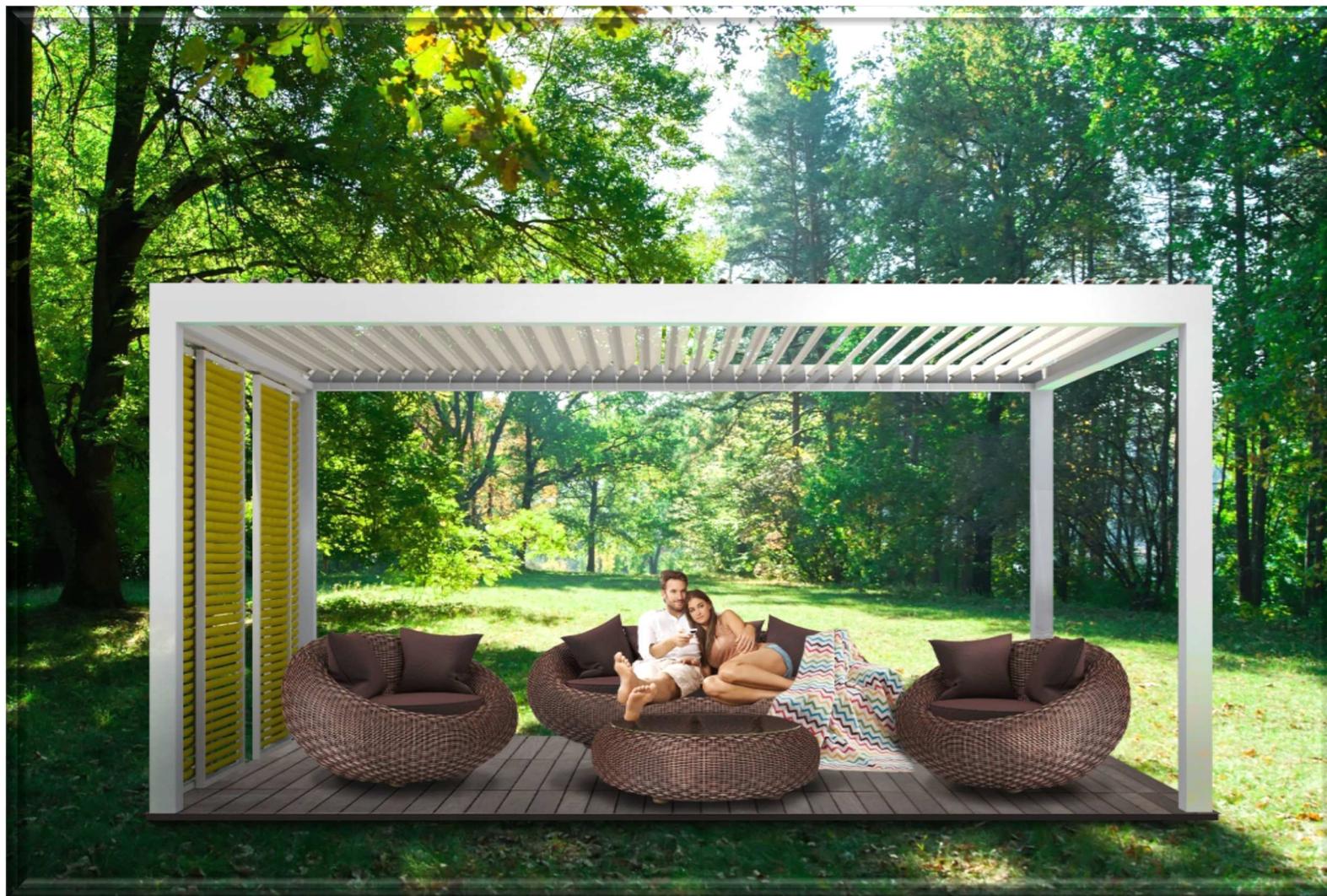


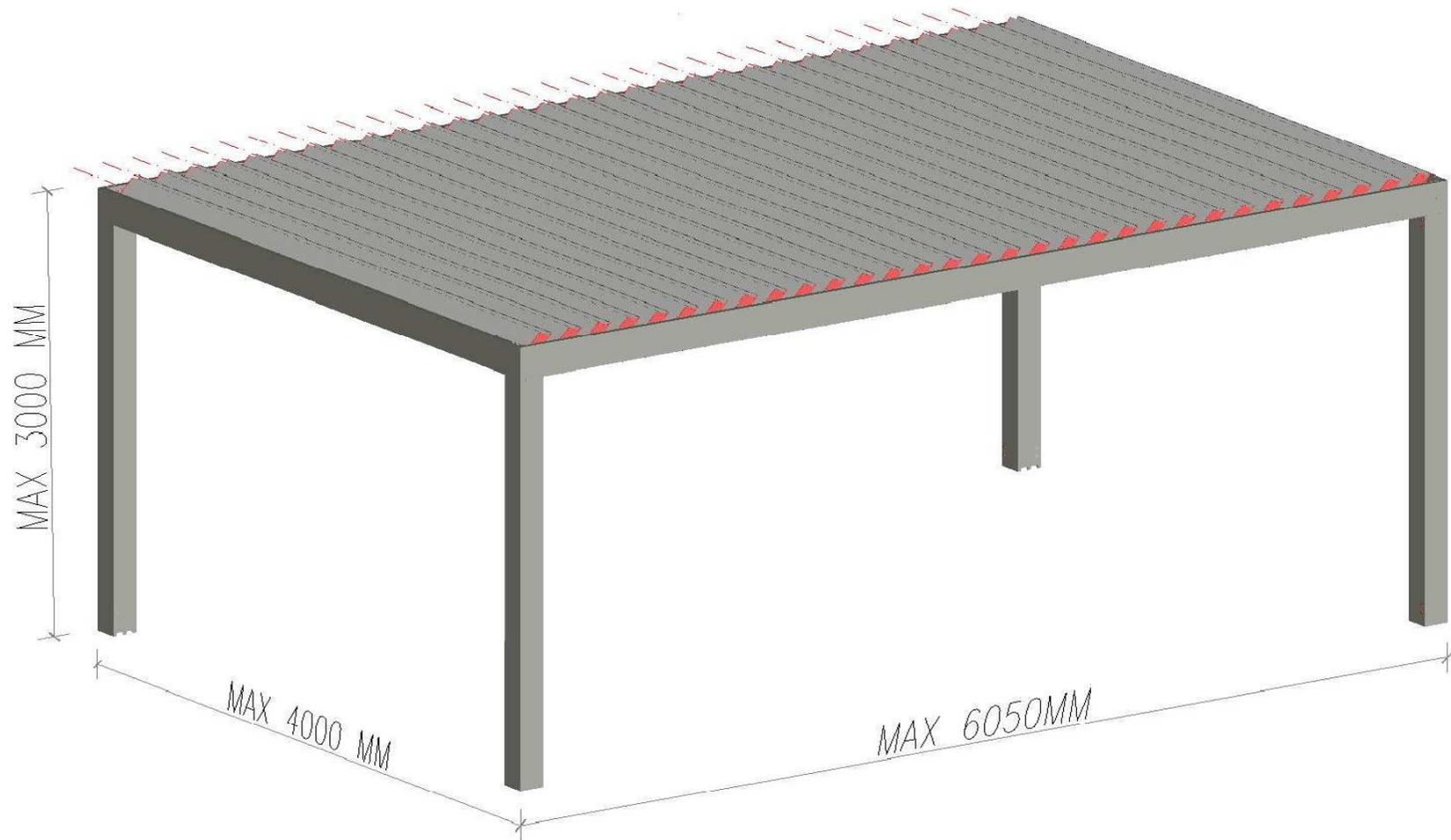
# Instrukcja montażu Pergoli Lamelowej EN

**ROLCO** ■■■  
ŚWIAT CIENIA ■■■

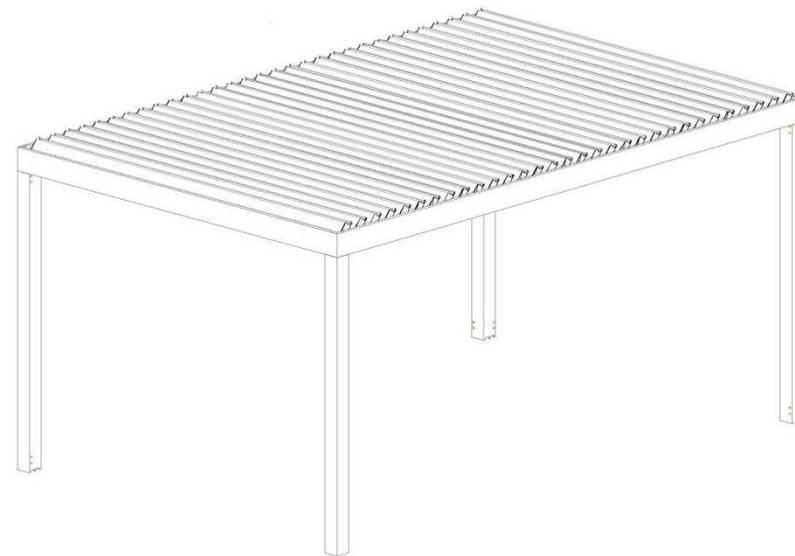
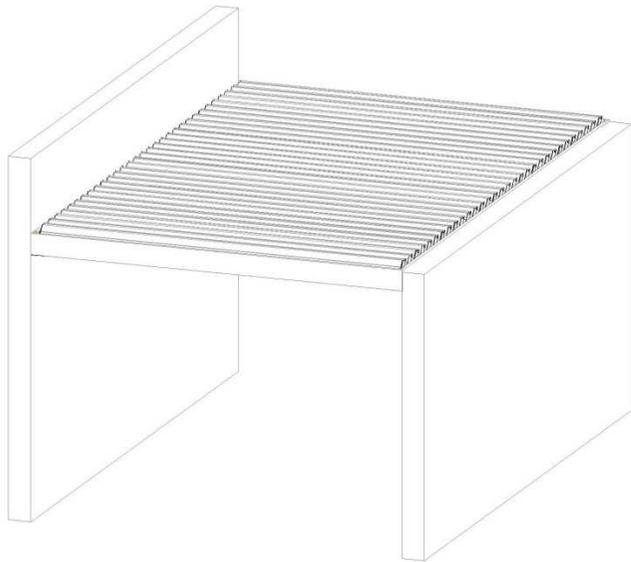
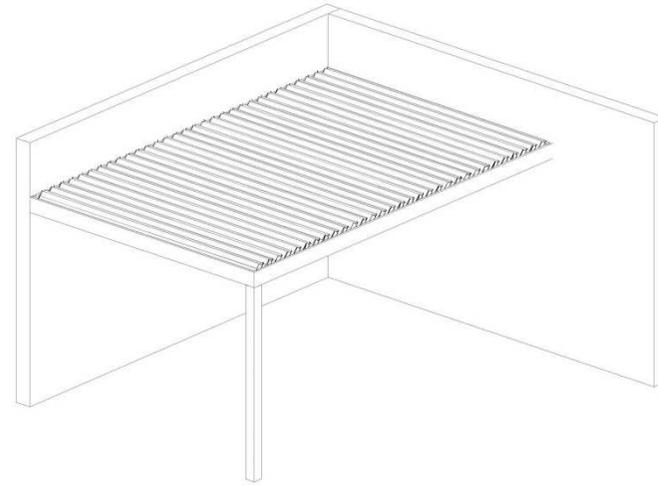
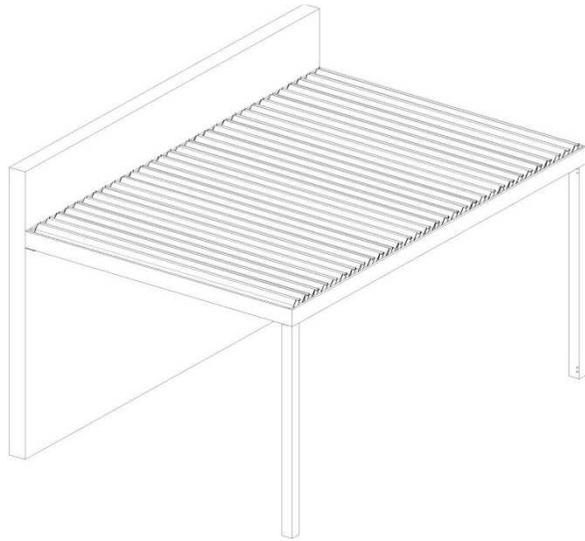


Technical specification:

- Maximum dimensions:

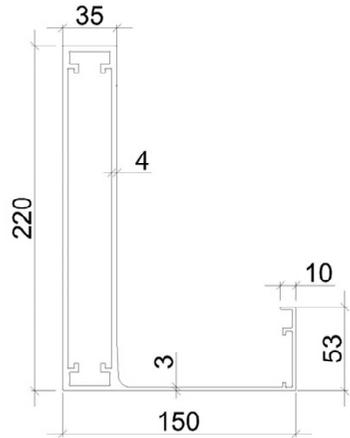


## Adaptability options:

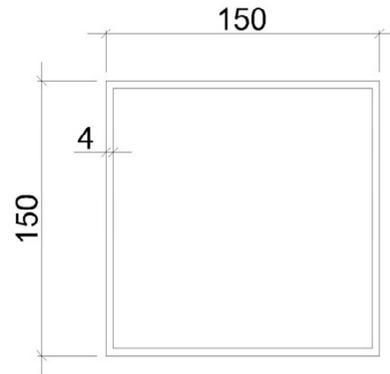


# Main profiles and components:

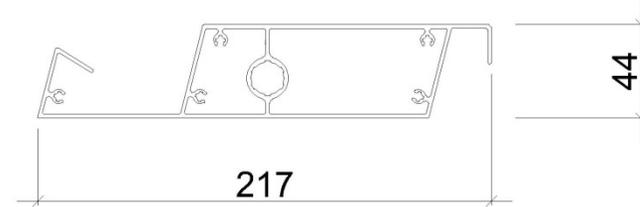
Frame profile



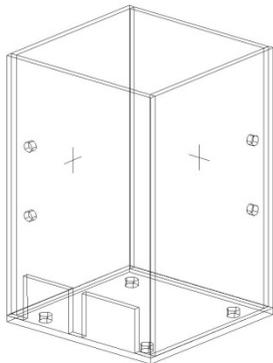
Post



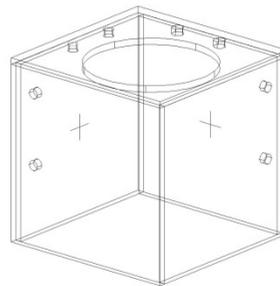
Waterproof louvre



Foot bracket



Head bracket



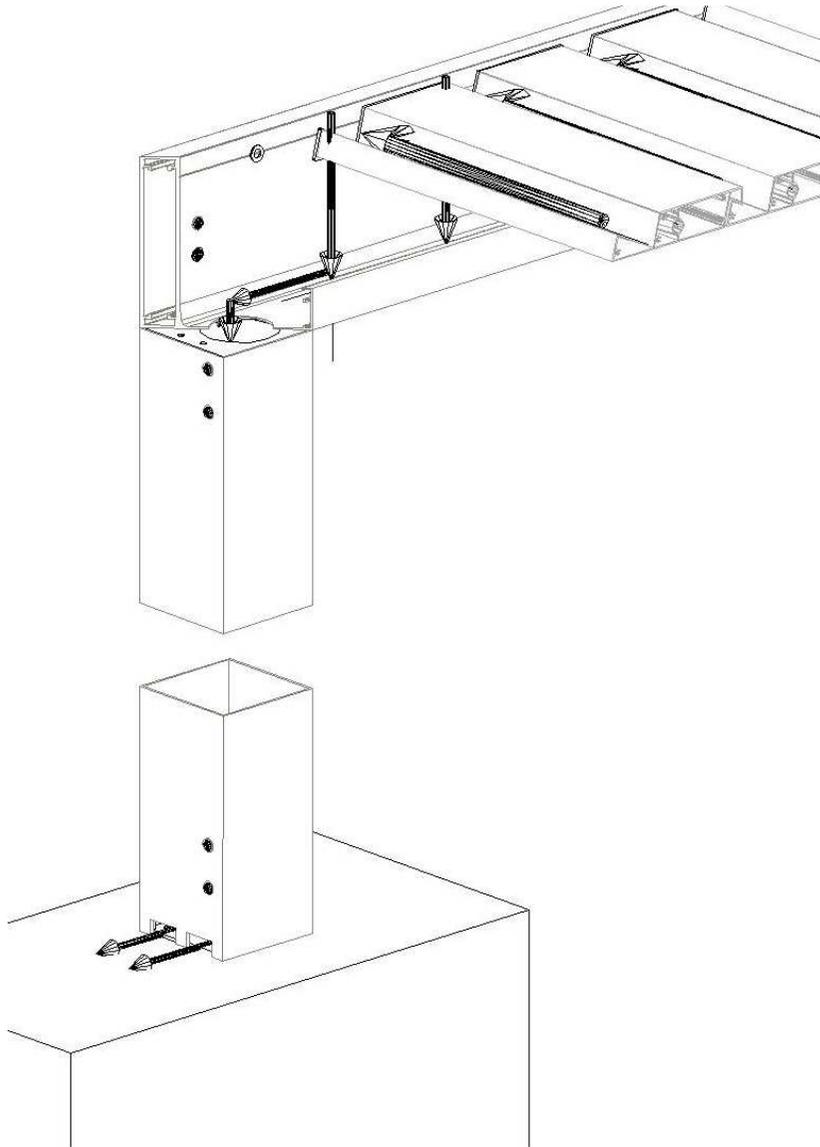
Material:

Aluminium: 6063 T66 (louvres, posts, frame, end caps)

Construction components: stainless steel  
Steel 304 (A2 / OH 18N9 ) - foot bracket, head bracket

Steel 304 (A2 / OH18N9) class min. 70 - screws

## The schema of water drainage system:

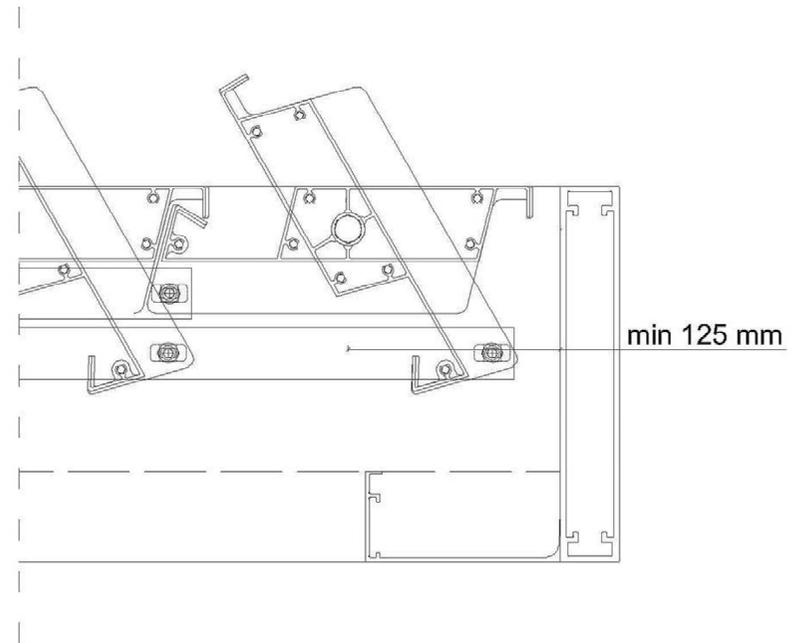
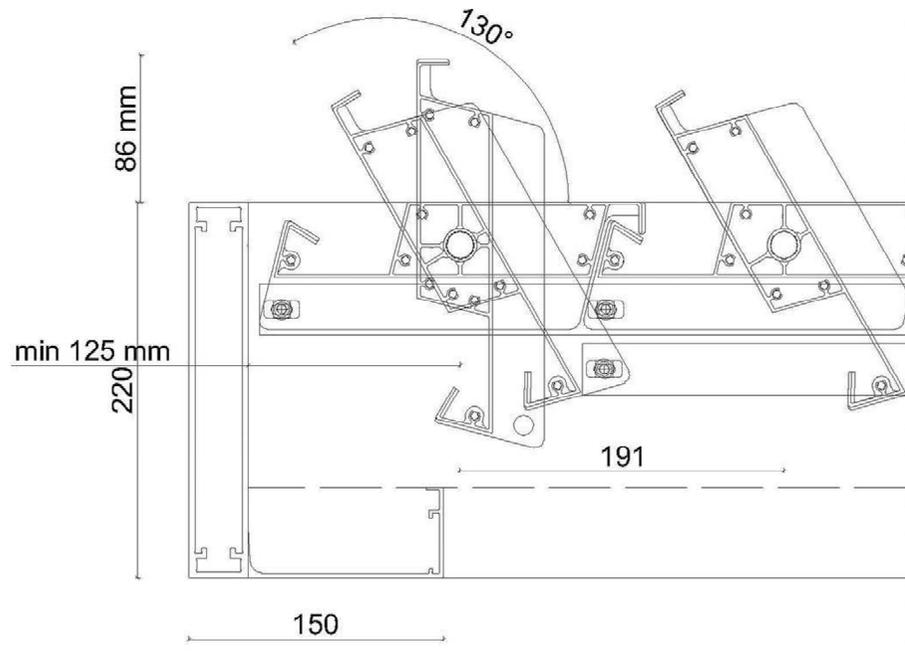


The drop water is drained to the gutter of the main bearing profile of Pergola and flows to the post. The drainage from the post to the ground is through holes in the post.

The holes in the frames corners are protected against leaves with special sieve.



# Louvres rotation:



## Parameters:

- Maximum wind load – 120 km/h
- Maximum icing and snow load – 90kg/m<sup>2</sup>
- During snowfall louvres have to be in open position.  
Pergola cannot be in places where is the risk of snowdrift on louvres, e.g. by sliding down of snow clumps.
- Power supply 24 V
- Linear actuator: 1200 N, stainless steel housing and fastenings, IP65



## INSTALLATION GUIDE:

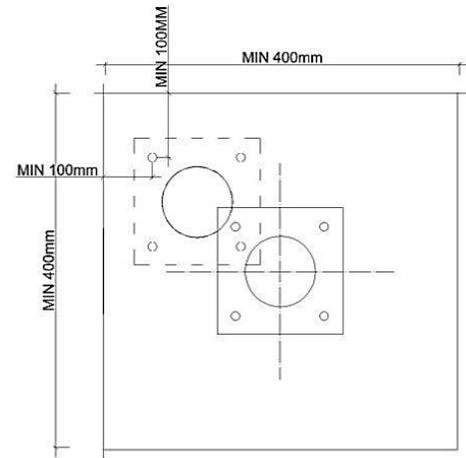
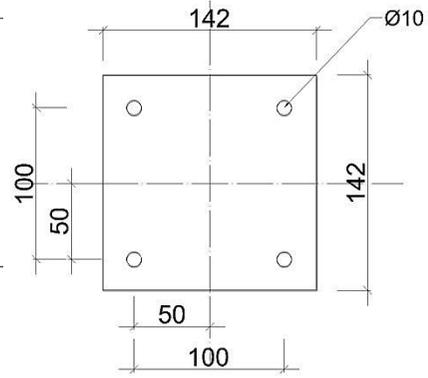
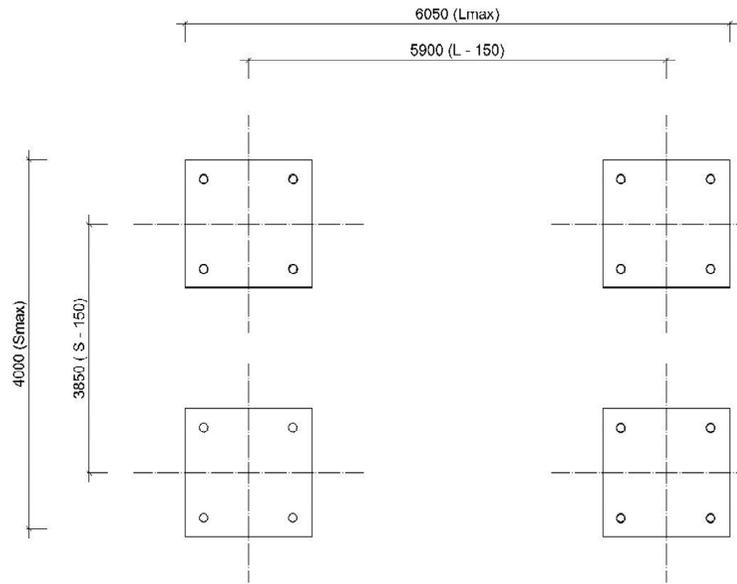
The assembly of Pergola have to be realized according to all health and safety regulations and only by qualified installers.

Pergola free-standing:

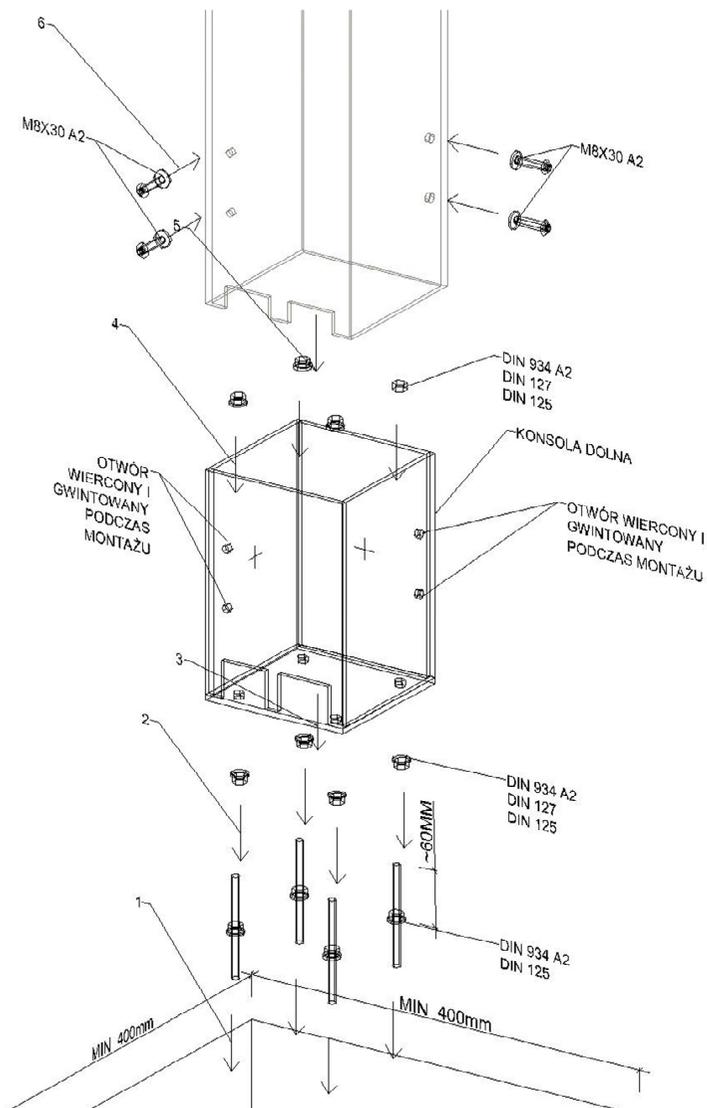
1. Pergola has to be anchored to the concrete foundation, ensuring stability and safety.
2. Pergola can be installed to the external construction (e.g. steel construction).

The distance between installation feet has to be matched to the Pergola dimensions.

For Pergola in maximum sizes the distance between installation feet is as follow:



## Installation of bottom foot:



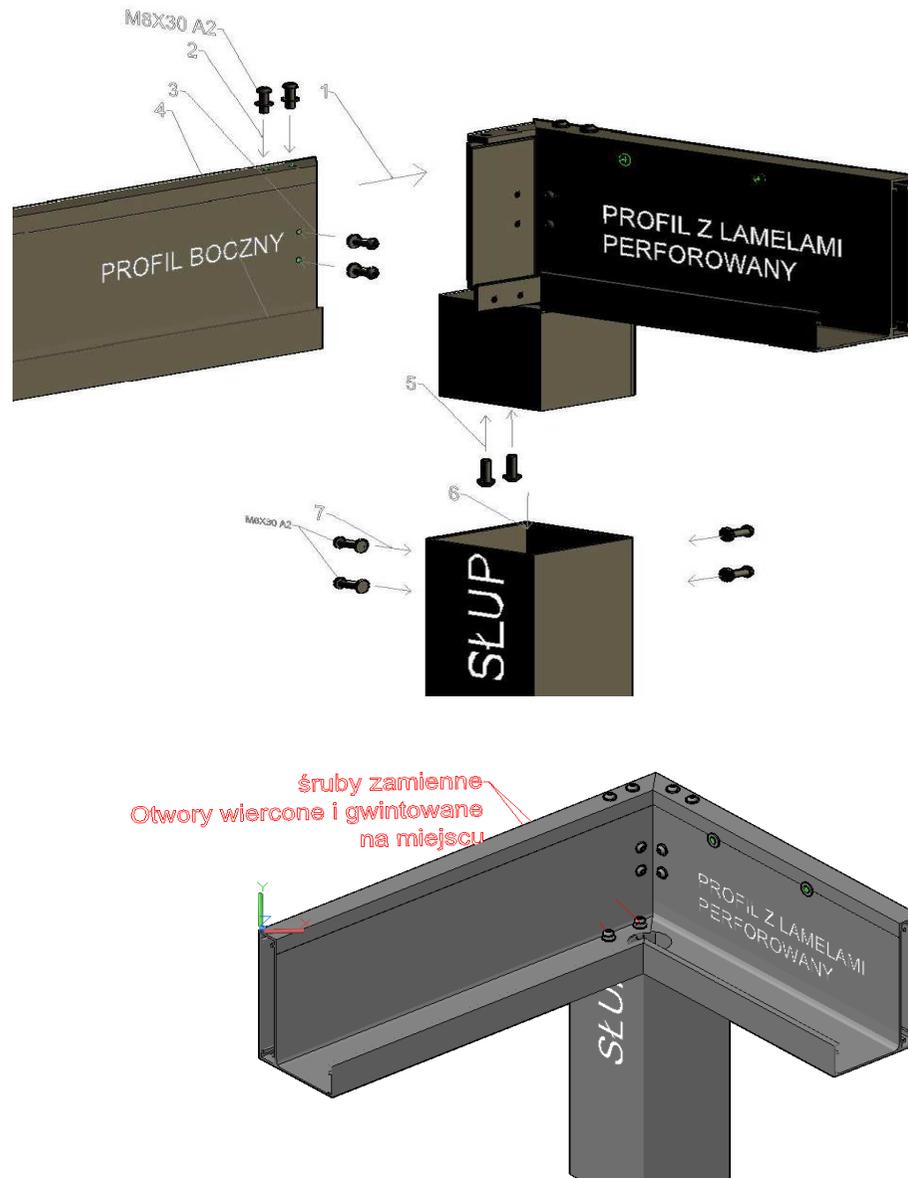
Drill the holes  $\text{Ø}12\text{mm}$  in the foundation.

The depth of the holes match to the material of the foundation and Pergola dimensions.

1. Anchor the pins
2. Put the foot
3. Screw the fastening nuts
4. Put the post
5. Screw the post to the foot

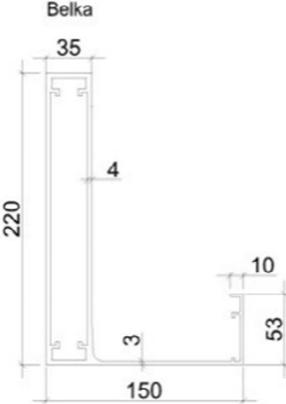
Caution! All fasteners have to be stainless steel, at least A2 class, before screwing to apply thread adhesive

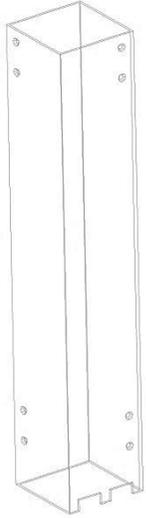
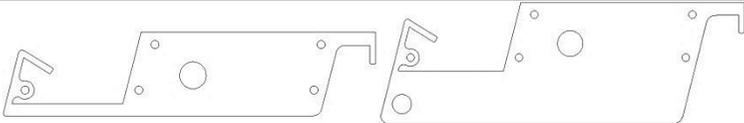
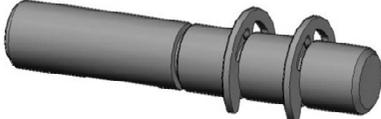
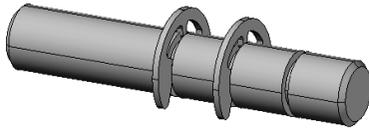
## Installation of head bracket:



The assembly of the frame should be made on a stable and straight ground. The frame (without louvres) should be put on the already installed posts. For frame installation will be needed lift tool and 2-3 installers.

1. Insert the side profile of the frame (without holes for louvres) to the second profile of the frame (perforated for louvres).
2. Apply top screws – do not tighten.
3. Use side screws – do not tighten. Above procedure repeat to each corner. Check the diagonals, check the corners – maximum gap 0,5 mm.
4. Put the thread adhesive to all screws and tighten.
5. Lift up the whole frame, check the stability on the lift tool, secure against moving and falling down. Put thread adhesive and tighten the screws to the bottom of the head bracket.
6. Lift up carefully the whole frame and put on the posts.
7. Tighten side screws in the posts.

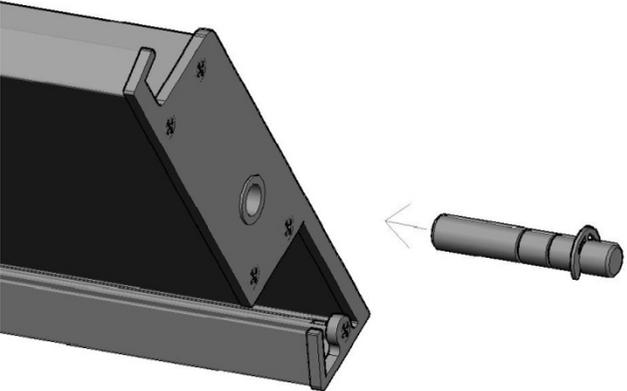
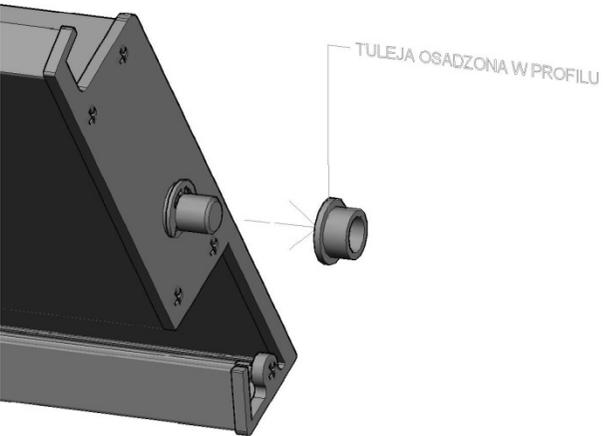
Main components supplied for pergola installation			
Description	Quantity	Unit	Sketch
Perforated frame profile with head bracket and plastic sleeves	1	pcs	
Perforated frame profile with head bracket, plastic sleeves and console for a motor	1		
Foot bracket	4	pcs	
Side frame profile – not drilled	2	pcs	

Post 150x150x4 drilled	4	Szt	
DIN 933A2 M8x30 + DIN 125	8	set	
Louvre with end caps (different end caps on each side) with brass sleeves	N*	pcs	
Stainless steel pin with security rings (security rings to moved)	N*	pcs	
Stainless steel pin with security rings	N*	pcs	

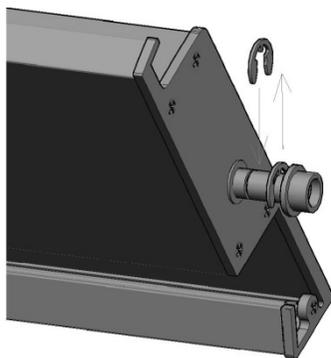
2-step screw	N*	pcs	
Washer PE $\phi 12$	2xN*	pcs	
Washer PE $\phi 8$	N*	pcs	
Drive rod with bracket for motor	1	pcs	
Motor 24V with cable 1,5m	1	pcs	
ISO 7380M8x30	48	Szt	
<p>N – louvres quantity  * depends on the sizes of pergola  ** screws in the end caps DIN 7981 lub 7982 depending on the pergola type  *** sleeves put in the profiles</p>			

# Louvres installation:

Louvres are installed to the ready and screwed pergola construction

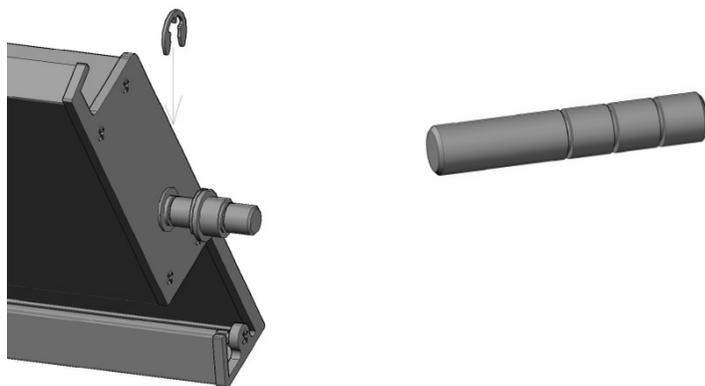
1		<p>Put the stainless steel pin with temporary security ring in the brass sleeve</p>  <p>security ring</p>
2	 <p>TULEJA OSADZONA W PROFILU</p>	<p>Put the louvre with the pin in the PE sleeve in the frame. Please be cautioned with <b>the direction of louvres rotation!</b></p>

3



Slide out a little bit the pin and put the second final security ring. After that take away the temporary security clip. Caution: if the order will be changed the pin will be inserted in to the louvre.

4

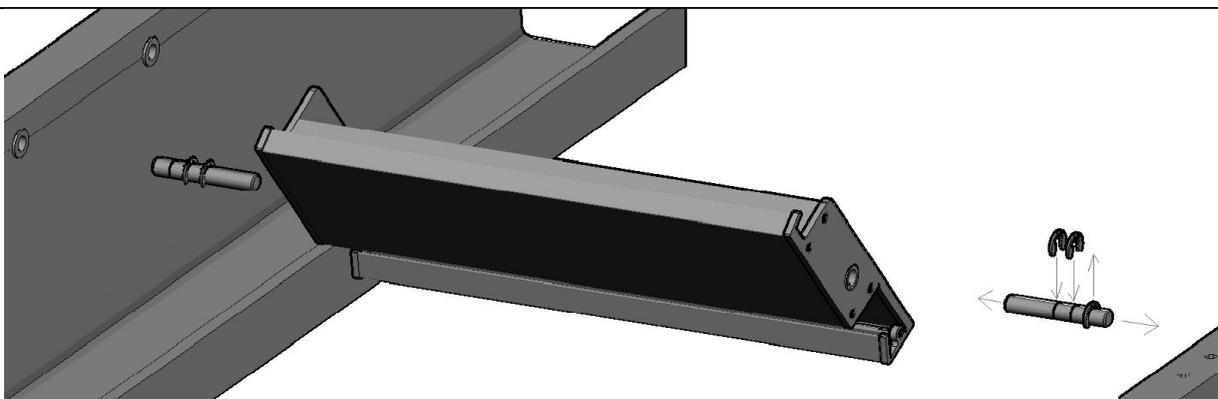


Slide the pin deeper in the frame and put security ring (previously it was temporary pin). The first channel were was the temporary security ring should be inside the frame now.

5

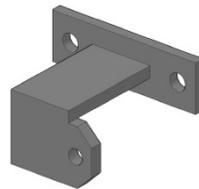
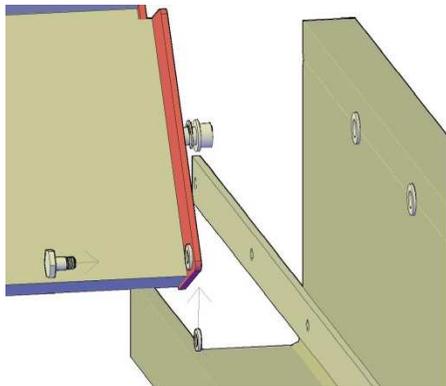
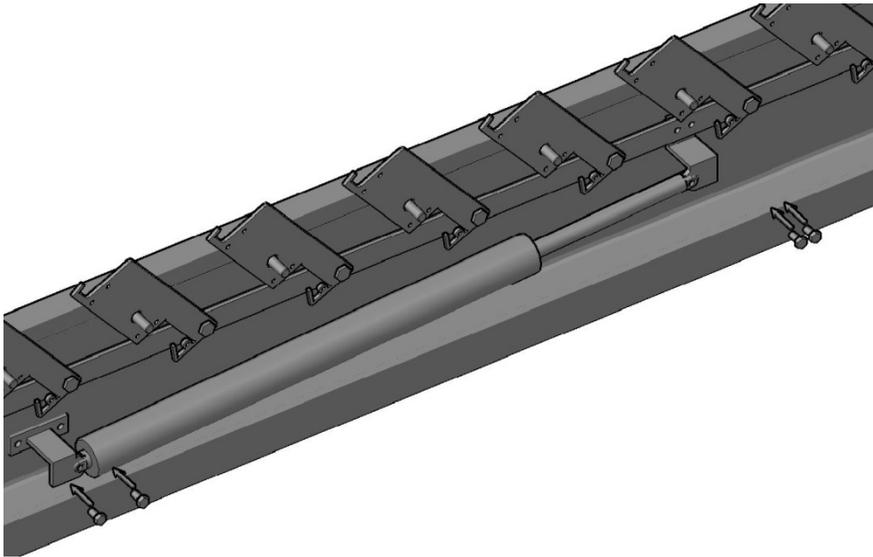


The view after assembly  
From the right side:  
Sleeve 16/12 in the  
bearing profile of Pergola  
Plastic washer  
Security ring  
Second security ring  
Brass sleeve  
End cap

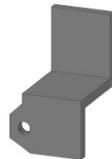


Above operations repeat to all louvres from both sides.

## Motor and drive accessories installation:



bracket for the motor



bracket for the drive rod

The motor and the drive rod should be installed after louvres assembly.

1. Apply the thread adhesive on the 2-step screw.



2-step screw

2. Insert the 2-step screw through the sleeve of 8 mm which is in the end cap, insert through the PE washer, screw with the drive rod



PE sleeve  $\varnothing 8$  mm



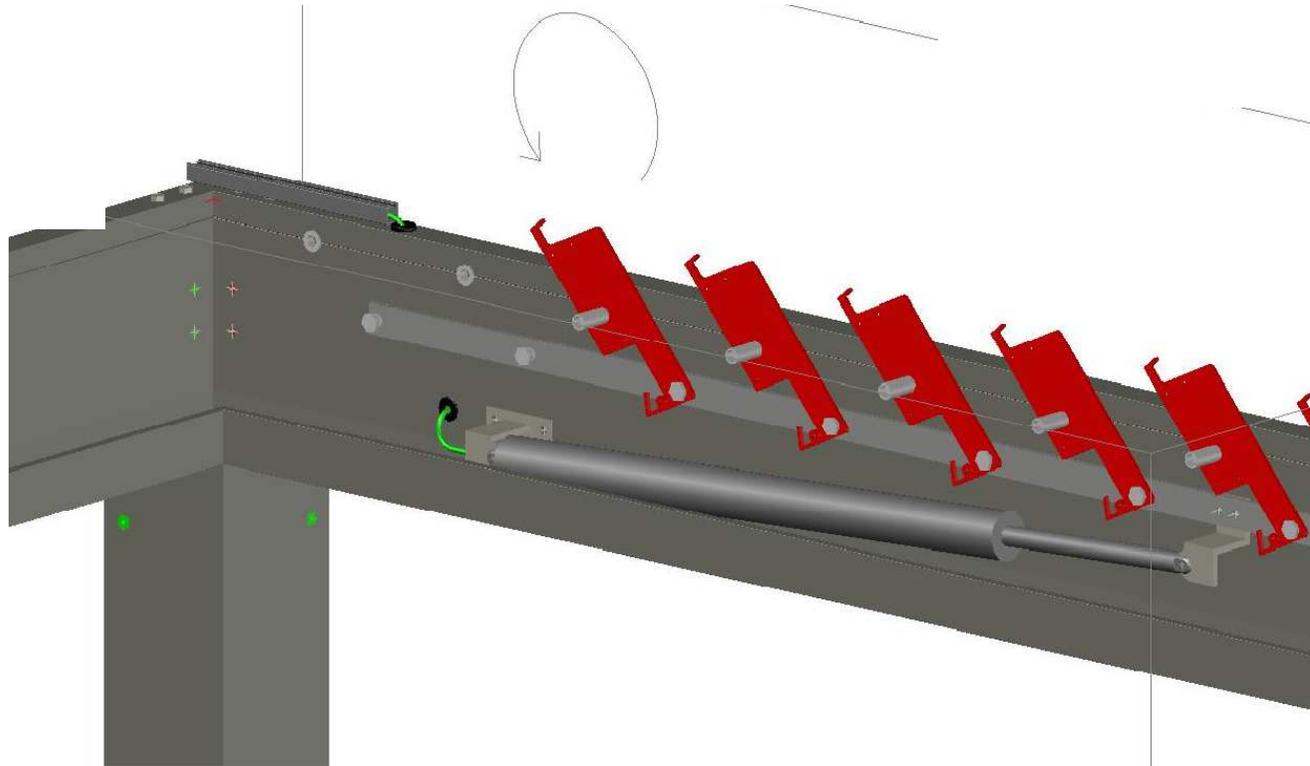
Drive rod

3. Connect the motor with the bracket, the cable should be in the bottom.
4. The motor and the bracket screw to the beam and to the drive rod with stainless steel screws (first covered with thread adhesive).
5. Connect the motor to the power supply and **adjust the limit end stops very carefully!!!**  
**Otherwise the bracket can be broken.**

Caution! The motor has to be installed from both sides with stainless steel pin.

## Basic schema of power supply:

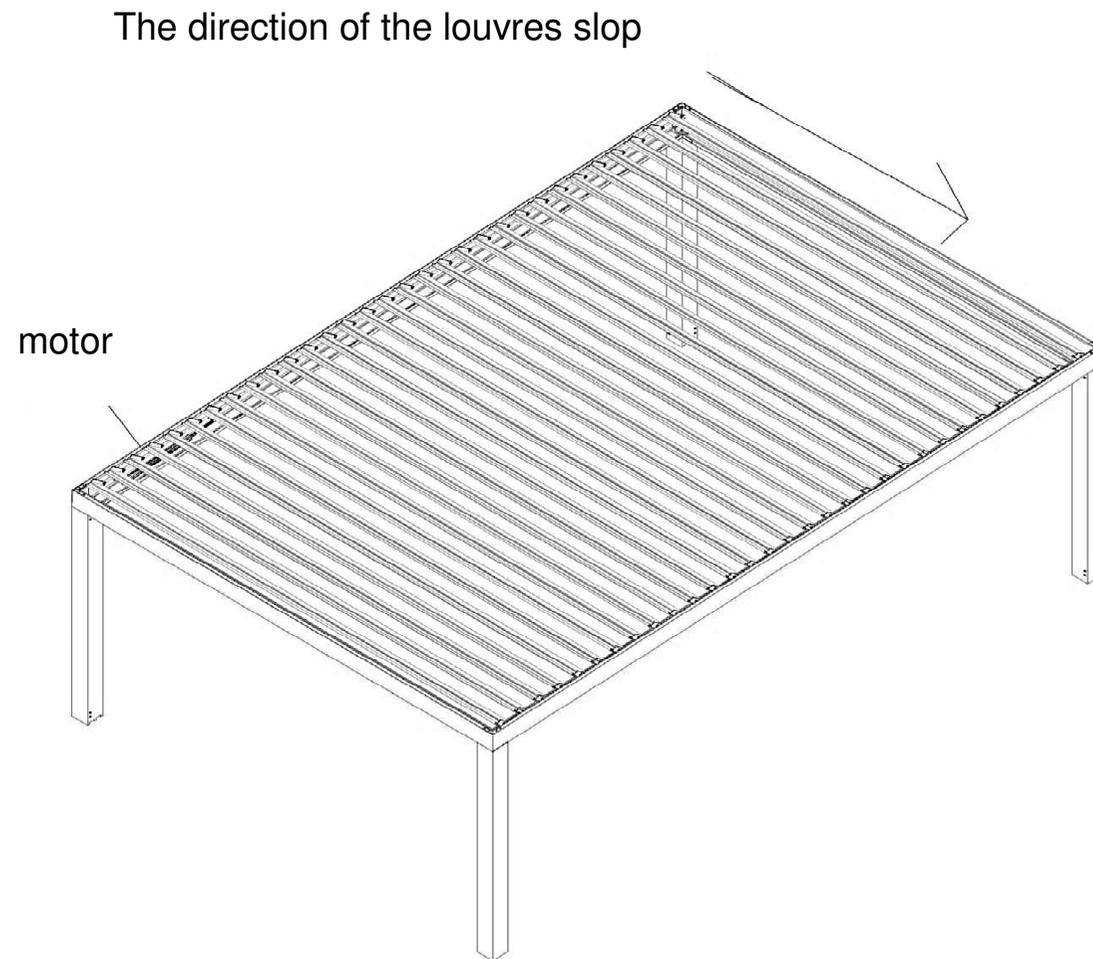
All power cables have to be connected to the motor with waterproof wires.



The power supply schema and manual of the motor are attached.

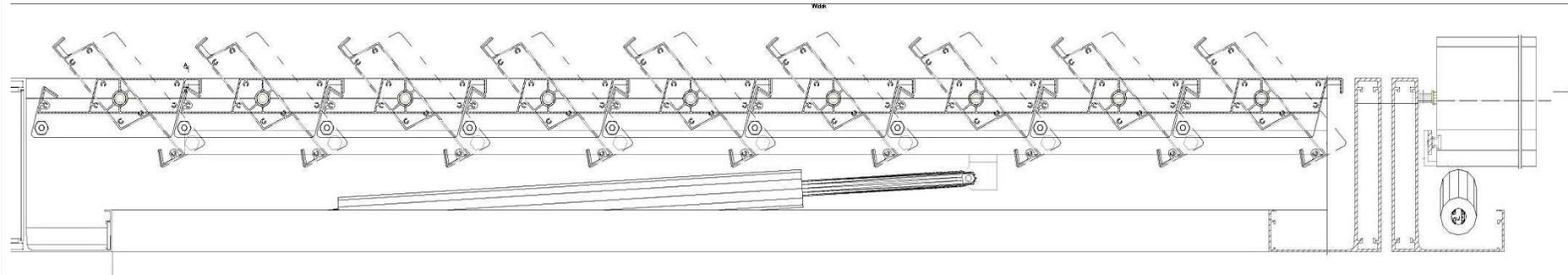
# Slop of the construction

Pergola is manufactured with a slop of the louvres to one side - making easier the water flow. The water flow should be in opposite site to the motor.

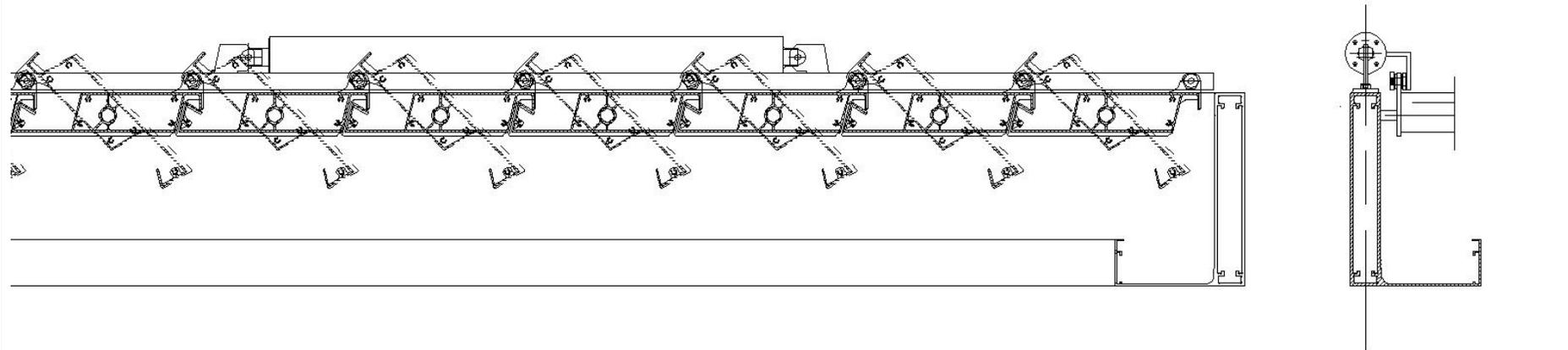


## Motor assembly options:

The motor in the standard position –  
in the gutter – **BOTTOM POSITION**



The motor above the frame –  
**TOP POSITION**

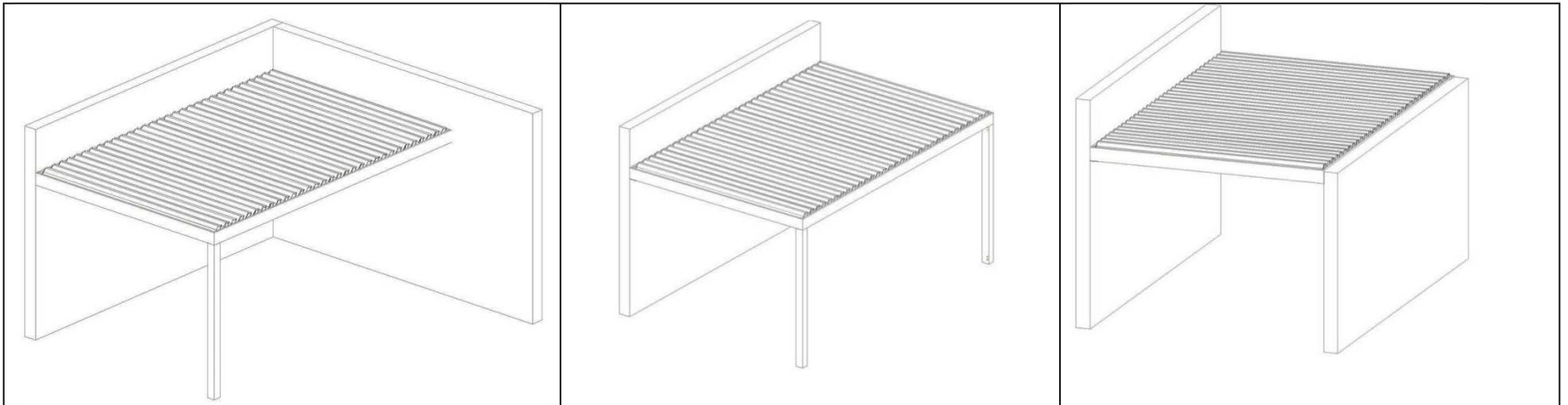


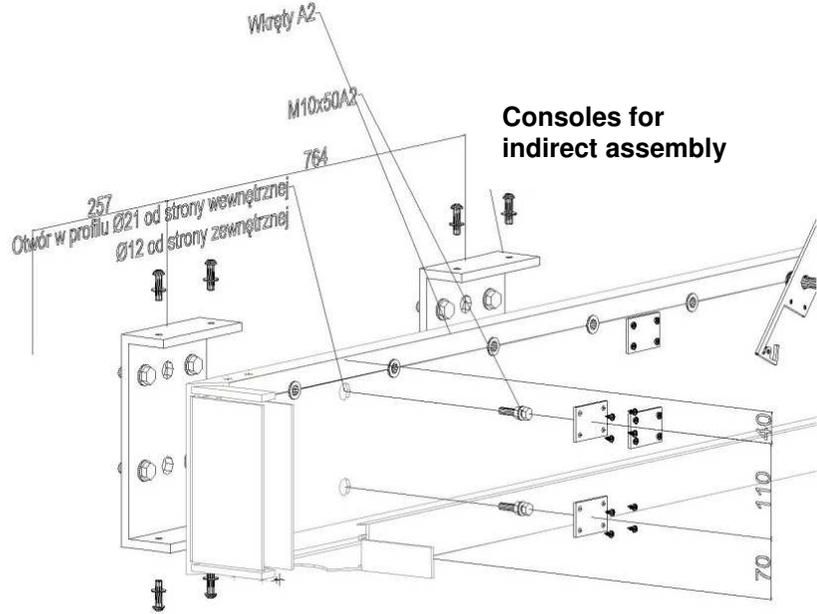
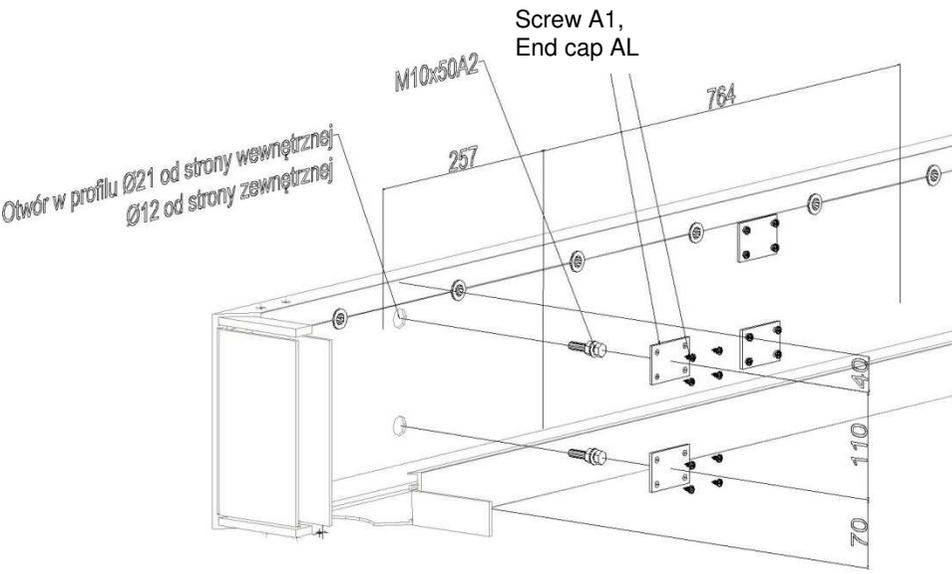
The position of the motor influences the shape of end caps. The motor always stainless steel, not coated. It is an option to order additionally a tube or a cover for motor in the colour of pergola.

## Alternative assembly options:

### The assembly of the main frame beam to the wall:

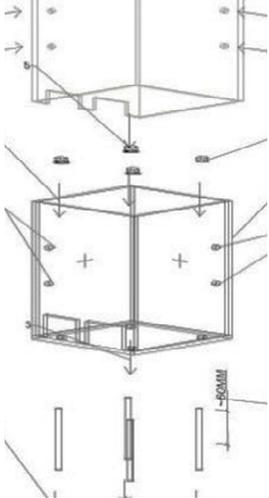
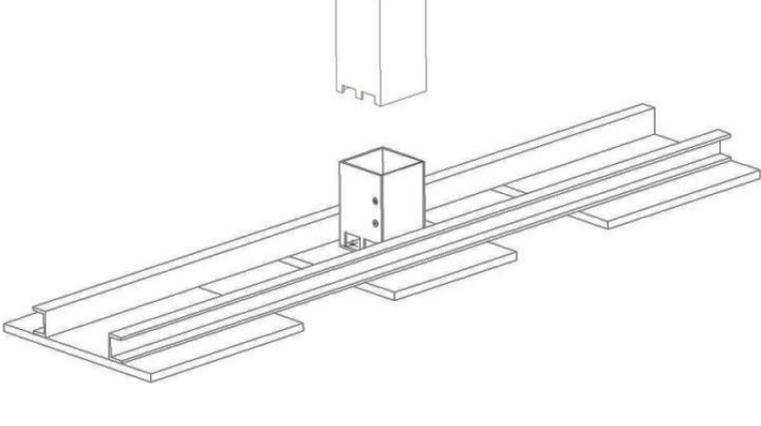
Caution: The anchoring to the ground should be chosen individually to each project. The size of the anchors should be matched to the local conditions, distance between anchors and distance to the wall (the thickness of the insulation), the type of the wall. It is recommended to make an endurance test of the anchors – made by an engineer of the anchors manufacturer.

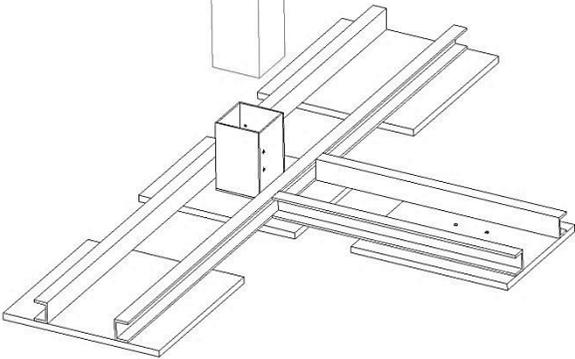
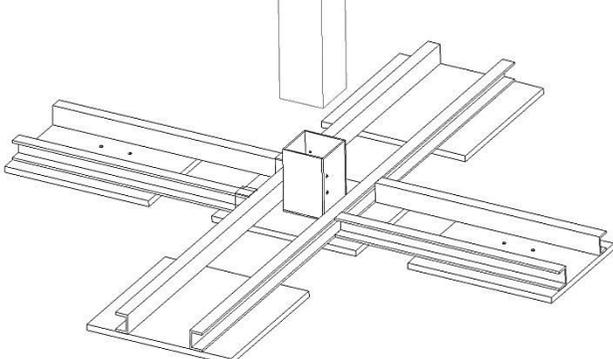
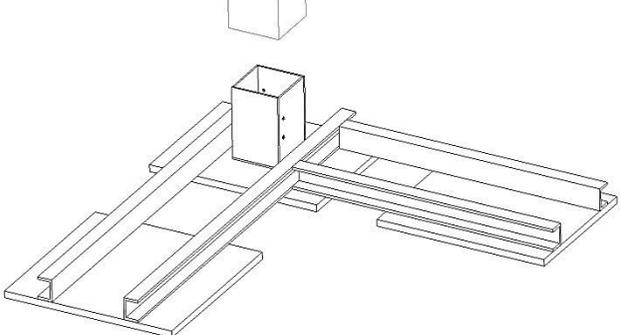


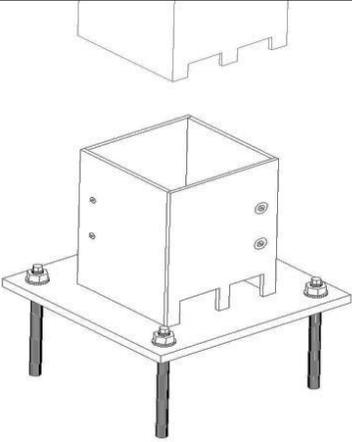
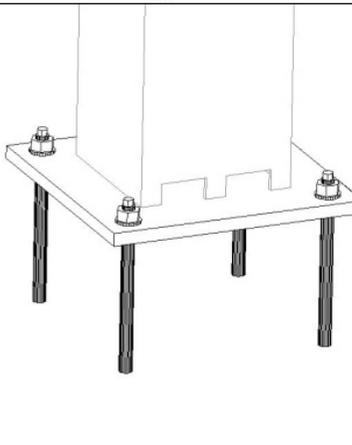
<p><b>1. The indirect assembly – consoles screwed directly to the building – end caps AL RAL not in the standard</b></p>	<p><b>2. The direct assembly</b></p>
 <p>Technical drawing showing the indirect assembly of a bearing beam. The beam is mounted to a wall using consoles. Labels include: 'Wkręty A2' (A2 screws), 'M10x50A2' (screw size), '764' (part number), '257' (part number), and 'Otwór w profilu Ø21 od strony wewnętrznej / Ø12 od strony zewnętrznej' (hole in profile Ø21 on the inner side / Ø12 on the outer side). Dimensions shown are 40, 110, and 70.</p>	 <p>Technical drawing showing the direct assembly of a bearing beam. Labels include: 'Screw A1, End cap AL' (hardware), 'M10x50A2' (screw size), '257' (part number), and '764' (part number). Dimensions shown are 40, 110, and 70. A note indicates: 'Otwór w profilu Ø21 od strony wewnętrznej / Ø12 od strony zewnętrznej' (hole in profile Ø21 on the inner side / Ø12 on the outer side).</p>
<ul style="list-style-type: none"> <li>• <b>Standard round end caps – white or black</b></li> </ul>	 <p>Photograph showing several black and white round end caps of different sizes.</p>

**Caution:** By the installation without posts the back support of the bearing beam has to be ensured. The back support has to have appropriate rigidity.

## Alternative options of installation and foot bracket:

Type	Description	Drawing
Standard (above described)	Type 1	 Exploded view drawing of a square metal enclosure. The drawing shows the enclosure's frame, a top cover, and a foot bracket. Arrows indicate the assembly sequence. A dimension line labeled 'L-SCM1' is shown at the bottom right.
With pressing steel beams	Type 2.1	 3D perspective drawing of a foot bracket mounted on two parallel steel beams. The bracket is a rectangular block with two vertical posts. A dimension line labeled 'L-SCM1' is shown above the bracket.

	Type 2.2	
	Type 2.3	
	Type 2.4	

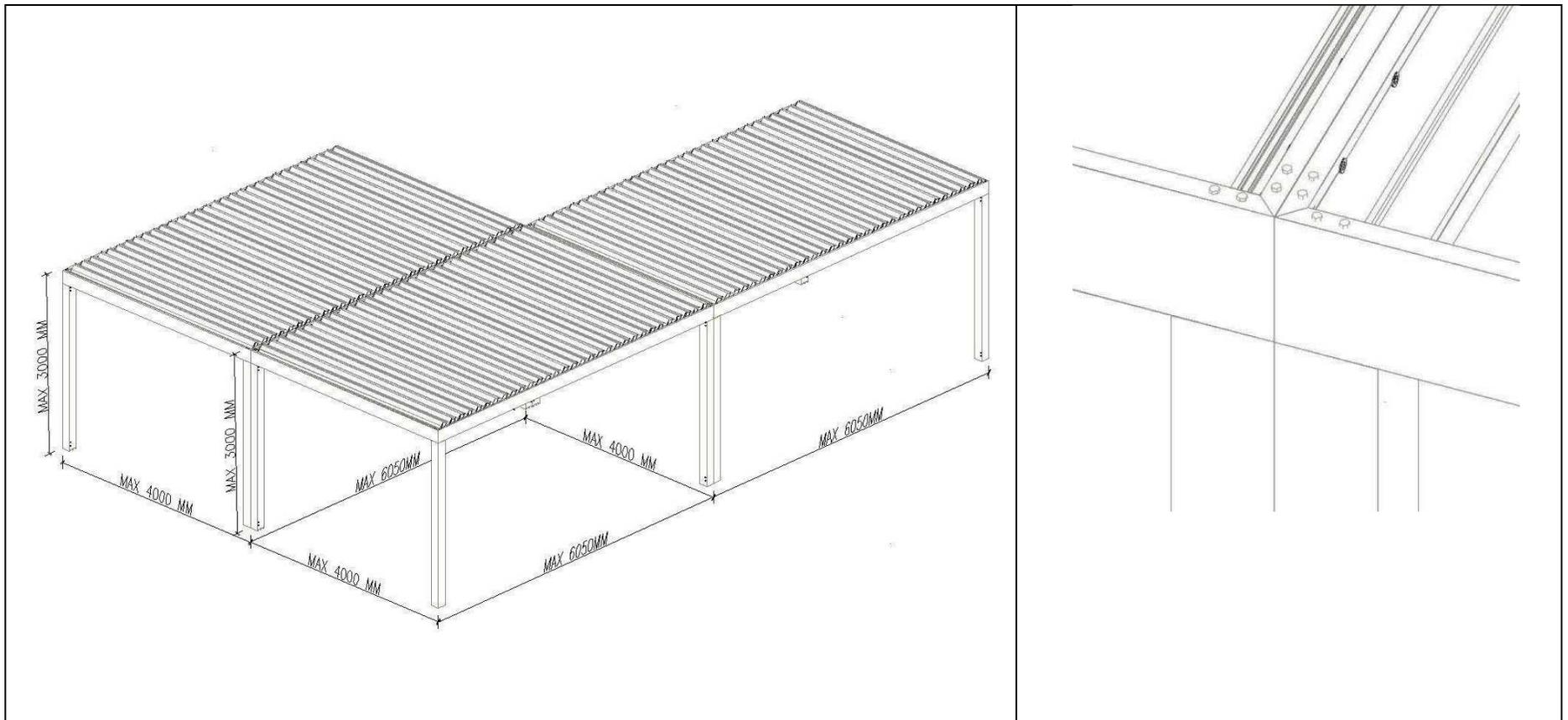
<p>With a foot bracket with outside screws (recommended by pergolas with additional side shading systems)</p>	<p>Type 3</p>	 A technical line drawing showing a square metal box with four screws on its front face. This box is mounted on a flat rectangular plate. The plate is supported by four vertical posts. A separate component with a stepped profile is shown above the box, indicating it fits into the top of the box.
<p>With a direct plate (without foot bracket) with outside screws. Aluminium plate is welded to the post of pergola (for pergola with height &lt; 2m, without side shading systems)</p>	<p>Type 4</p>	 A technical line drawing showing a square metal box with four screws on its front face. This box is mounted directly onto a flat rectangular plate. The plate is supported by four vertical posts. The plate is welded to the top of the posts.

## Adaptability options – modular connections of a few pergolas

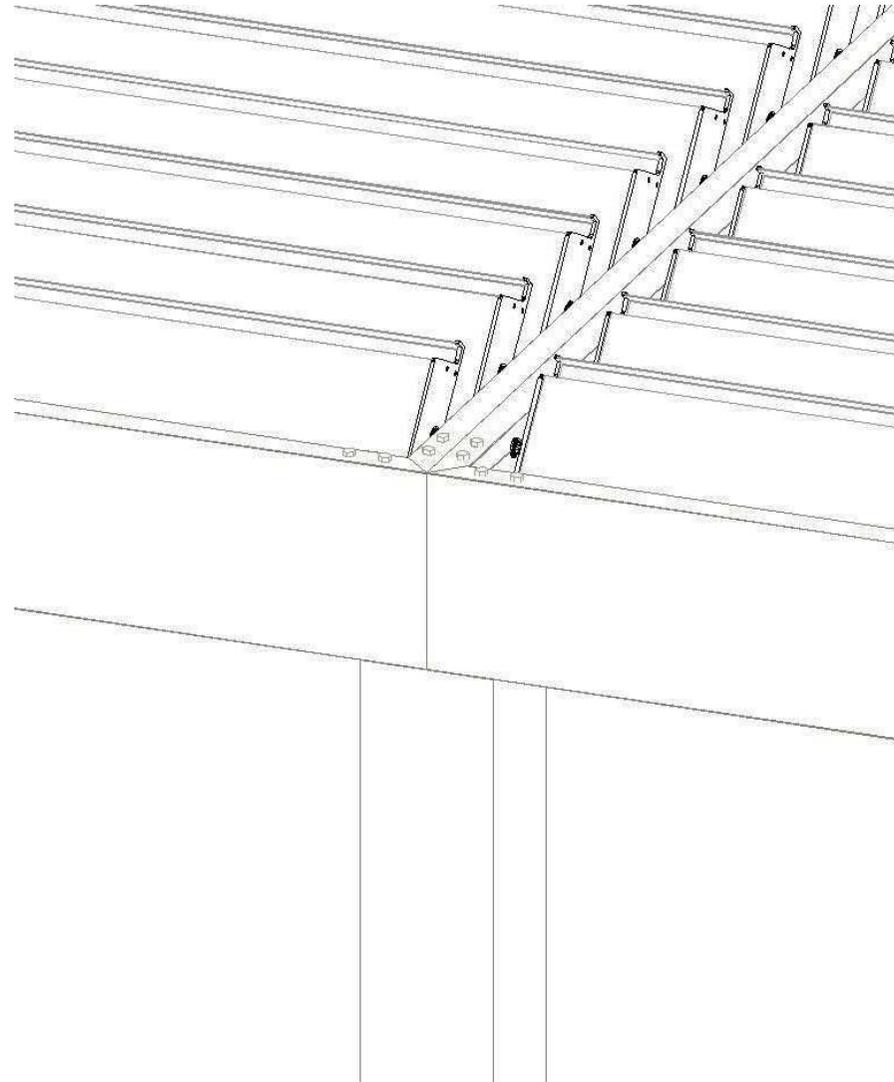
There is an option to connect more pergola with additional supporting profiles

### OPTIONS:

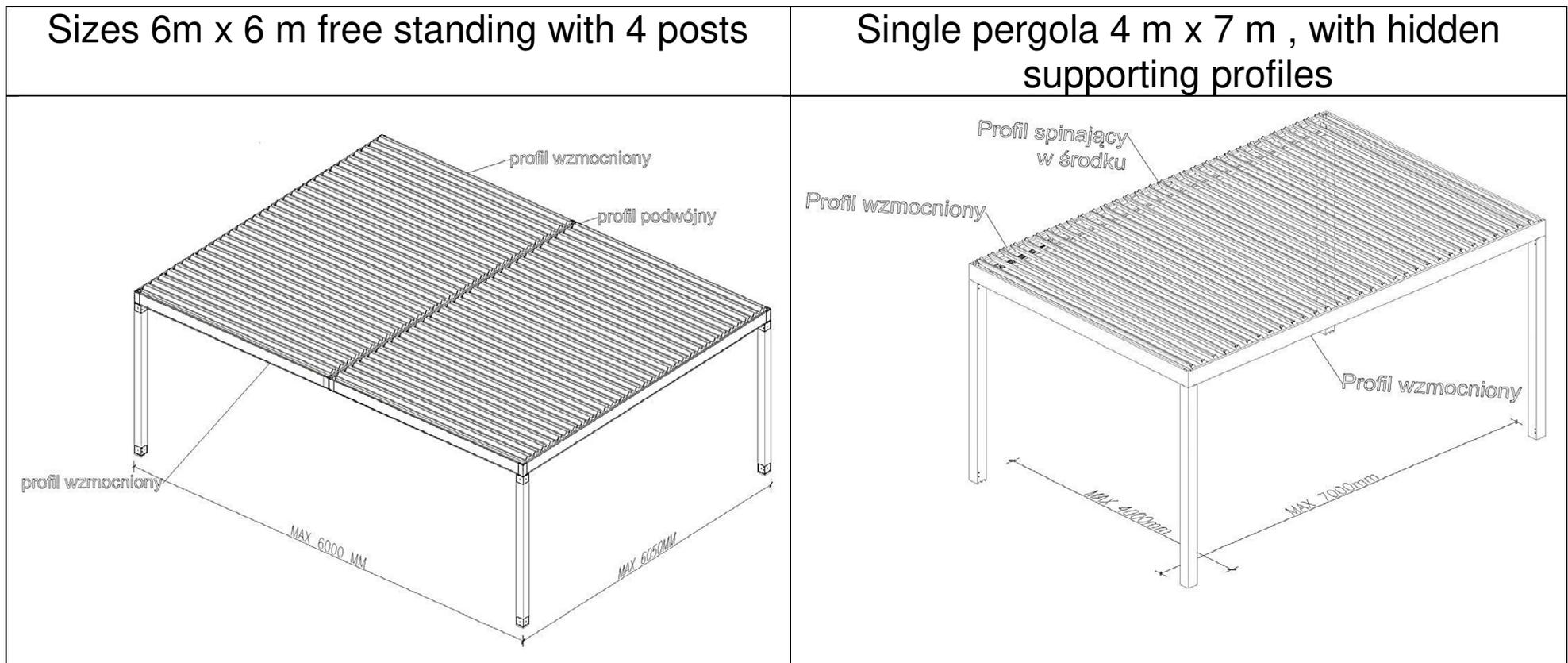
- Moduls near each other – an example of a triple pergola



- Moduls with a common post



- Maximum sizes of pergola with supporting profiles



## Accessories:

Heaters



Led lights



Led lights in tape



Shading systems: shutters, ZIP, roller blinds