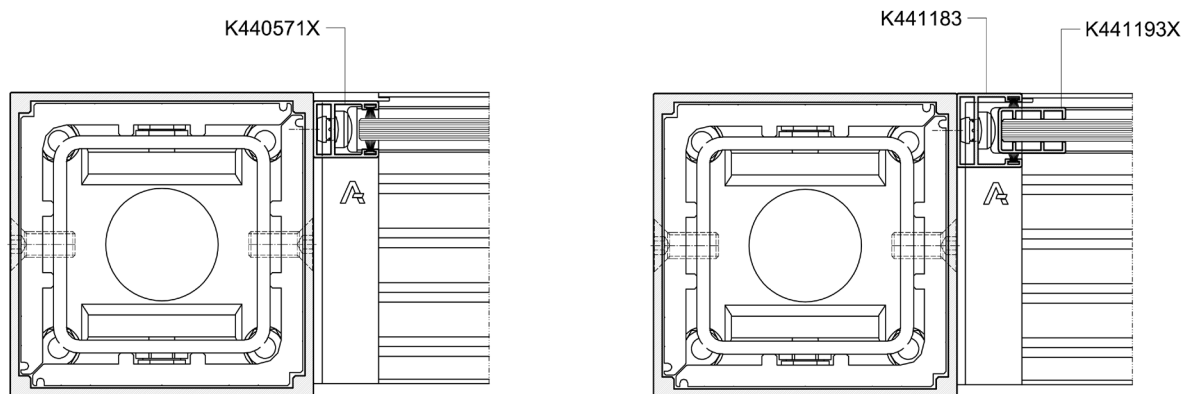
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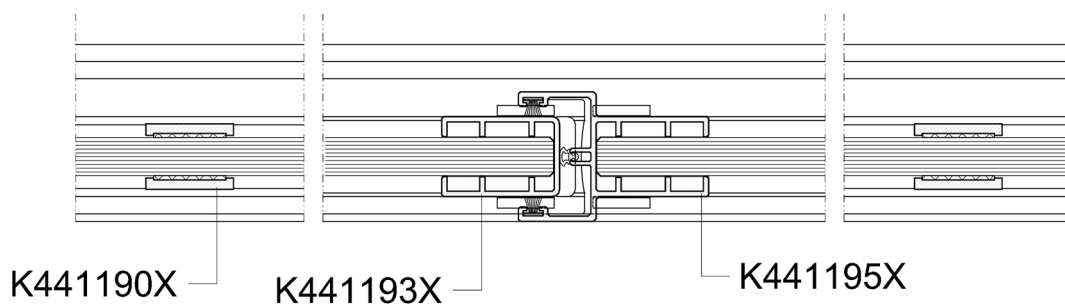
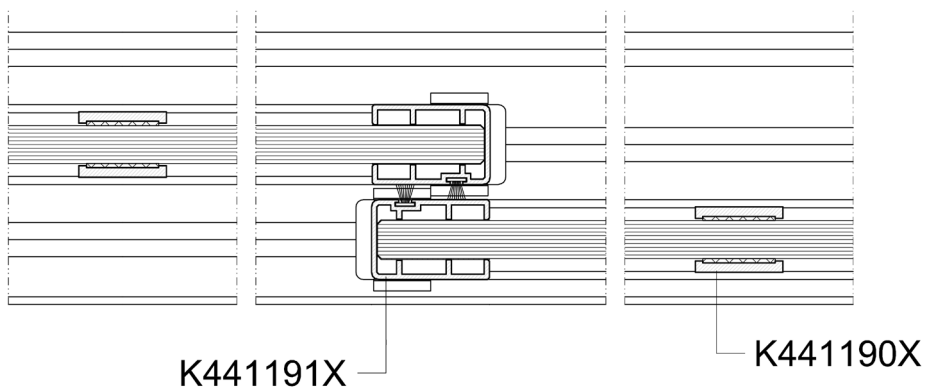
MB - OpenSlide
Cross-section through a purli



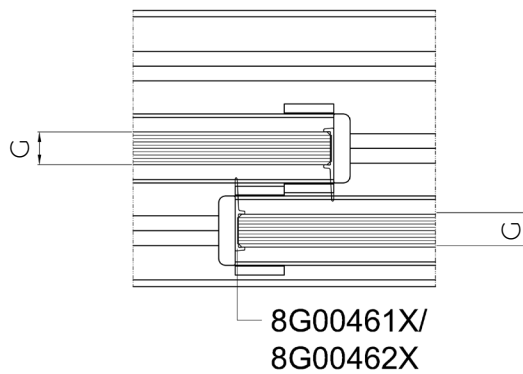
MB - OpenSlide
Cross-section through a post



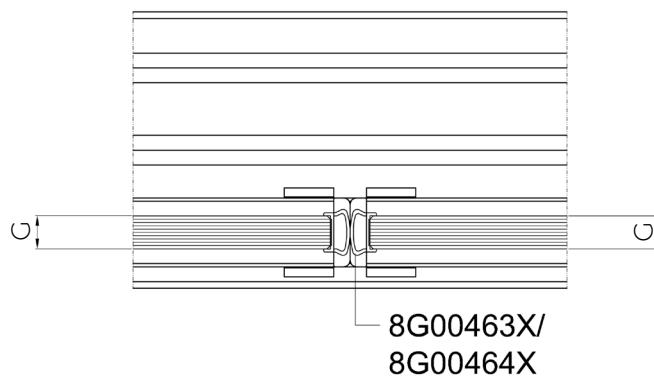
MB - OpenSlide
Glazing options



G	
12	8G00462X

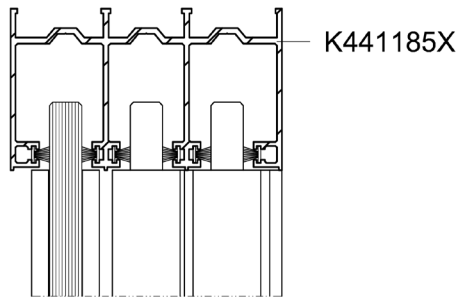


G	
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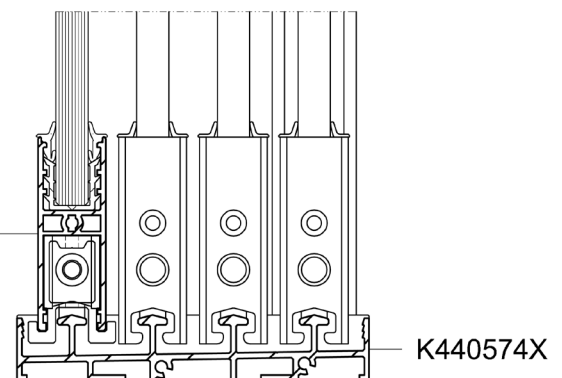
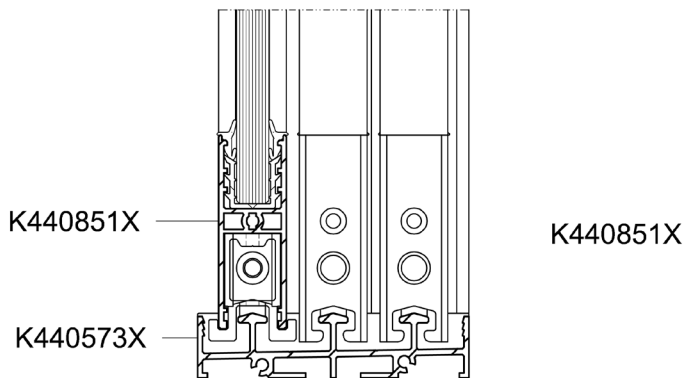
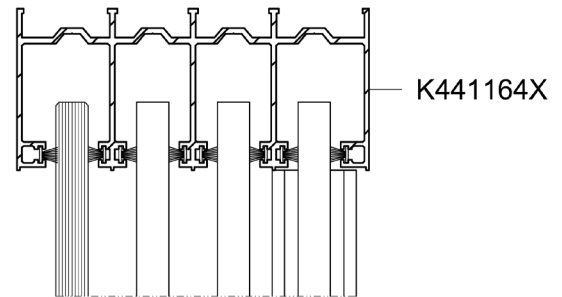


MB - OpenSlide
Examples of construction

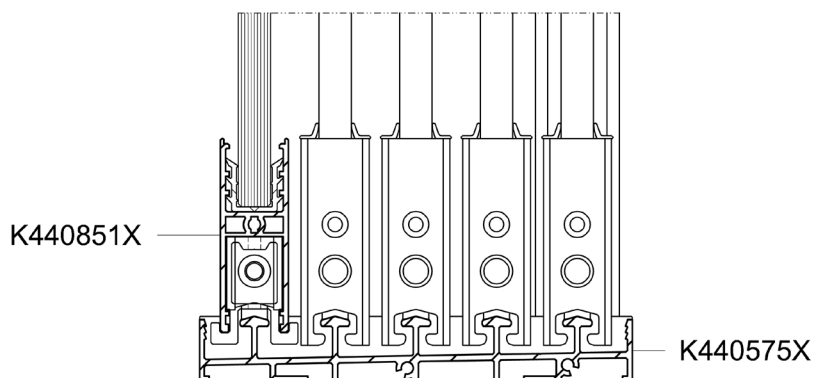
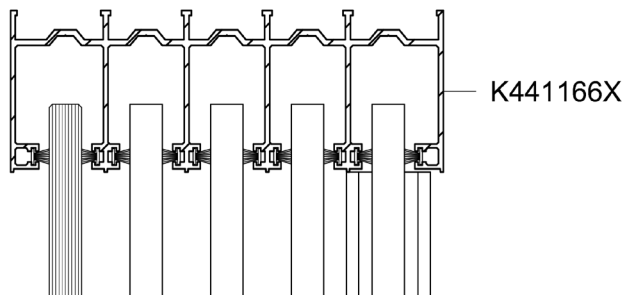
Sliding doors
three-panel / six-panel



Sliding doors four-
leaf / eight-leaf

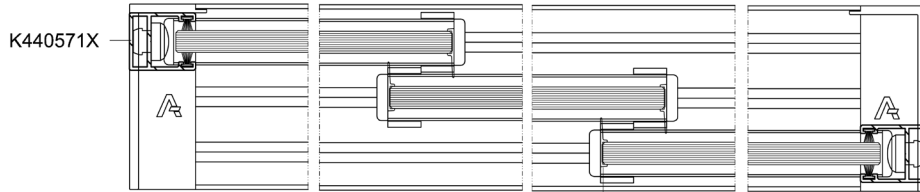
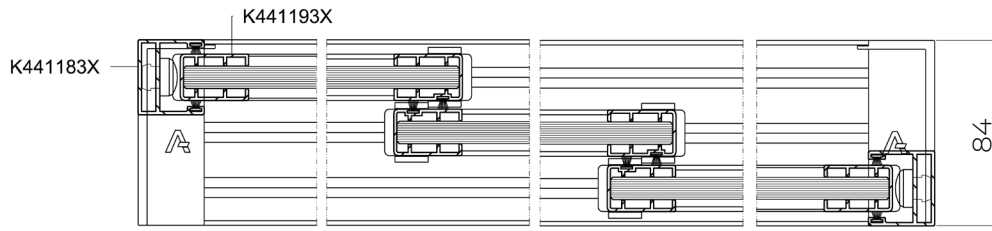


Sliding doors
five-bladed / ten-bladed

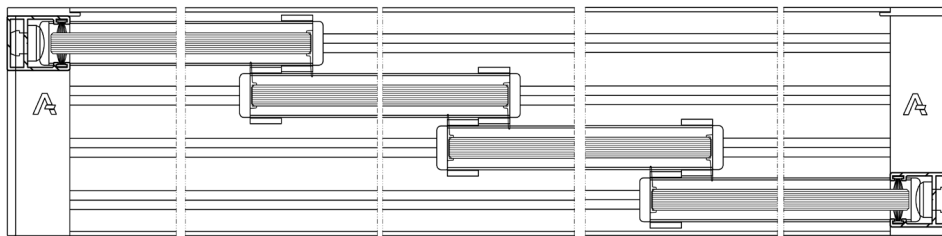
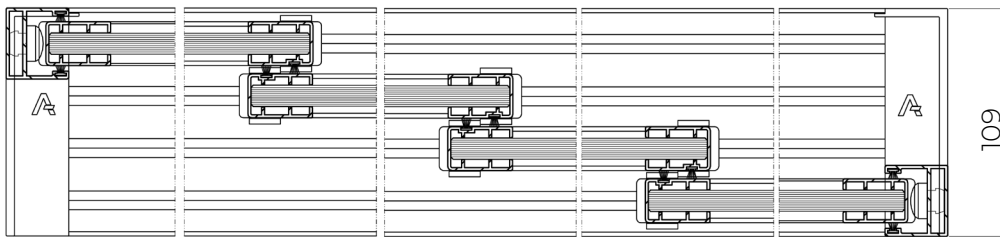


MB - OpenSlide
Examples of construction

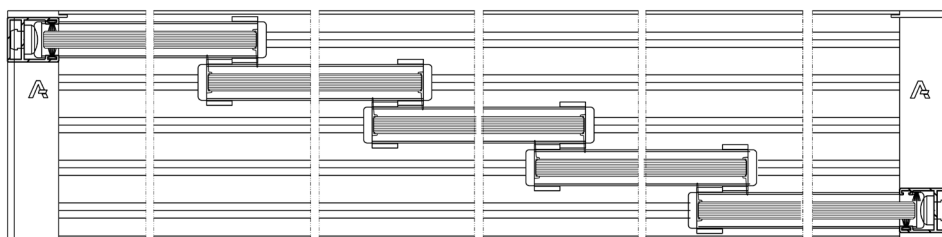
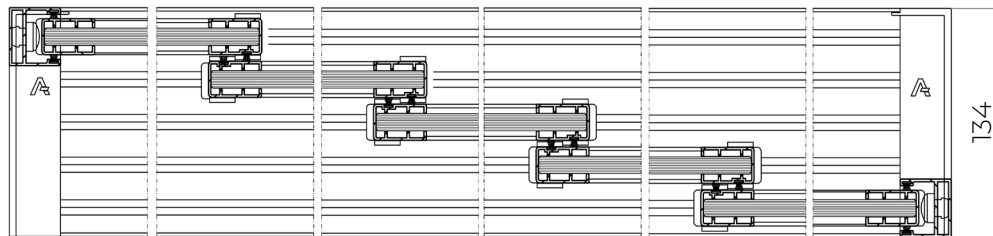
Sliding doors 3 - partial



Sliding doors 4 - partial

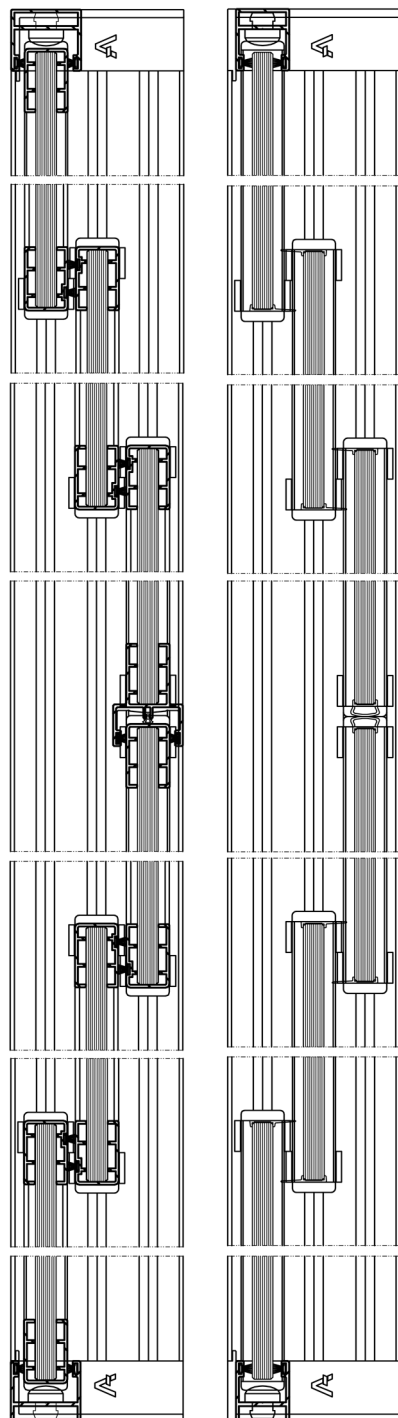


Sliding doors 5 - partial

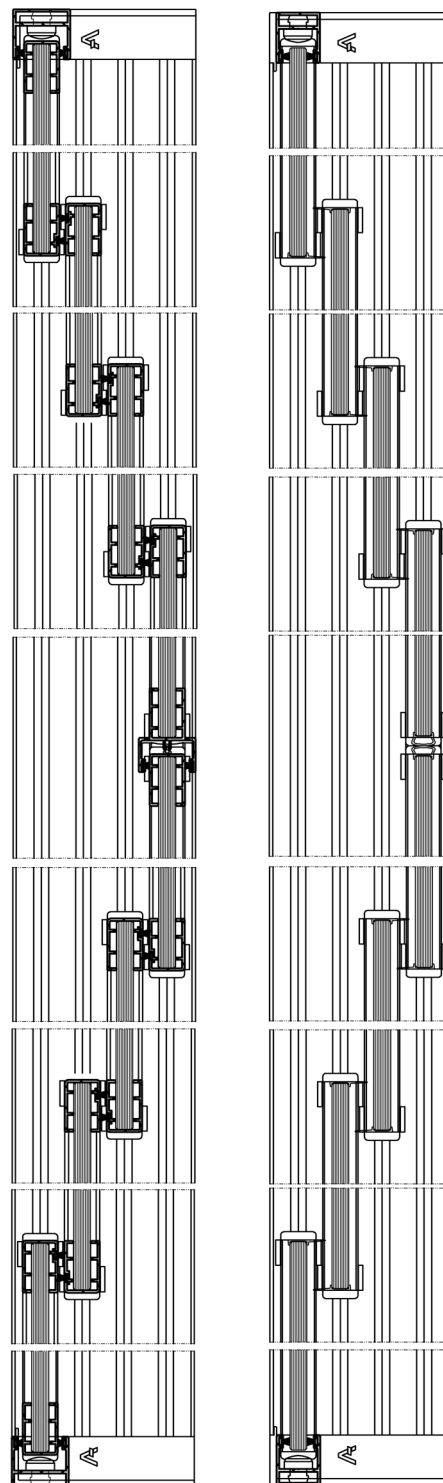


MB - OpenSlide
Examples of construction

Sliding doors 6 - partial

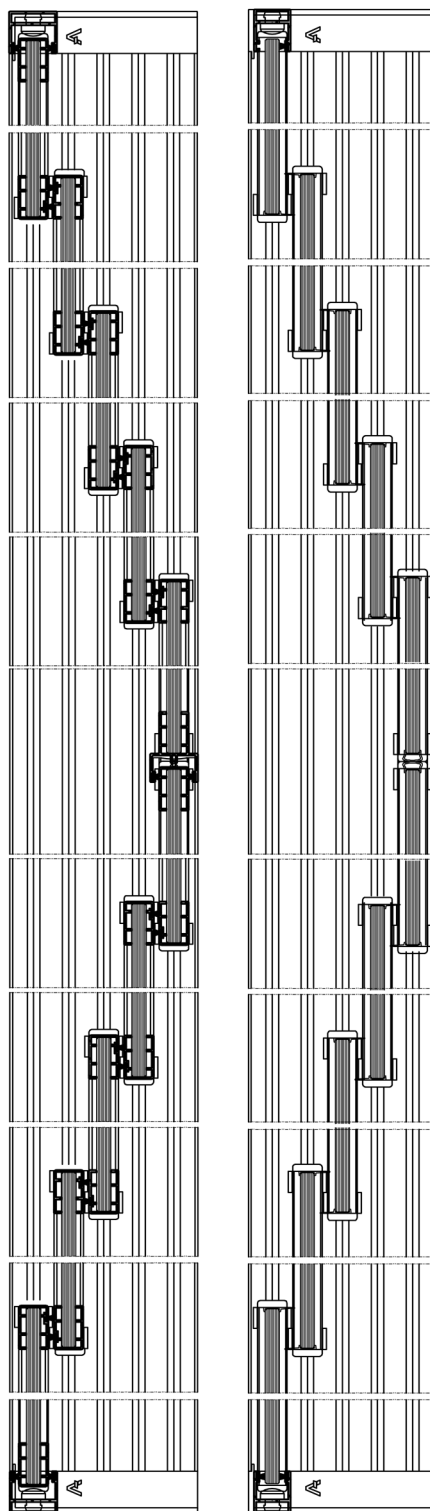


Sliding doors 8 - partial



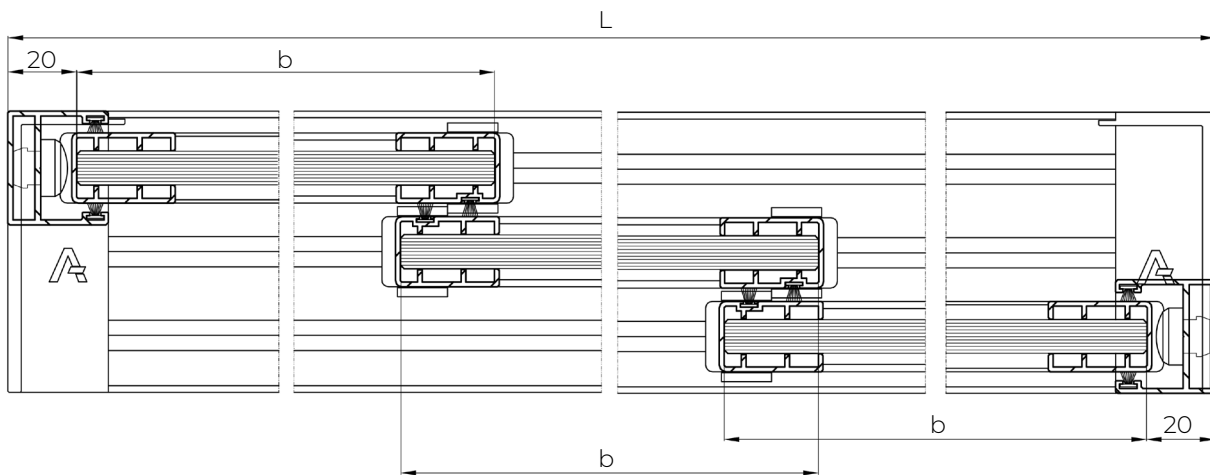
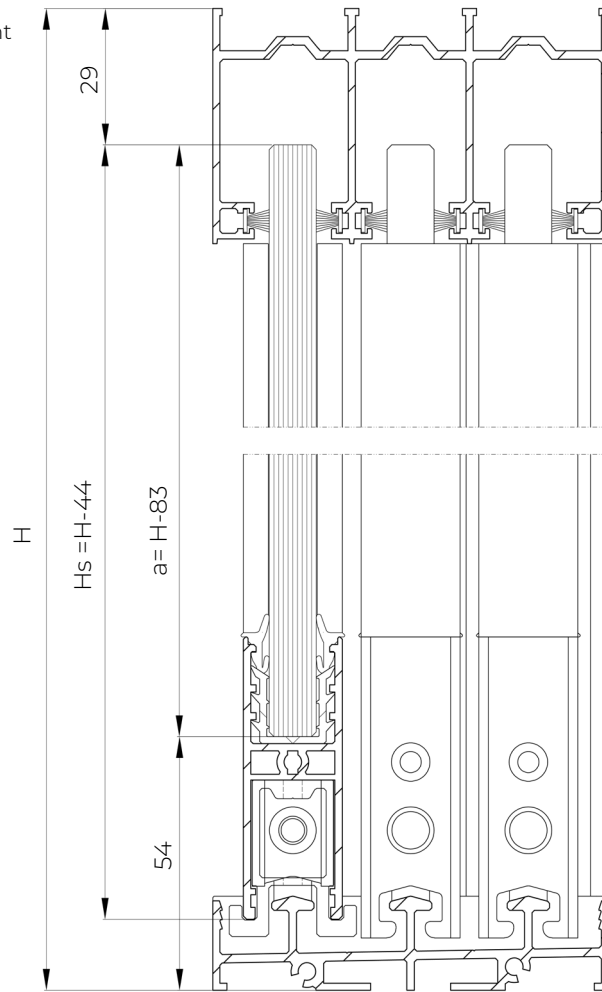
MB - OpenSlide
 Examples of construction

Sliding doors 10 - partial



MB - OpenSlide
Glazing - dimensions

For all types of segments, the height is calculated in the same way



- Segment 3 - wing: $b = (L+20)/3-2$
- Segment 4 - wing: $b = (L+50)/4-2$
- Segment 5 - wing: $b = (L+80)/5-2$
- Segment 6 - wing: $b = (L+70)/6-2$
- Segment 8 - wing: $b = (L+130)/8-2$
- Segment 10 - wing: $b = (L+190)/10-2$

SYSTEM SHUTTERS

SYSTEM SHUTTERS

The Shutters sliding panel system is a movable wall system with rotating slats, designed to provide protection against the sun's rays. It can be used as a decorative and elegant architectural element for partitioning and arranging spaces. The system consists of lightweight and durable aluminium frames suspended on roller carriages. Together with the top guide (acting as a track) and the bottom guide (acting as a guide rail), it forms a complete system. The product is intended for use by individuals and organisations in the private sector (e.g. detached houses) and the public sector (e.g. restaurant gardens, hotels, etc.).

APPLICATION:

- Sun protection and surface shading
- Immediate division of space

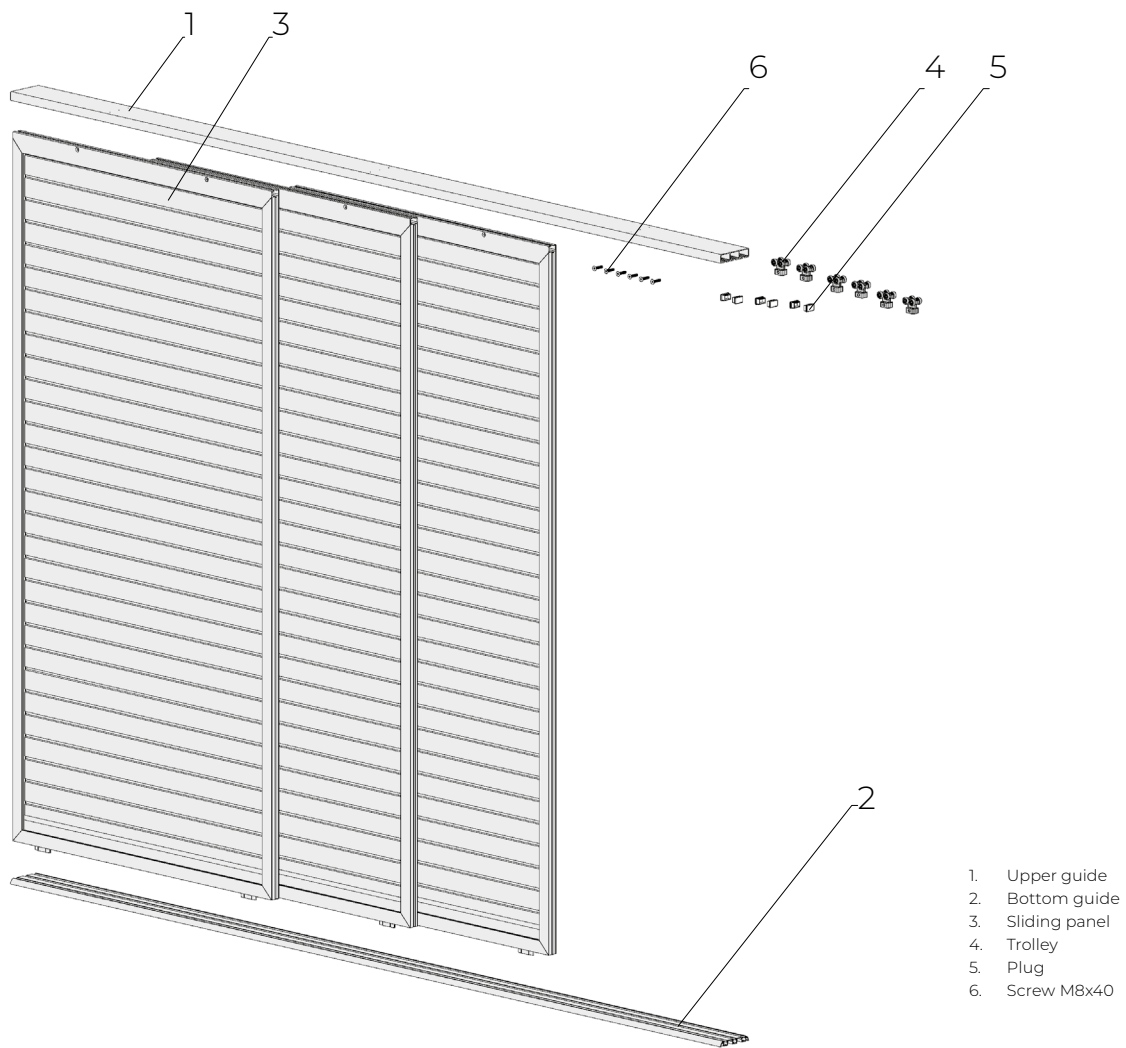
PRODUCT CHARACTERISTICS:

- Easy installation and operation,
- Immediate arrangement of space,
- Possibility of running three frames parallel to each other,
- Limiting sunlight access and protecting against the view of bystanders,
- Possibility of manually adjusting the angle of the slats within a wide range,
- Possibility of changing the angle of inclination by rotating any slat,
- easy movement and stopping in any position, thanks to suspension on ball bearing carriages,
- Zero emission of toxic substances during operation,
- Impediment to precipitation penetration when the sash is completely closed,
- NO POWER supply,
- Installation on a load-bearing and rigid substructure.

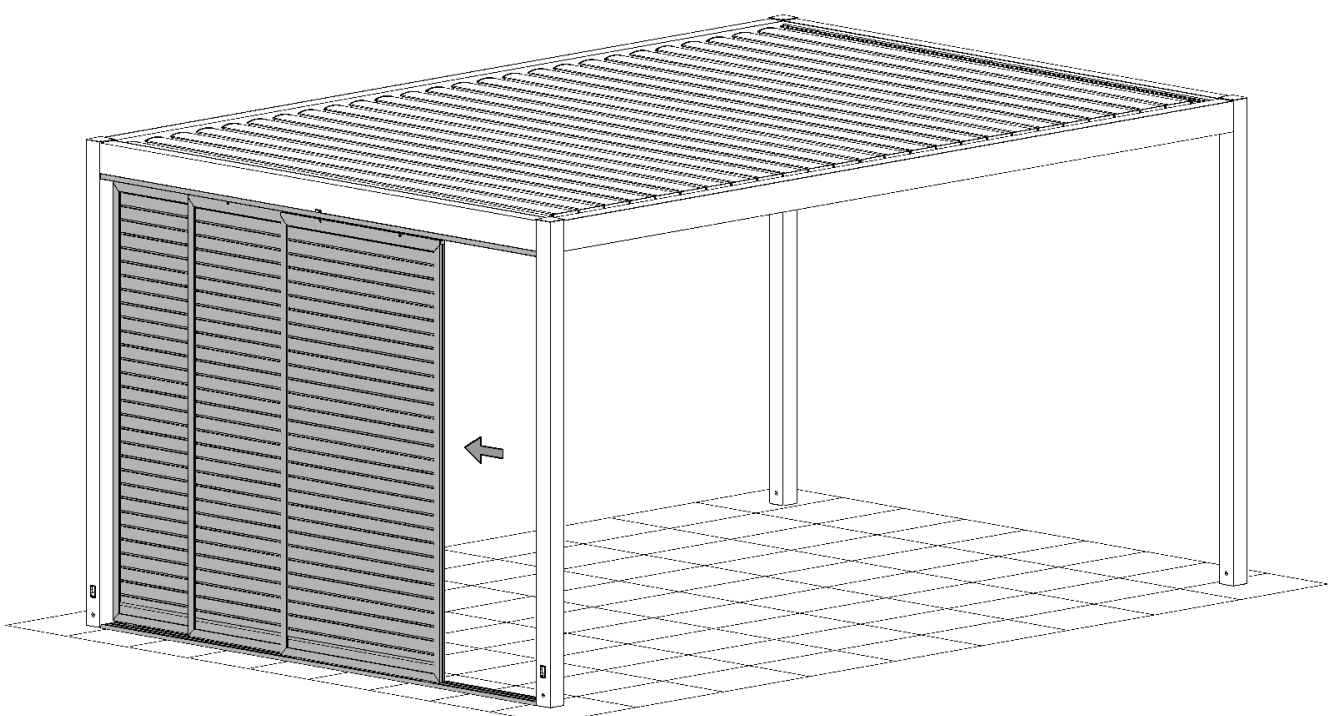
TECHNICAL PARAMETERS:

- Total height (with guides) 2800 mm
- Total length (of guides) 6698 mm
- Maximum frame width 1500 mm
- Maximum frame height 2725 mm
- Upper guide rail dimensions (running track) 149x34 mm (triple) or 101x34 mm (double)
- Lower guide rail dimensions (guide track) 149x20 mm (triple) or 101x20 mm (double)
- Number of tracks in a single guide: 3 or 2
- Axial blade spacing 86 mm
- Sash width/thickness 95.4 mm / 18.4 mm

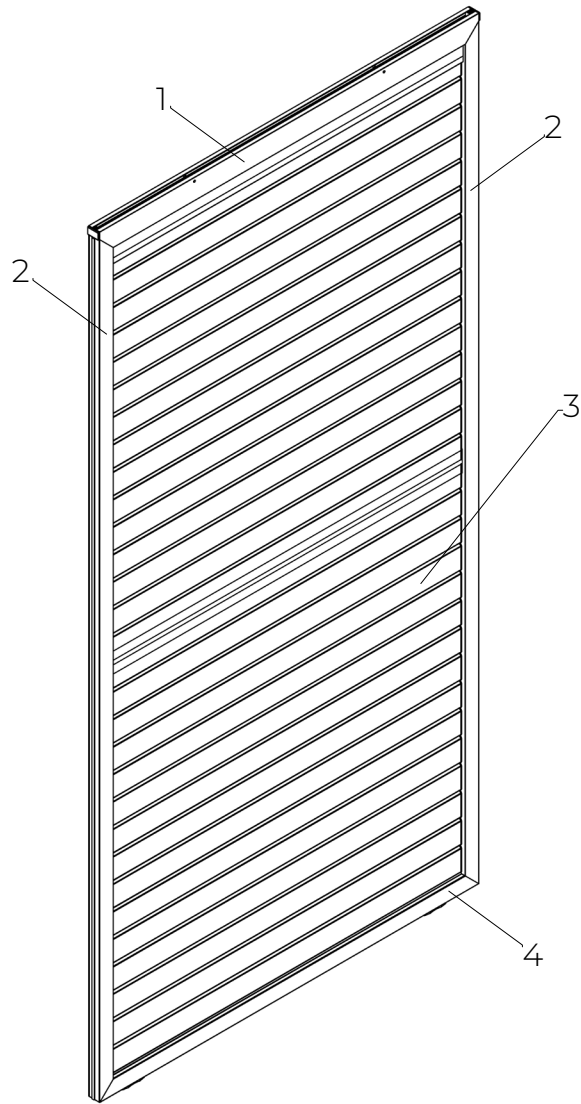
SYSTEM SHUTTERS



SYSTEM SHUTTERS
View of the system on the pergola

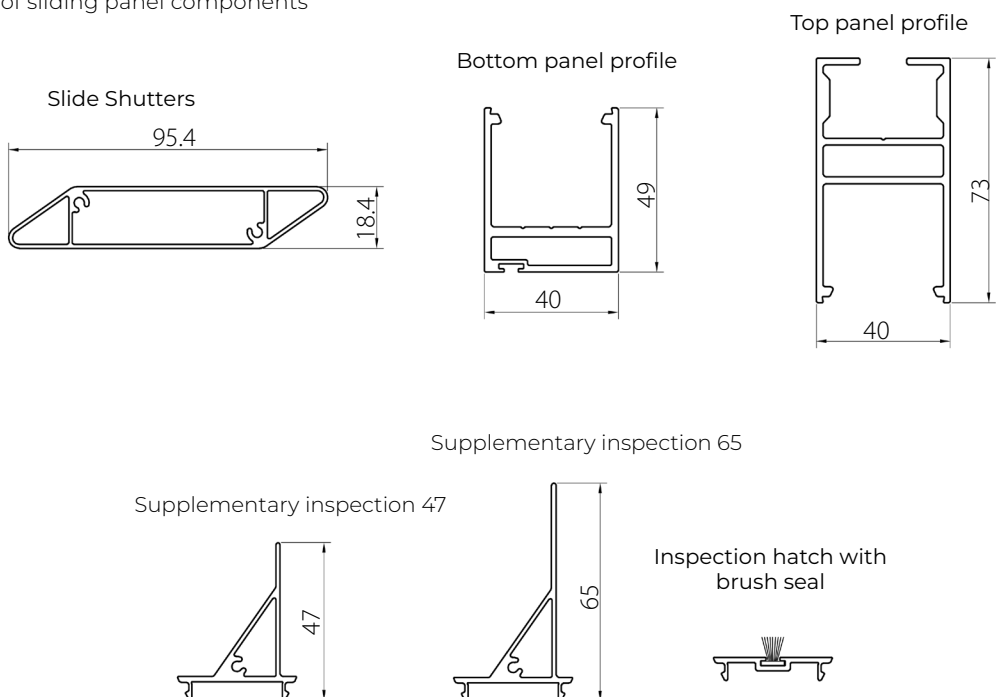


SYSTEM SHUTTERS
Sliding panel



- 1. Top panel profile
- 2. Side panel profile
- 3. Slide Shutters
- 4. Bottom panel profile

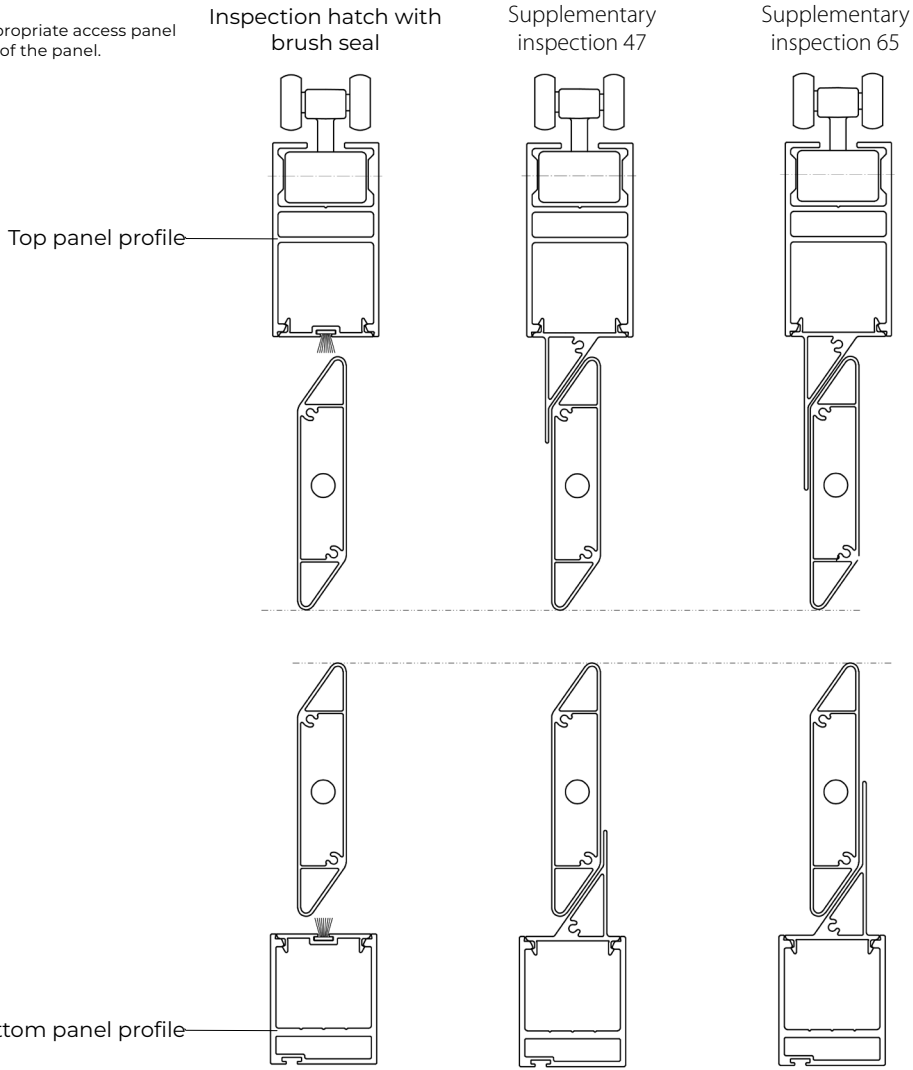
SYSTEM SHUTTERS
Cross-sections of sliding panel components



SYSTEM SHUTTERS

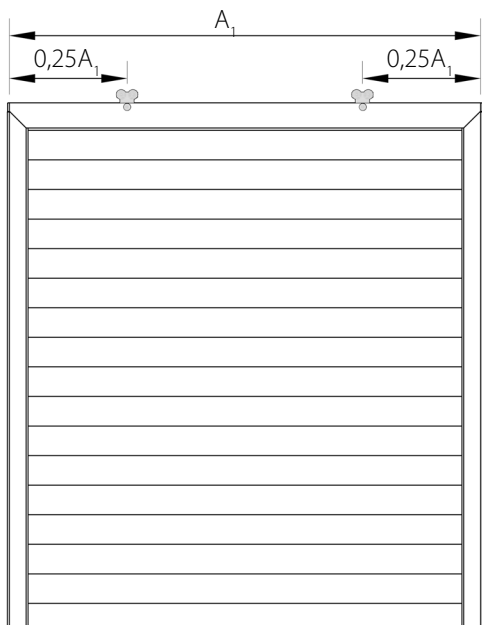
List of components

Note:
The selection of the appropriate access panel depends on the height of the panel.



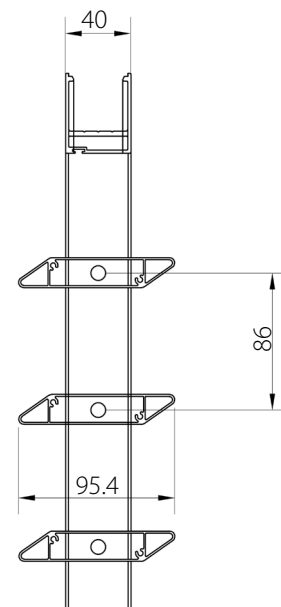
SYSTEM SHUTTERS

Roller spacing



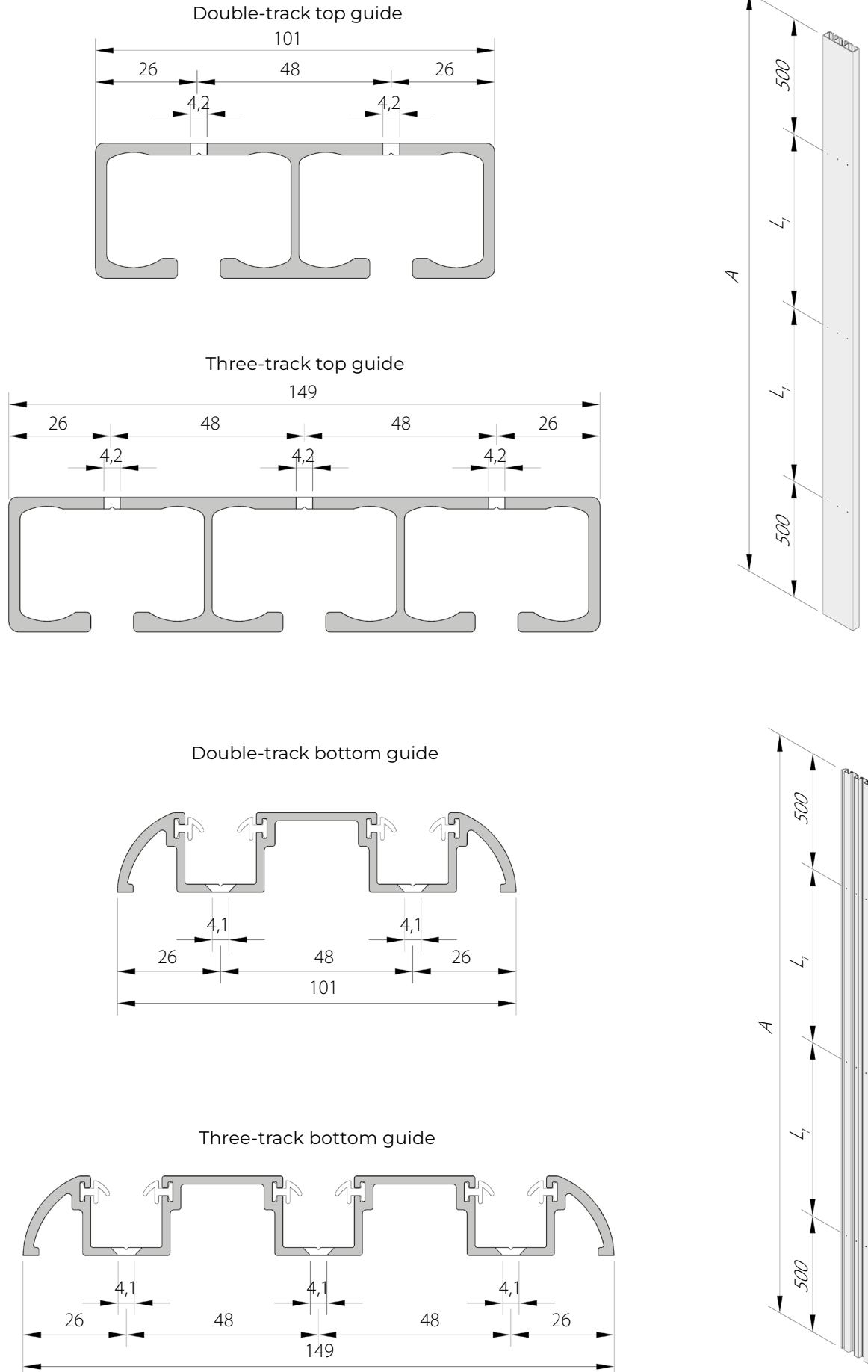
SYSTEM SHUTTERS

Spacing between slats



SYSTEM SHUTTERS

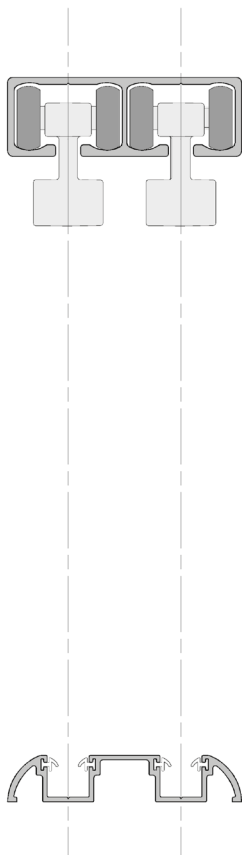
Dimensions for guide rail installation



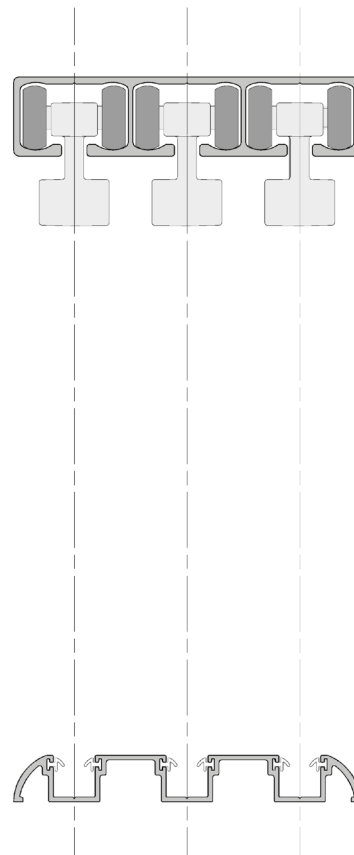
SYSTEM SHUTTERS

Design variants

Two-track variant

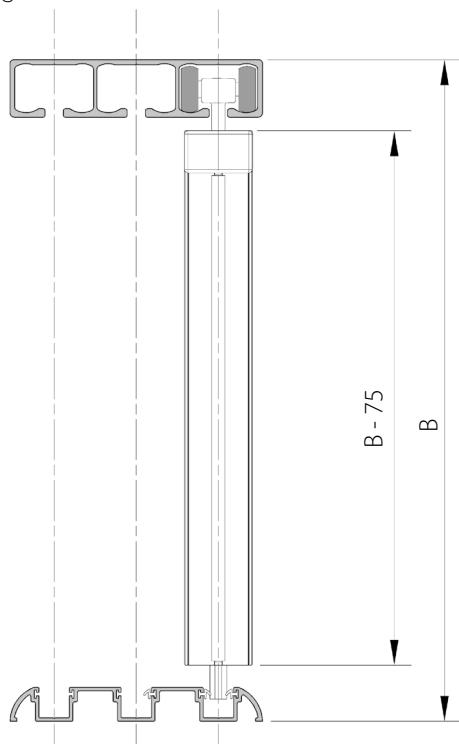


Three-track variant



SYSTEM SHUTTERS

Panel height



B - Height of the product

SUNBREAKER 210 MOVABLE

SUNBREAKER 210 MOVABLE - is a façade system designed to provide protection against the effects of sunlight. It can also be used as a decorative or protective architectural element. The system comprises two types of slats: A and B. The movable version features a linear motor and non-self-supporting guides.

APPLICATION:

Sun protection and shading of surfaces, as well as concealment of technical installations on the building.

PRODUCT CHARACTERISTICS:

- Structure made of extruded aluminium profiles and stainless steel components
- Weather-dependent automation can be used
- Does not emit toxic substances during operation
- Noise emissions from the electromechanical drive are not considered a significant hazard and are a matter of comfort
- Non-self-supporting guides fixed to a recess or substructure
- Sliding slats in a horizontal or vertical axis arrangement

TECHNICAL PARAMETERS:

- Maximum width: 4000 mm
- Maximum height (single panel): 6020 mm
- Spacing between slats (pitch): 200 mm
- The minimum height of the system is:
3 slats for manual operation: 620 mm
5 slats for motorised operation: 1020 mm (when the drive lever is not on either of the end slats) 4 slats for motorised operation: 820 mm if the lever is located on an end slat (not recommended)
- Sash profile width: 210 mm
- Blade rotation angle range: 0–90°
- Electric drive: 230V linear motor, with 500N thrust, 200 mm stroke
- Electric control: via remote control or switch
- Mounting: to the external load-bearing structure (directly to the building or indirectly – to the substructure)
- Installation options: slat rotation axis horizontal or vertical; the slat arrangement ('curtain') can form a vertical or horizontal wall
- Systems exceeding 4 m in height have the drive mounted halfway up the guide rail
- Drive cannot be mounted on the end battens

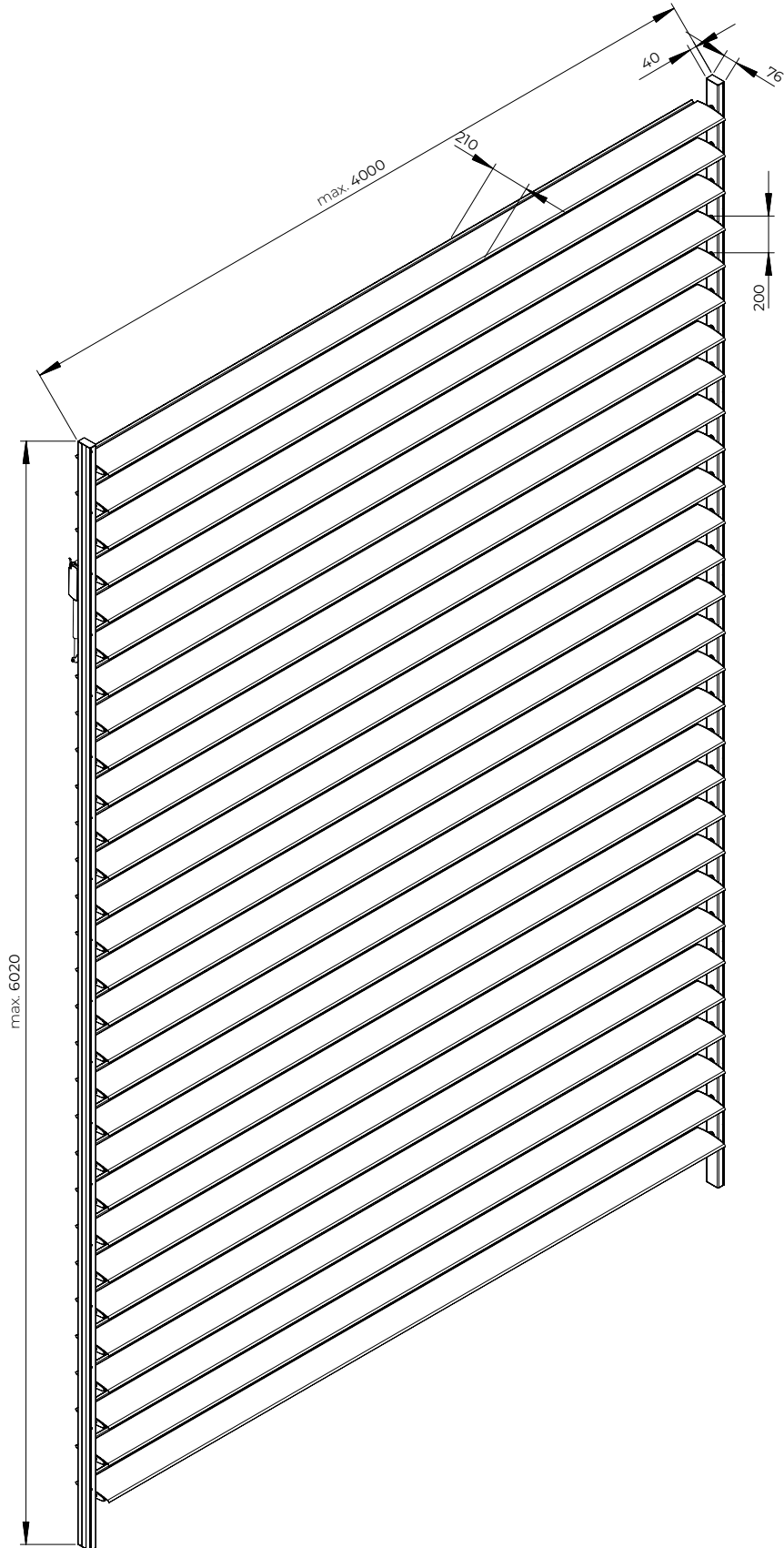
ADDITIONAL INFORMATION:

- The system comes as standard with a motor or manual lever located at the rear of the guide rail (on the façade side), and the direction of the slat rotation is set to either in-line or out-of-line accordingly
- In a system with vertical slats (curtain), the motor or manual drive is always located on the lower guide rail at the rear, and the direction in which the slats open must be specified for this type of system
- For the roof-mounted configuration, the drive is located at the top of the system on the guide rail
- The motor is not attached to the product and the guide rail has no factory-drilled holes
- The motor must be positioned with the piston facing downwards and must not have drive levers on the end plates

SUNBREAKER 210 MOVABLE TYPE A

Note:

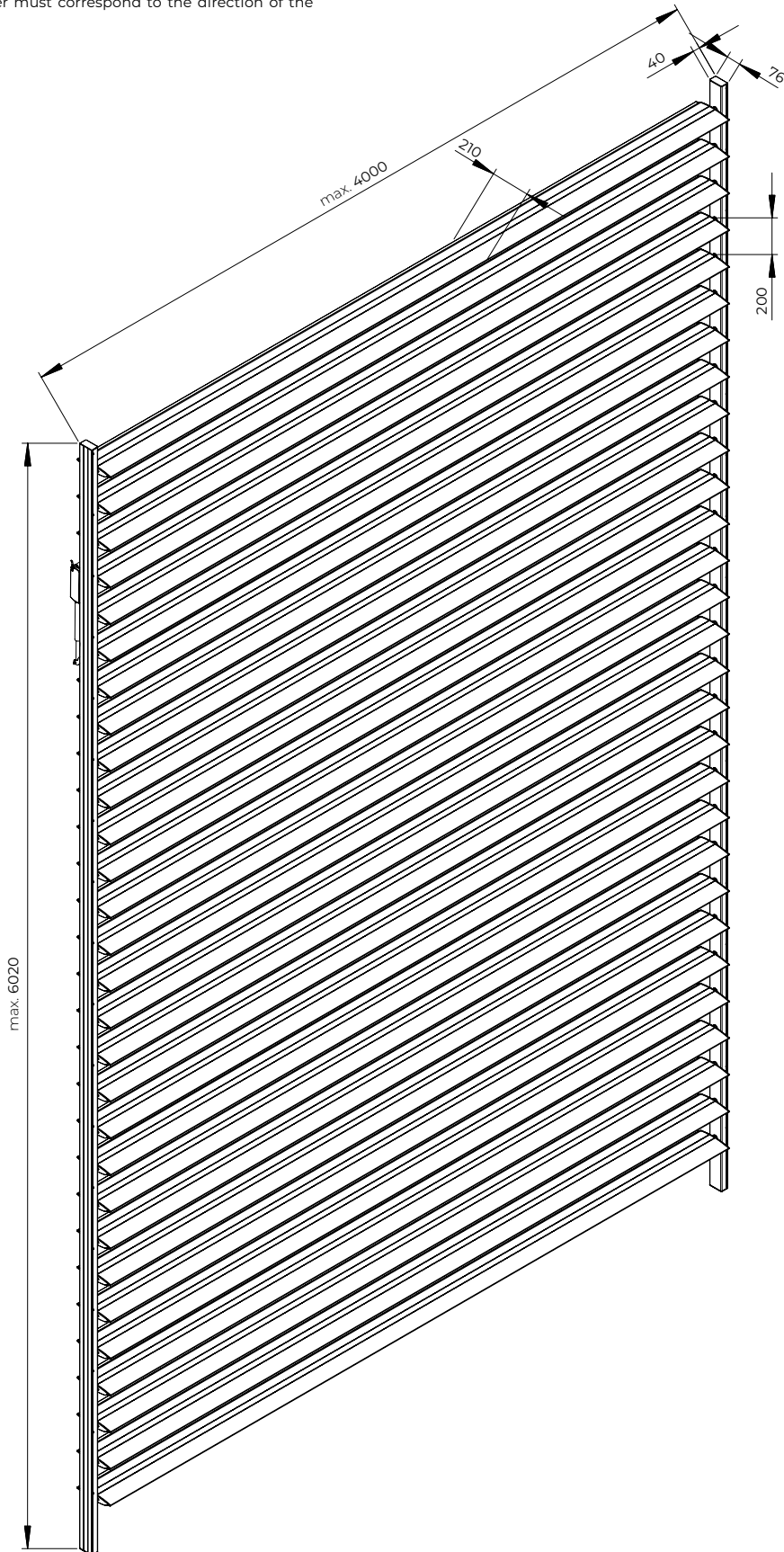
The drive is located on the façade side. It is not possible to mount the drive on the top or bottom of the last slat. In the case of a motorised drive on the four upper slats, the motor is mounted with the piston facing upwards (not recommended). The motor is not factory-fitted to the guide rail and there are no factory-drilled holes for its mounting. The directions of slat rotation fall into two categories: clockwise and anti-clockwise. The position of the cut-out in the drive lever must correspond to the direction of the motor piston.



SUNBREAKER 210 MOVABLE TYPE B

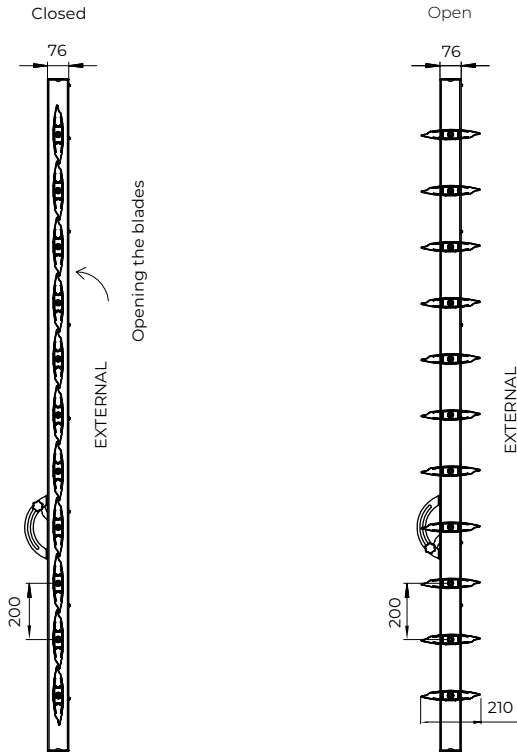
Note:

The drive is located on the façade side. It is not possible to mount the drive on the top or bottom of the last slat. In the case of a motorised drive on the four upper slats, the motor is mounted with the piston facing upwards (not recommended). The motor is not factory-fitted to the guide rail and there are no factory-drilled holes for its mounting. The directions of slat rotation fall into two categories: clockwise and anti-clockwise. The position of the cut-out in the drive lever must correspond to the direction of the motor piston.



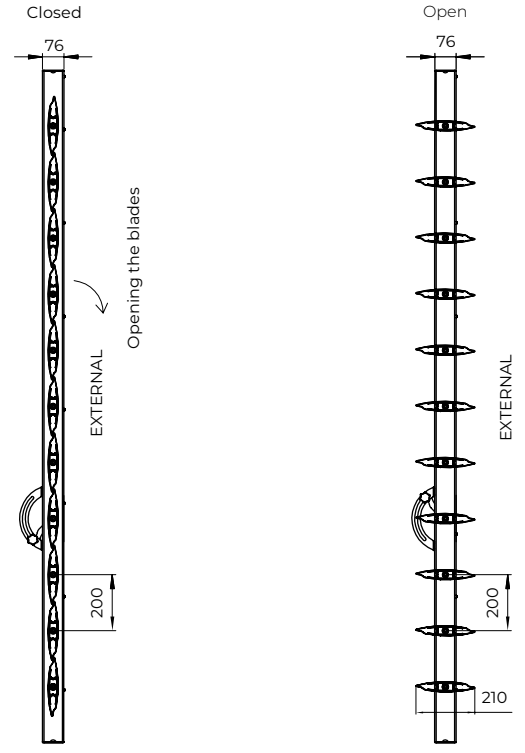
SUNBREAKER 210 MOVABLE

Blade rotation range
(Opposite leaf opening direction)



SUNBREAKER 210 MOVABLE

Blade rotation range
(Blade opening direction: same)

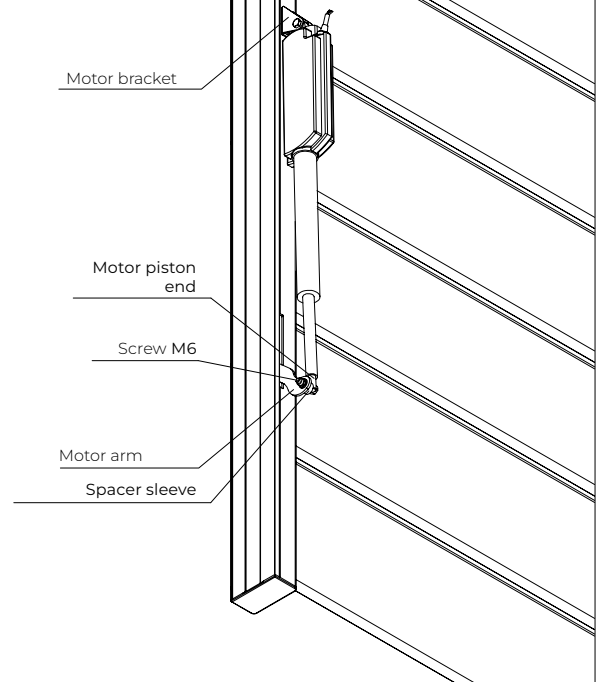
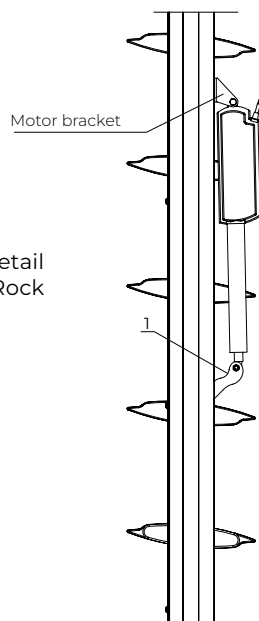


SUNBREAKER 210 MOVABLE

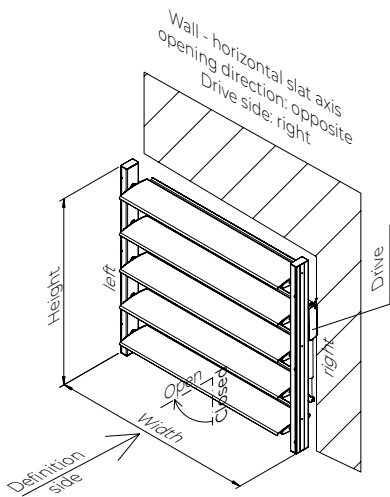
Rock motor installation

Note:
Always attach the motor arm with the cut-out (I) facing the piston

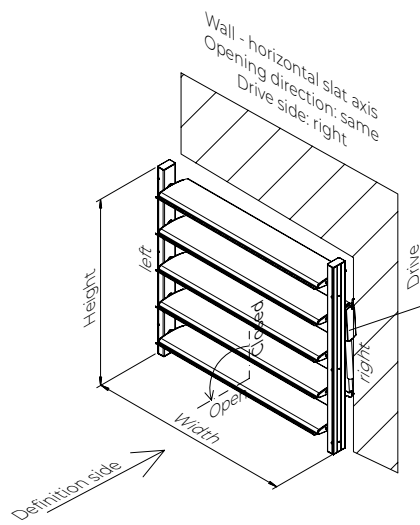
Installation detail
Motor Rock



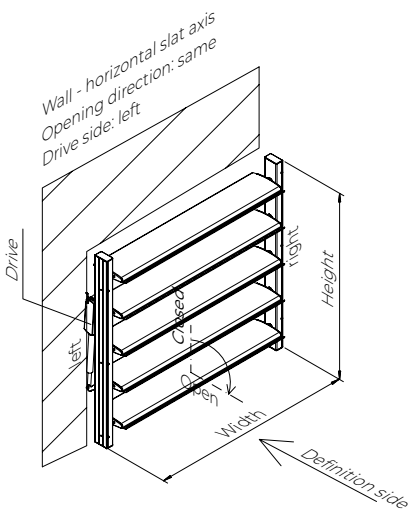
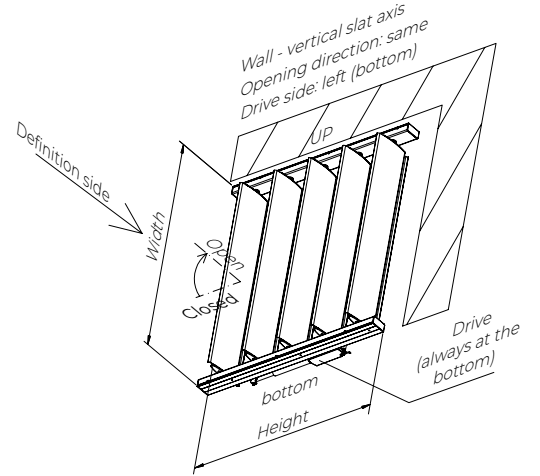
SUNBREAKER 210 MOVABLE
Feather opening directions



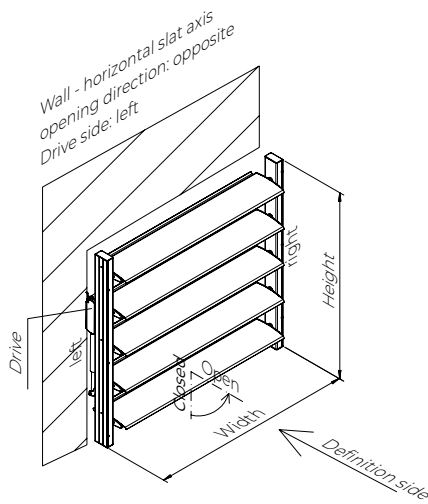
View from the outside (front)



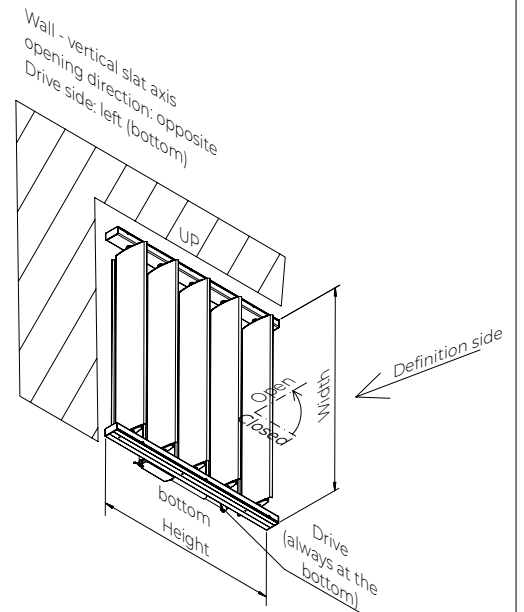
View from the outside (front)



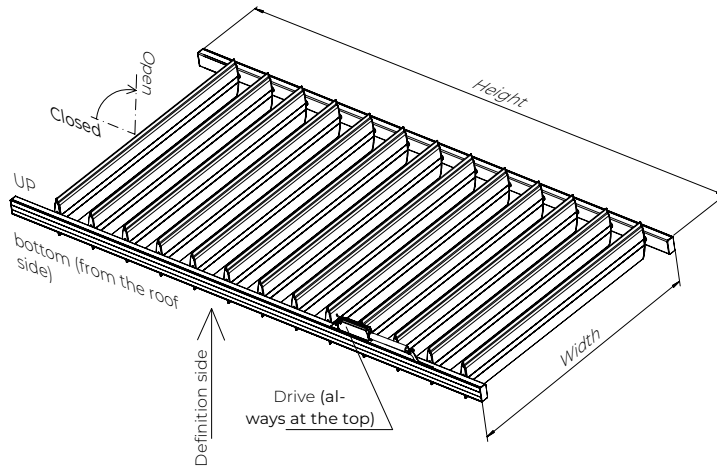
View from the outside (front)



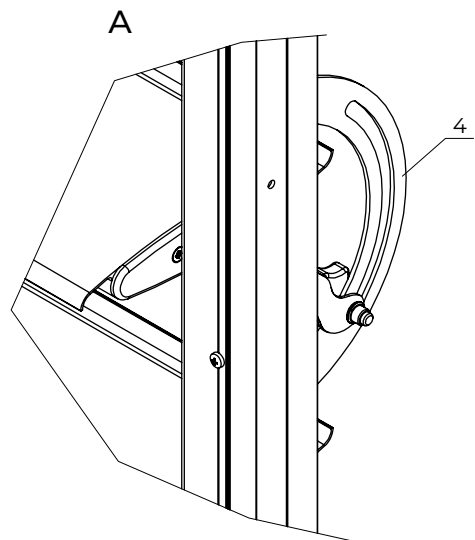
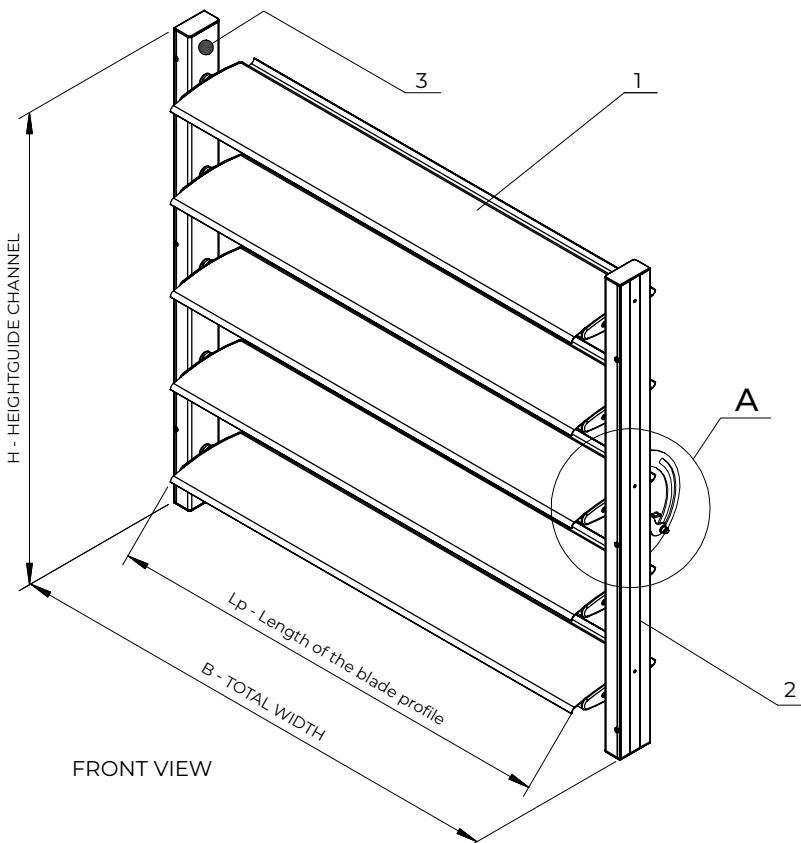
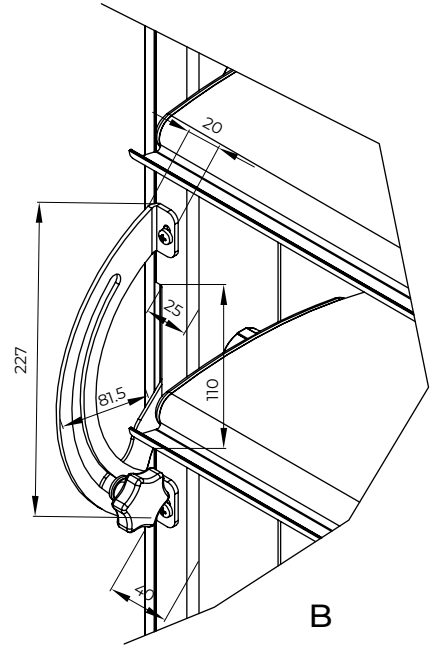
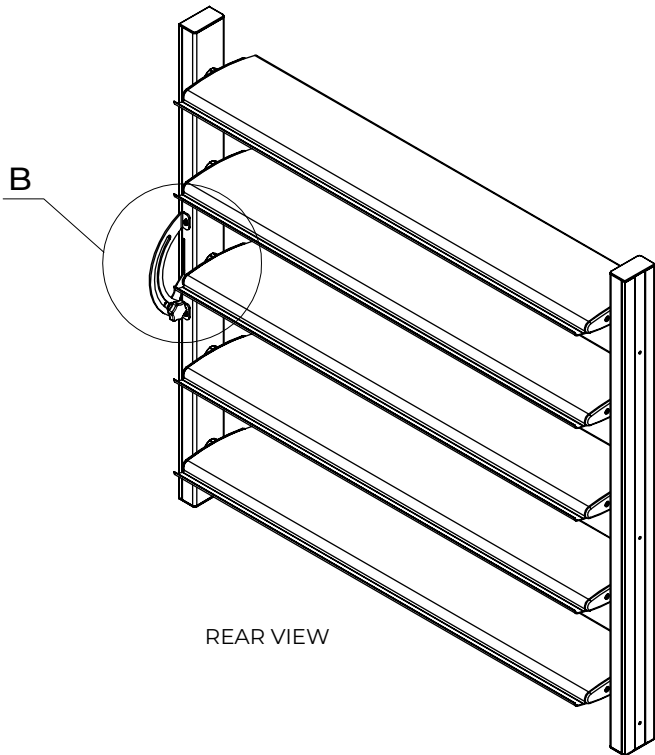
View from the outside (front)



roof (horizontal system)
opening direction: opposite
Drive side: left (top)

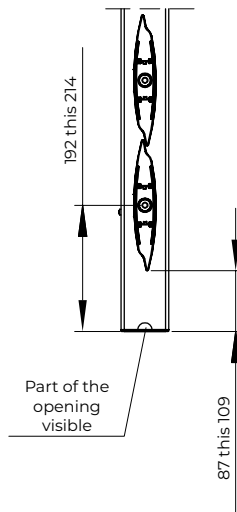
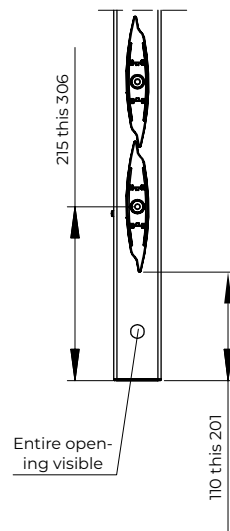
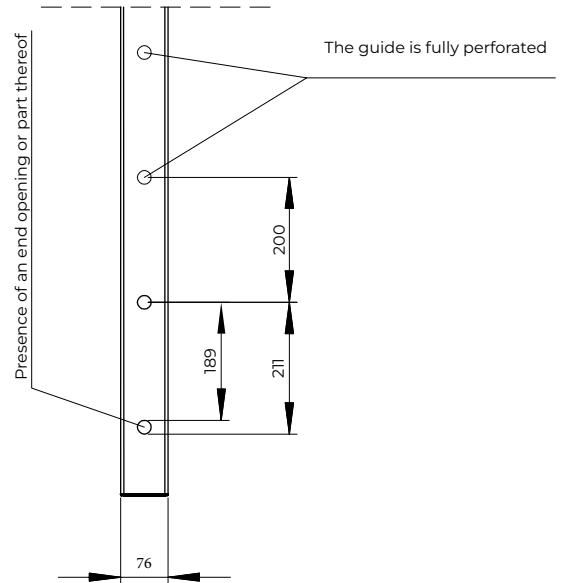
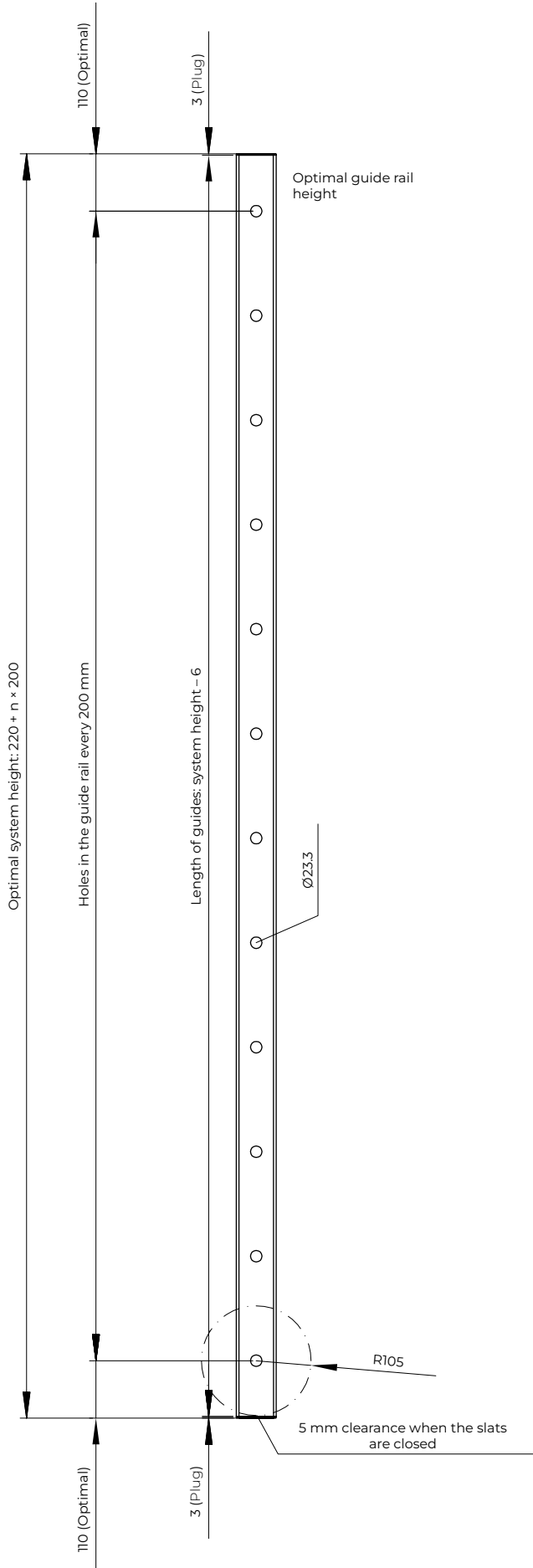


SUNBREAKER 210 MOVABLE TYPE A
MANUAL drive



1. Blade assembly 210 Type A
2. Guide channel - Drive side
3. Guide channel - Bearing side
4. KPL motor arm lock

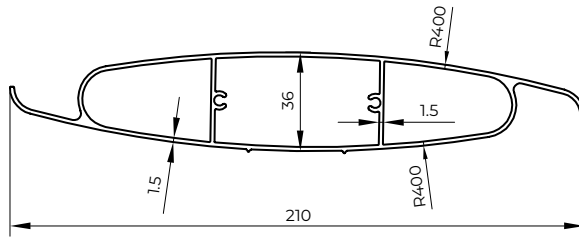
SUNBREAKER 210 MOVABLE TYPE A
Installation details



SUNBREAKER 210 MOVABLE

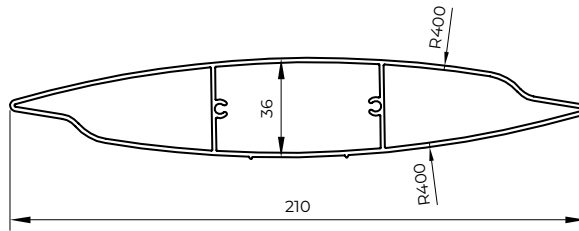
Cross-sections of components

Tongue cross-section SB210A
(36x210)



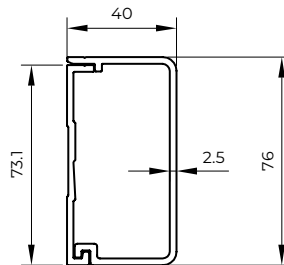
Material: EN AW6063 T66
Ground: 2.04 kg/m
Country: 6.29 cm²
J1 190 cm⁴
J2 9.6 cm⁴

Tongue cross-section SB210B
(36x210)



Material: EN AW6063 T66
Ground: 2.06 kg/m
Country: 7.62 cm²
J1 250.7 cm⁴
J2 11.6 cm⁴

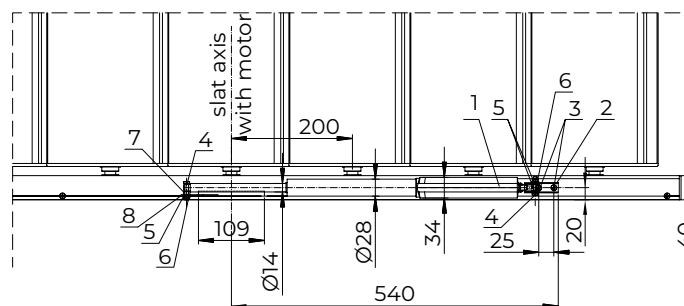
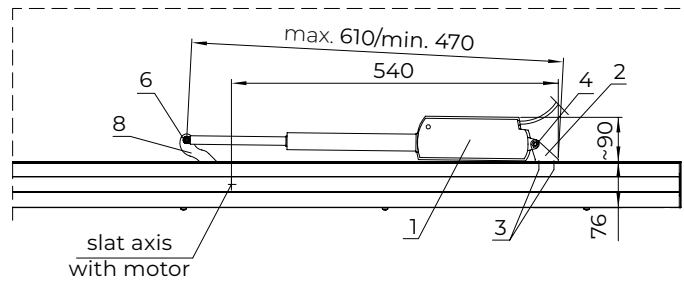
Guide rail cross-section SB210
(40x76)



Material: EN AW6060 T66
Ground: 1.64 kg/m
Country: 6.05 cm²
J1 15.53 cm⁴
J2 47.2 cm⁴

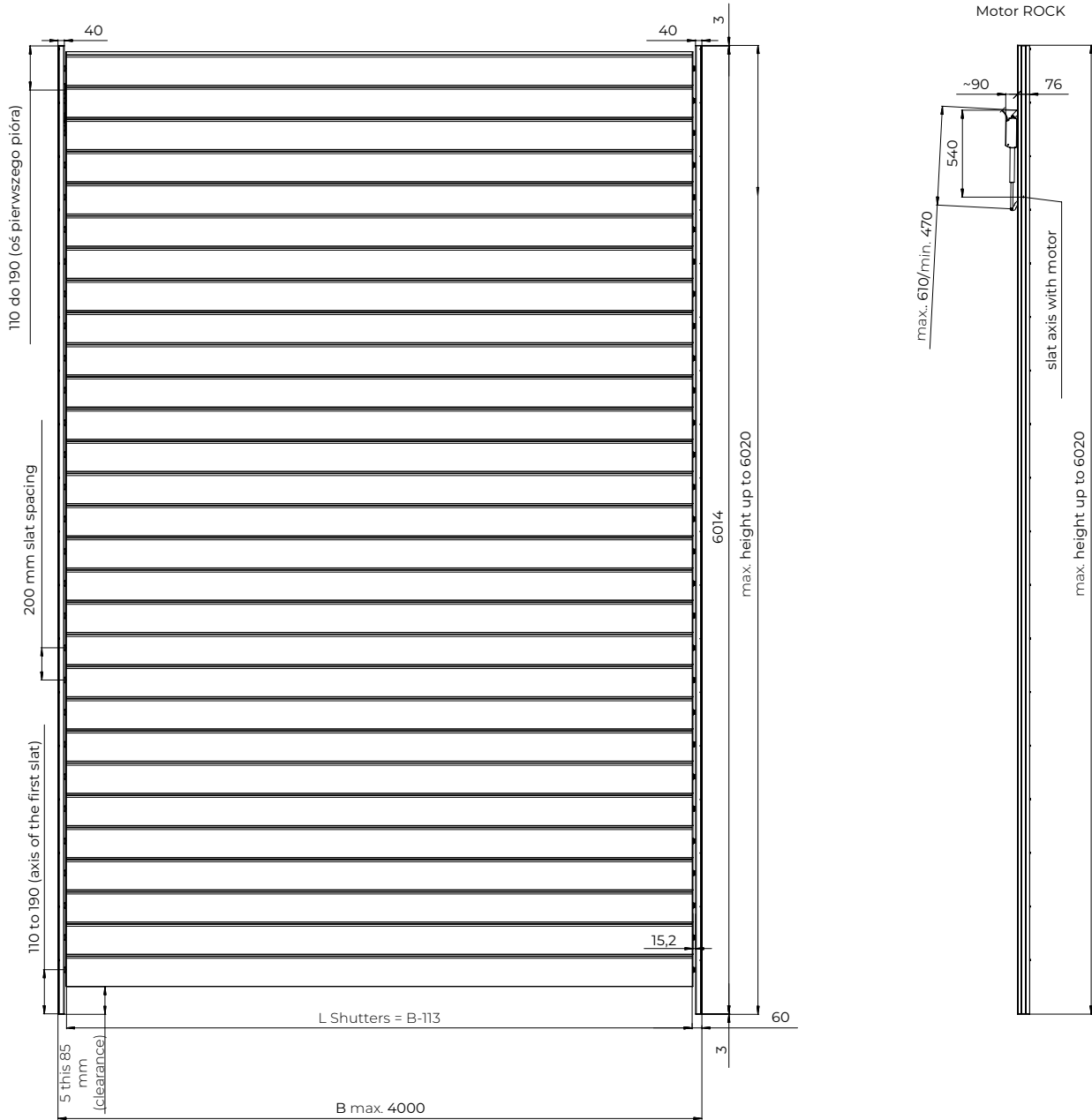
SUNBREAKER 210 MOVABLE

Location of Rock motor

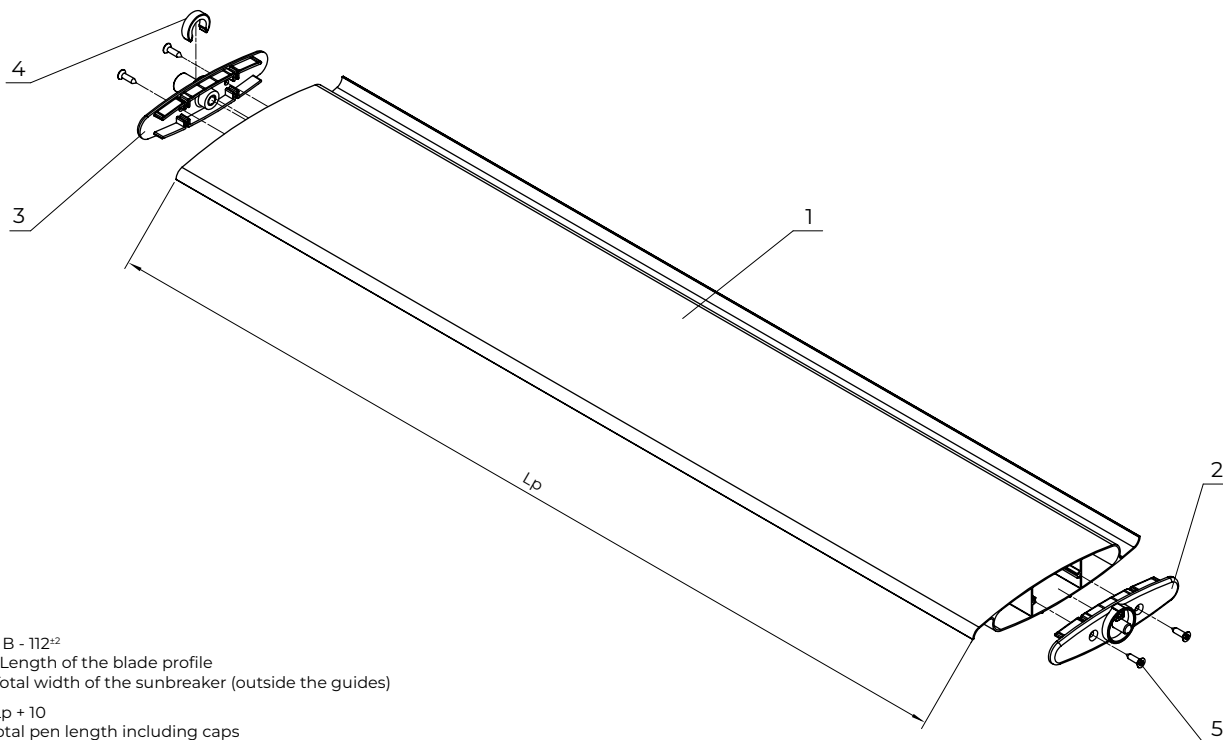


1. Linear motor Rock
2. Curved motor bracket
3. Mounting: 2 x ST4.2x13 (drill Ø3,8 holes in the guide)
4. M6x30 hexagon head screw
5. Flat washer A6.4
6. M6 self-locking nut
7. Plastic spacer sleeve
8. Sunbreaker drive lever

SUNBREAKER 210 MOVABLE



SUNBREAKER 210 MOVABLE
Blade assembly 210 Type A

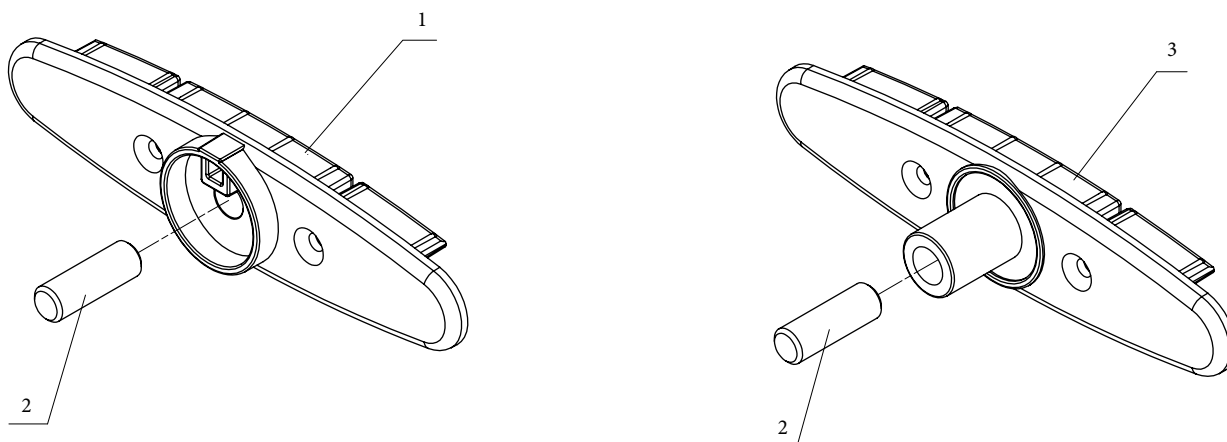


$L_p = B - 112^{+2}$
 L_p - Length of the blade profile
 B - Total width of the sunbreaker (outside the guides)
 $L = L_p + 10$
 L - total pen length including caps
 L_p - Length of the blade profile

1. Tongue profile 210 Type A
2. Universal drive profile end cap SET
3. Universal bearing profile end cap SET
4. Security clip
5. Conical sheet metal screw with cross-recess

SUNBREAKER 210 MOVABLE
Universal profile end cap

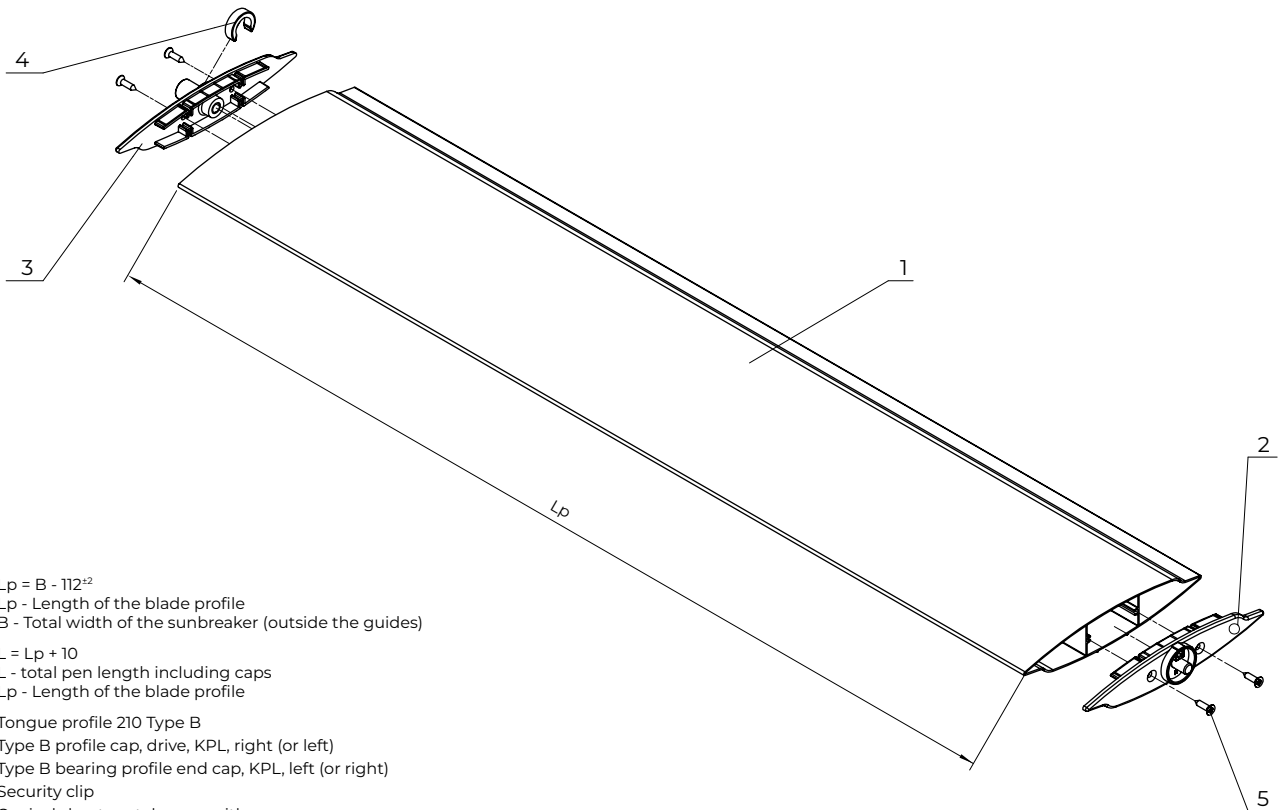
Universal, drive and bearing profile end caps are recommended for type A blade profiles. Due to their symmetrical design, they can also be used with type B blades. The advantage of universal end caps is that their position within the blade can be changed. This allows the motor position to be adjusted without the need to purchase additional end caps.



1. Universal drive profile end cap
2. Cylindrical pin Ø10x30
3. Universal bearing profile end cap

SUNBREAKER 210 MOVABLE

Blade assembly 210 Type B



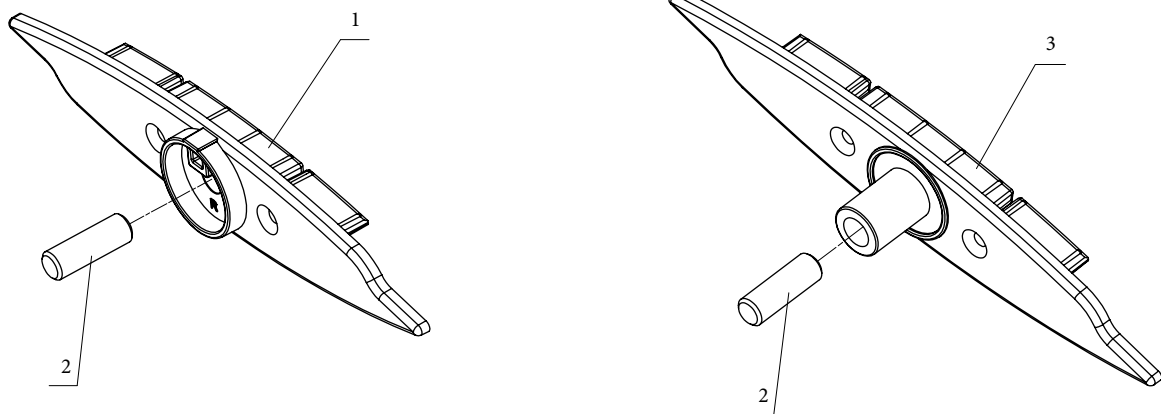
$L_p = B - 112^{+2}$
 L_p - Length of the blade profile
 B - Total width of the sunbreaker (outside the guides)
 $L = L_p + 10$
 L - total pen length including caps
 L_p - Length of the blade profile

1. Tongue profile 210 Type B
2. Type B profile cap, drive, KPL, right (or left)
3. Type B bearing profile end cap, KPL, left (or right)
4. Security clip
5. Conical sheet metal screw with cross-recess

SUNBREAKER 210 MOVABLE

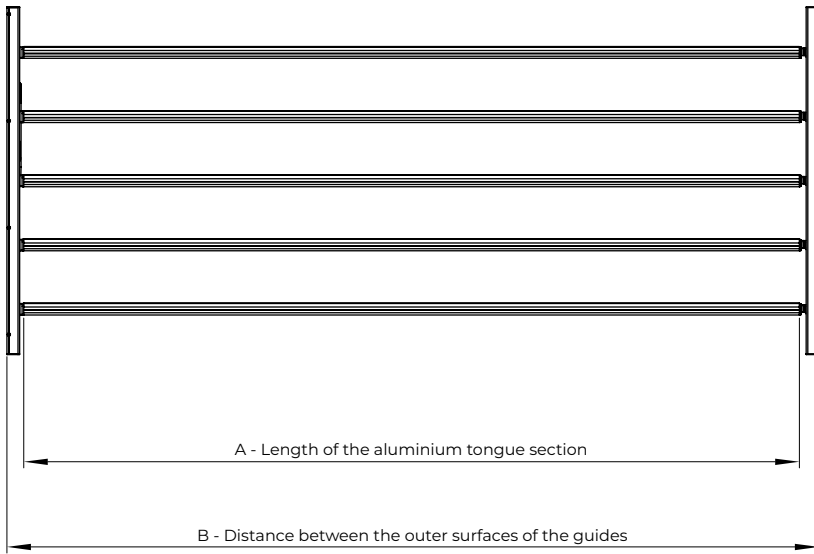
Pen profile cap Type B

Profile end caps for type B profiles, for use with type B tongue profiles

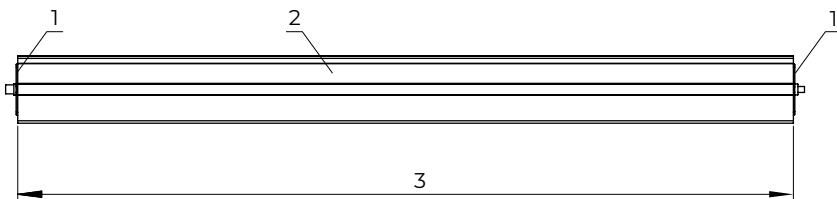


1. Profile cap type B, drive, right-hand
2. Cylindrical pin $\varnothing 10 \times 30$
3. Profile cap type B, bearing, right-hand

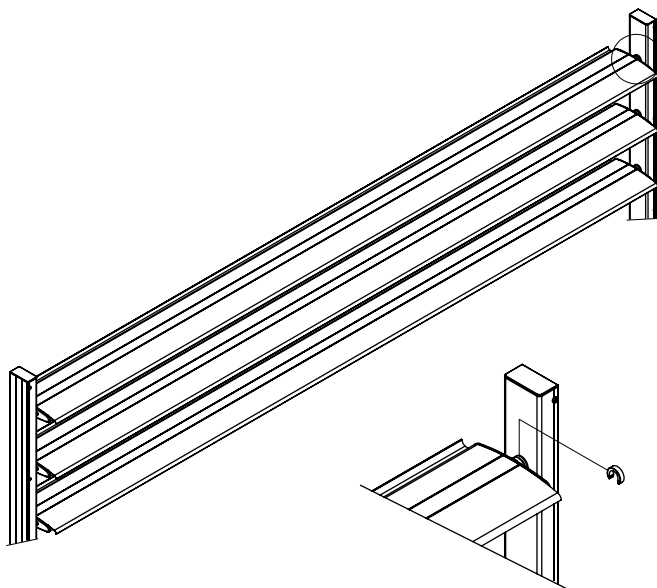
SUNBREAKER 210 MOVABLE
Blade assembly 210 Type B



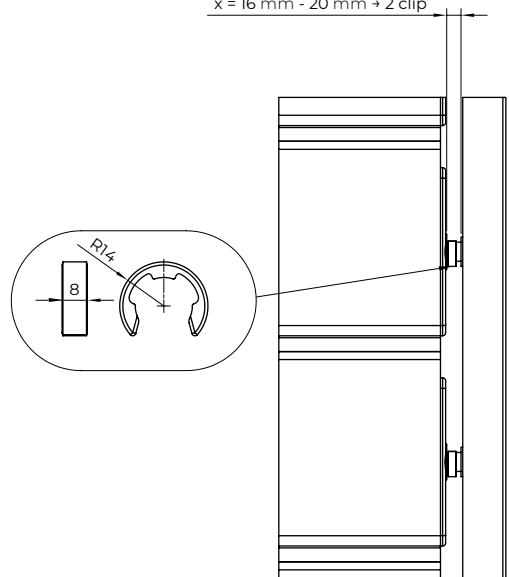
- If:
- if the difference in dimensions (B-A) is less than 110 mm, installation of the system is not possible
 - the difference in dimensions is between 110 and 115 mm; installation of the slats may proceed
 - if the difference in dimensions is between 115 and 122 mm, installation is permitted only if the guidelines below are followed
 - the difference in dimensions exceeds 122 mm there is a very high probability that the slat will fall out and pose a risk to life and health; in this situation, installation of the slats is prohibited; the width of the slat must be correctly adjusted to the width of the profiles



1. Plastic component
2. Aluminium component
3. Length of the aluminium section



x = 8 mm - 12 mm → 1 clip
 x = 12 mm - 13 mm → 1.5 clip
 x = 16 mm - 20 mm → 2 clip

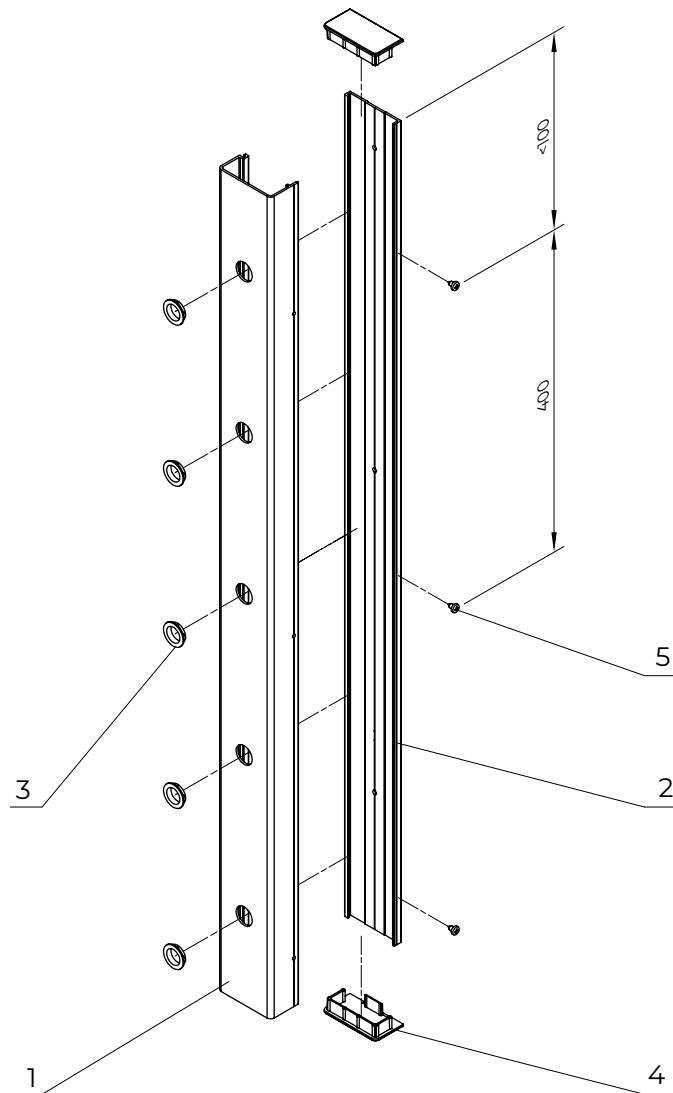


SUNBREAKER 210 MOVABLE

Guide rail - closure

Note:

After screwing the fixed part (item 2) to the building and assembling the entire guide, close it and secure it with ST4.8x9.5 self-tapping screws (item 5). The screws should be spaced evenly, approximately every 400 mm, but no closer than 100 mm from the ends of the guide. Seal both ends of the guide with a cap (item 4).

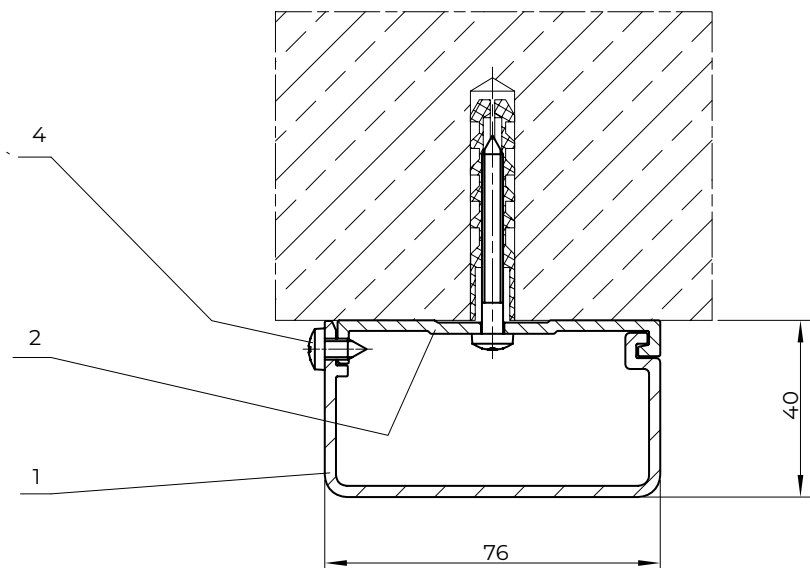
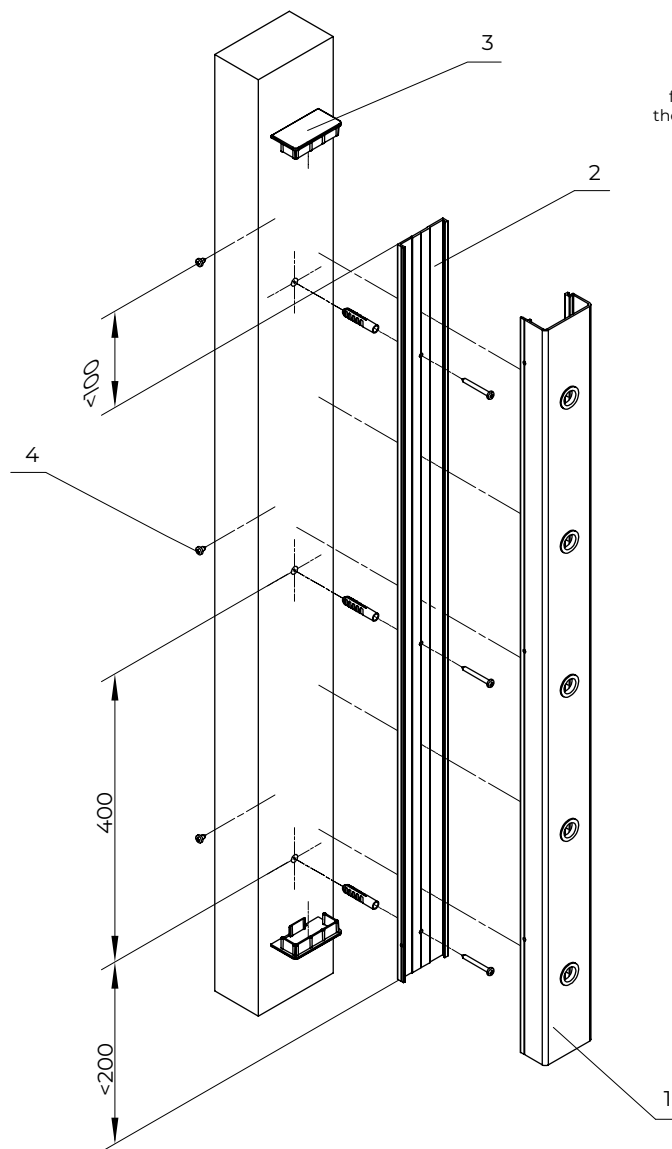


1. Guide rail – moving part
2. Guide rail – fixed part
3. Pen bearing
4. Blind for a guide channel
5. Self-tapping sheet metal screw

SUNBREAKER 210 MOVABLE
Guide rail anchoring

Note:

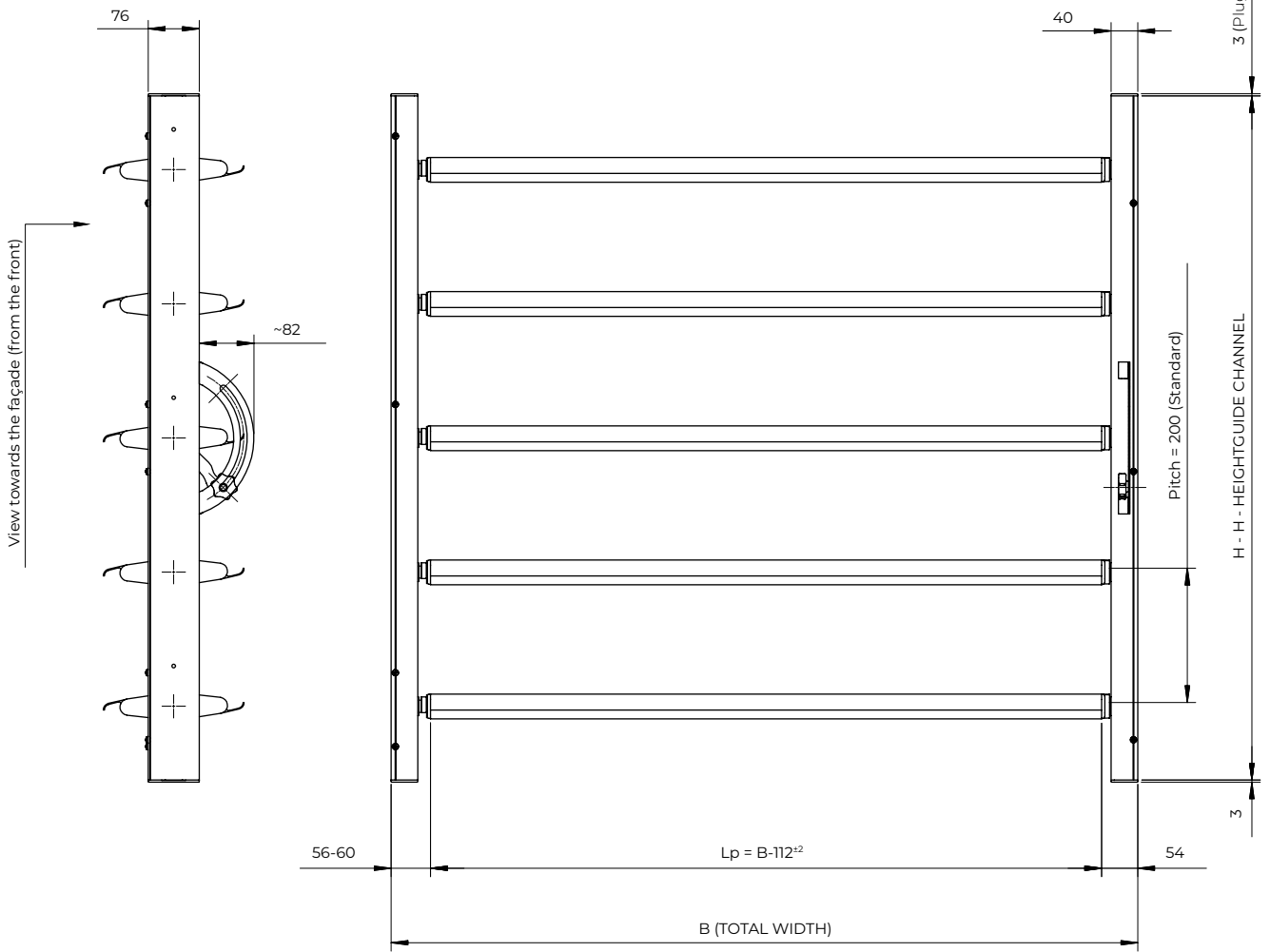
Mount the fixed section of the guide (item 2) to the wall using anchors suitable for the substrate; drill holes in the fixed section of the guide with a diameter appropriate for the anchor. It is recommended to fix the guide evenly at 400 mm intervals, no more than 200 mm from its ends. Furthermore, the axis of the pin must be at least 50 mm vertically away from the axis of the tongue. It is recommended to fix the movable part of the guide evenly at 400 mm intervals, no more than 100 mm from its ends.



- 1. Guide rail – moving part
- 2. Guide rail – fixed part
- 3. Blind for a guide channel
- 4. Self-tapping sheet metal screw

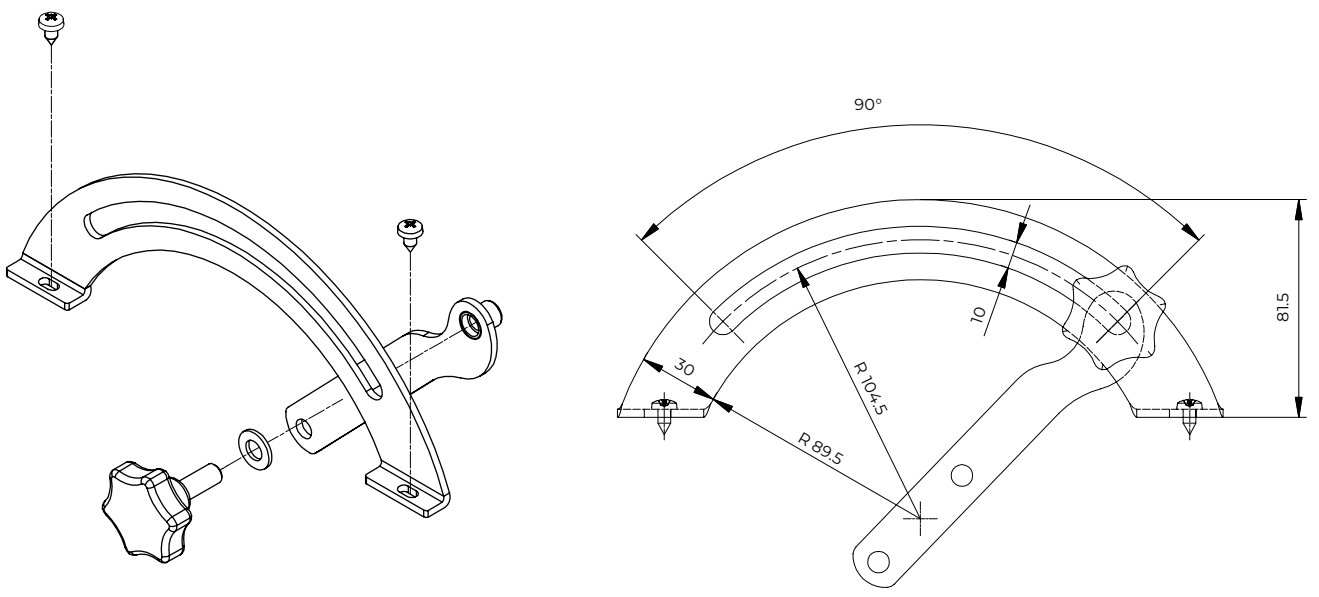
SUNBREAKER 210 MOVABLE

Sunbreaker movable 210 type A, with manual drive.



SUNBREAKER 210 MOVABLE

Sunbreaker arm mechanism lock



SUNBREAKER 210 FIXED

SUNBREAKER 210 FIXED - is a simple façade system designed to provide protection against the effects of sunlight. It includes several louvre mounting options, including pre-adjustment of the tilt angle. It is also used as a decorative or protective architectural element. Blades with brackets allow for flexible spacing, and adjustable brackets can be joined to form long linear runs (taking into account expansion joints for linear expansion).

APPLICATION:

- Sun protection and surface shading
- Decorative covering of monotonous sections of the façade
- Concealment of technical installations on the building

PRODUCT CHARACTERISTICS:

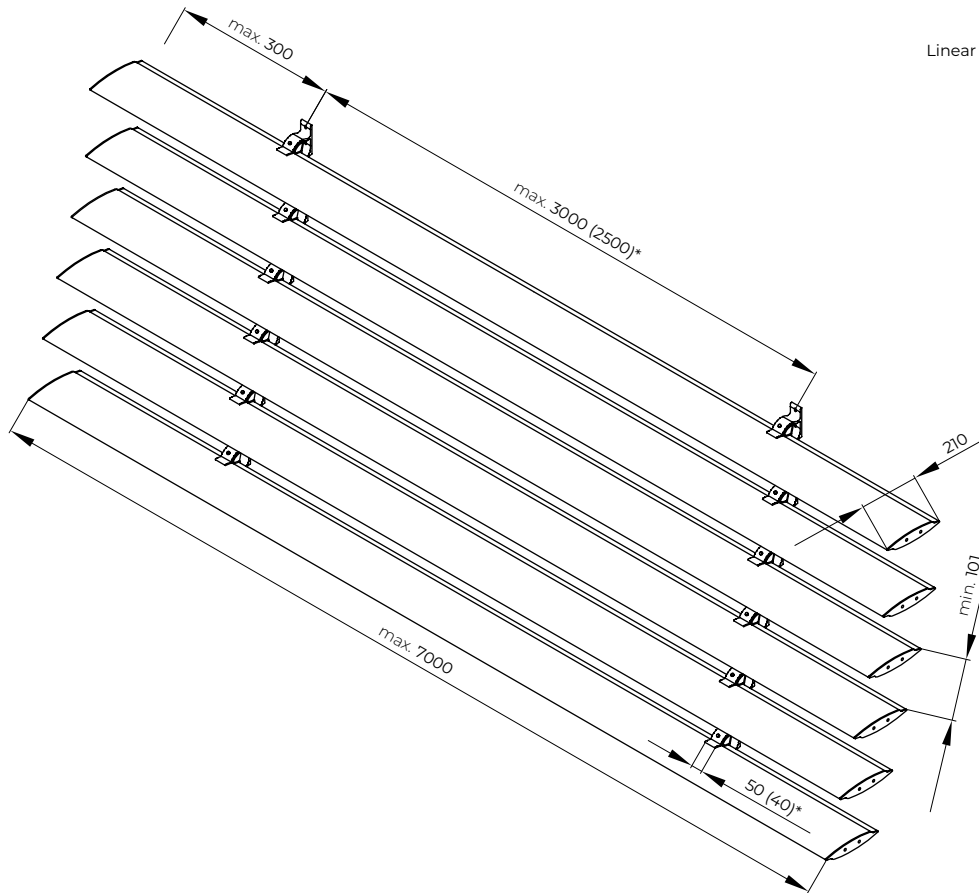
- Structure made of extruded aluminium profiles and stainless steel components
- Flexibility in selecting slat spacing
- Does not emit toxic substances during operation
- Connection into long linear runs with expansion joints on shared adjustable brackets
- Pre-set feather angle with 15-degree increments
- Structure compliant with PN-EN 13659

TECHNICAL PARAMETERS:

- Maximum spacing:
- Fixed adjustable bracket, width 50 mm – 3000 mm
- Fixed adjustable bracket, width 40 mm – 2500 mm
- Min. spacing 101 mm (fixed adjustable brackets)
- Blade rotation angle range:
- On a fixed bracket adjustable from 30 to 90 degrees (in 15-degree increments)
- Blade type B available
- Mounting to external supporting structure (directly to the building or indirectly – to the substructure)
- Installation options – slat axis horizontal only
- Unpainted stainless steel end caps

SUNBREAKER 210 FIXED
Fixed adjustable brackets

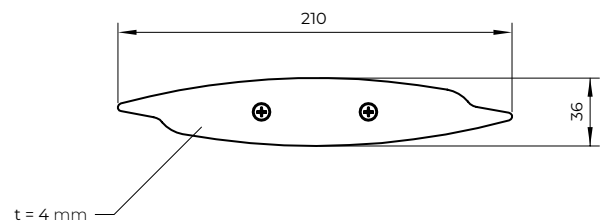
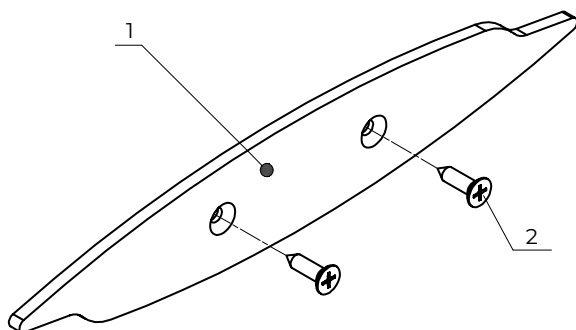
Note:
Linear extension of the blades $d=0.001 \cdot L$



* Fixed adjustable brackets, 50 or 40 mm wide

SUNBREAKER 210 FIXED
Al fin cap Type 1 SET

Note:
The drawing shows the right-hand end cap. The set also includes a left-hand end cap, which is a mirror image of the right-hand one.

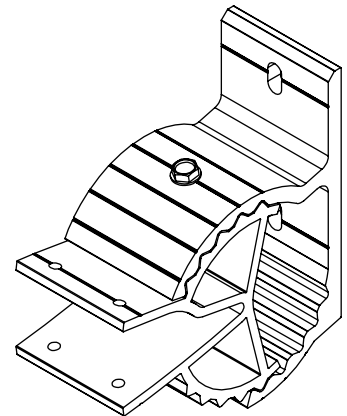
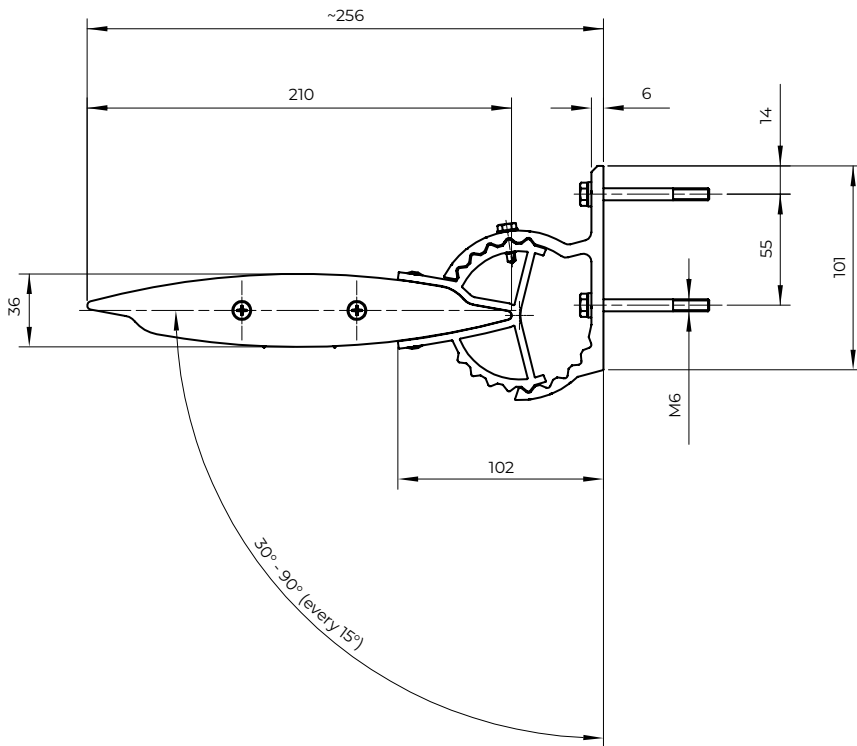
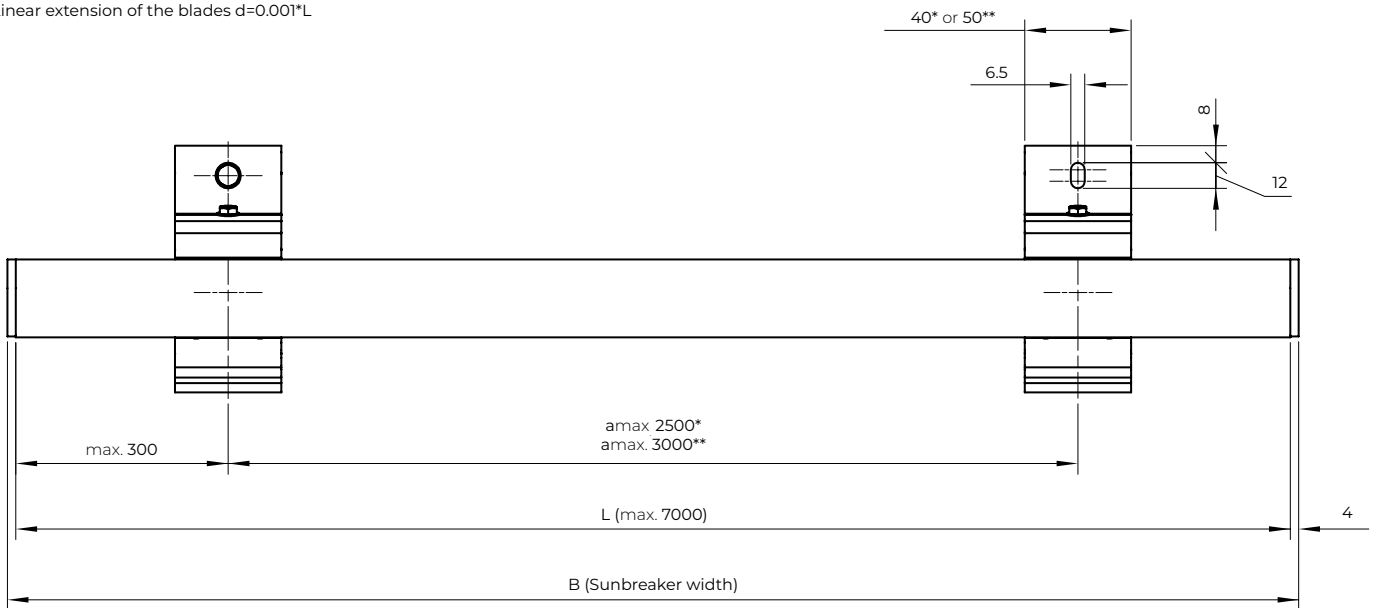


1. Aluminium fin cap type 1 (L or P) – painted aluminium or stainless steel
2. ST4.2x16 conical head sheet metal screw

SUNBREAKER 210 FIXED

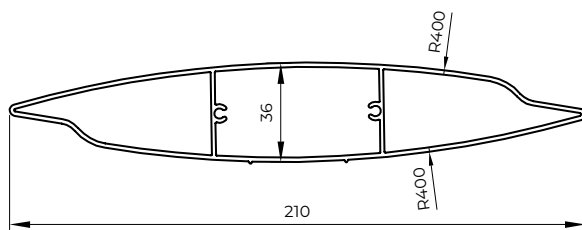
Fixed Sunbreaker 210 with fixed adjustable bracket

Note:
Linear extension of the blades $d=0.001 \cdot L$



SUNBREAKER 210 FIXED

Tongue cross-section



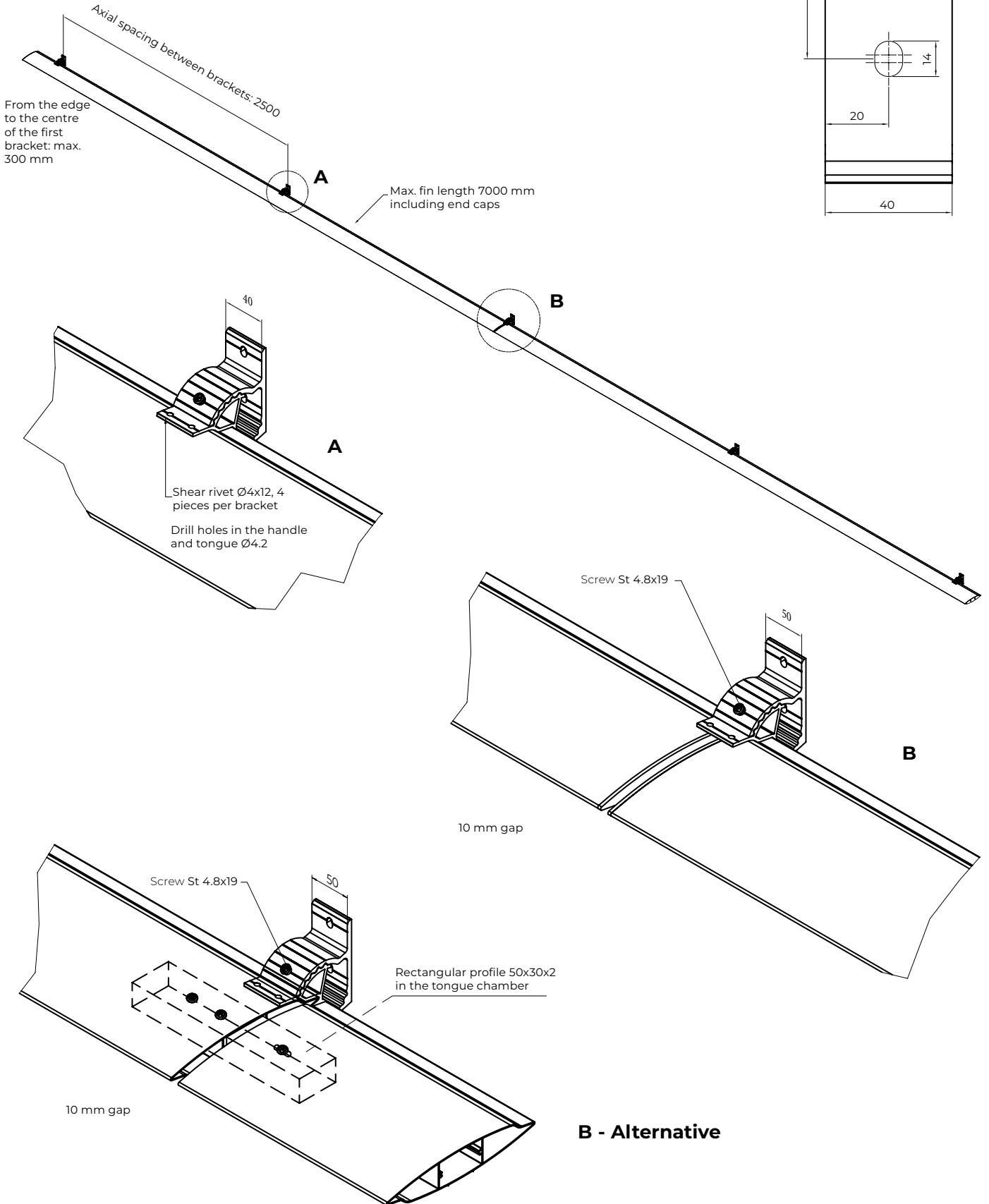
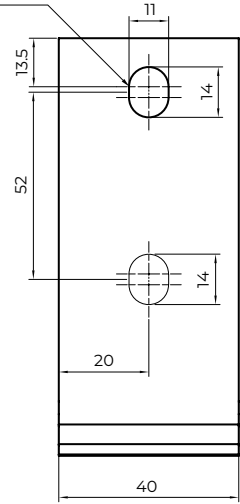
Material: EN AW6063 T66
Ground: 2.06 kg/m
Country: 7.62 cm²
J1 250.7 cm⁴
J2 11.6 cm⁴

SUNBREAKER 210 FIXED

Modular connection - 40 mm brackets

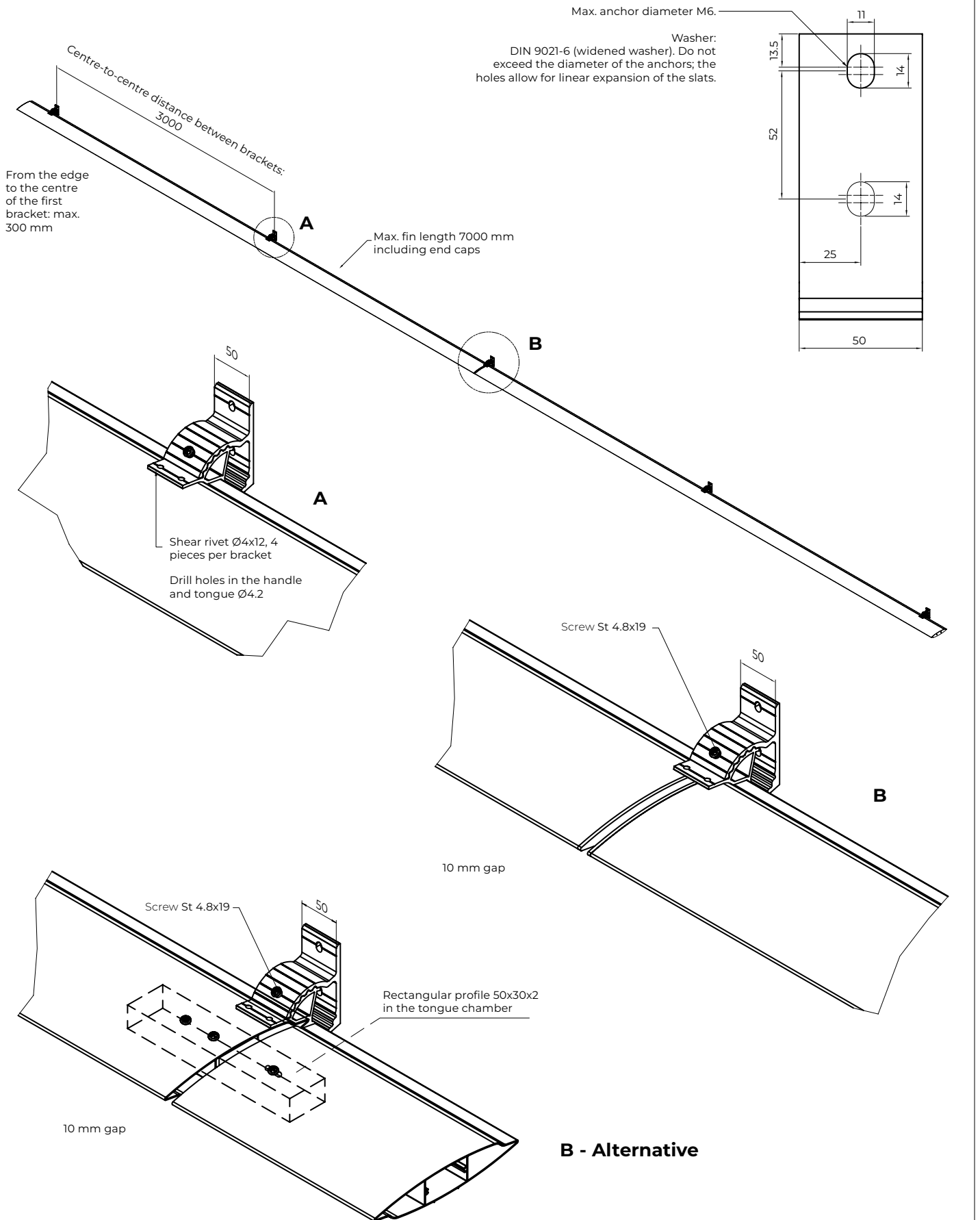
Max. anchor diameter M6.

Washer:
DIN 9021-6 (widened washer). Do not
exceed the diameter of the anchors; the
holes allow for linear expansion of the slats.

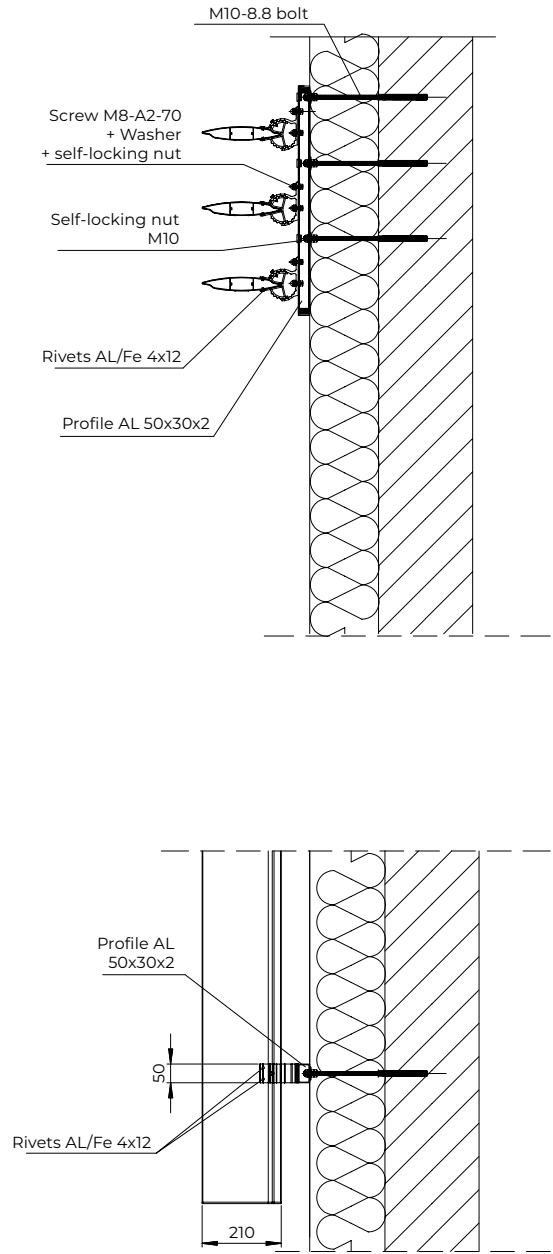
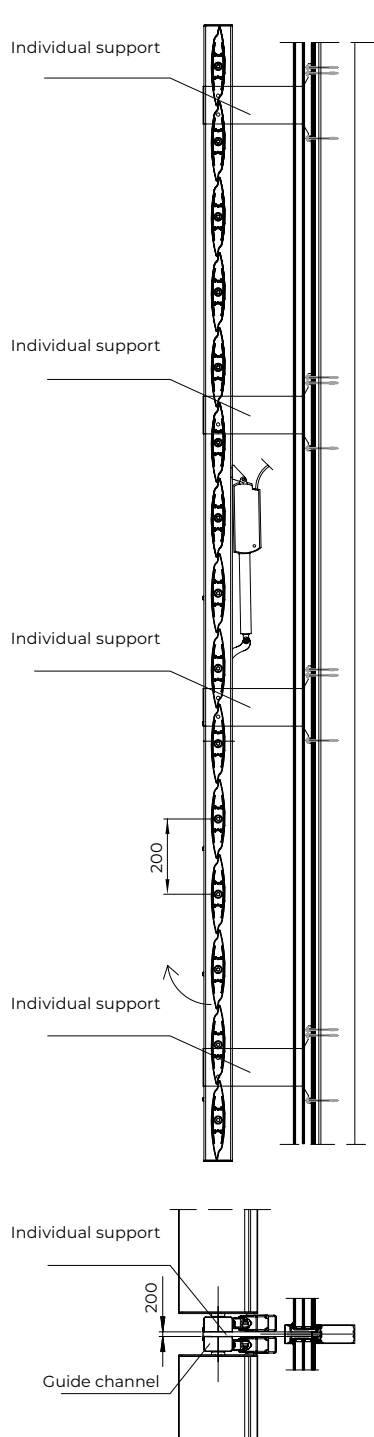


SUNBREAKER 210 FIXED

Modular connection 50 mm brackets



SUNBREAKER 210
Examples of installation



TECHNICAL SUPPLEMENT - PERGOLAS

The product meets the CE safety requirements

ALUPROF

Head Office

ul. Warszawska 153
43-300 Bielsko-Biała, Poland
Tel. +48 33 81 95 300
fax +48 33 82 20 512
e-mail: aluprof@aluprof.eu
www.aluprof.com

ALUPROF SUN SHADING SOLUTIONS

ul. Wschodnia 23a
45-449 Opole, Poland
Tel. +48 77 55 32 100

SUPLEMENT TECHNICZNY - PERGOLE
We reserve the right to make technical changes.
Valid from 2026.01.01