



Louvre Roof



SPECIFICATIONS

Sec. ; Louvre Roof
Date: June 2023

Louvre Roof – Overview

The Louvre Roof is a functional and aesthetic construction set with fixed roof made of rotating blades, which protect against the sun and rain.

USAGE:

- Sun protection and surface shading. It is also rainproof but in adverse weather conditions may not be watertight.

PRODUCT CHARACTERISTICS:

- Extruded aluminium construction with stainless steel elements
- Water drainage system integrated within the construction
- Outflow of water through the posts and exits at the decking or downpipes
The connection of the down pipes to the storm water system completed by others)
- Option for Rain or Wind sensors to operate the louvres automatically.
- Regulates the access of the sunlight according to user needs
- Protects against weather conditions: rain and wind
- Protects against snowfall up to 50 kg/m² (even load)
- The rotation of roof blades may be operated by switch or remotely controlled
- Easy access to the motor

TECHNICAL SPECIFICATION:

- Maximum width of the module 4.1 m
- Maximum projection 7m (no middle post is required for a 7m projection)
- Maximum height between the floor and the underside of the projection beam is 2.8m
- Maximum height from the floor to the top of the beams is 3.01m.
- Free-standing or wall-mounted construction, single- or multi-module
- Manufactured with extruded aluminium profiles and stainless-steel elements, equipped with water drainage system
- Slope angle 0 degrees
- Intervals of roof blades 200 mm
- Blade rotation range: 0-90°
- Recommend opening the Louvres when wind exceeds 65km/hr
- Maximum drainage capacity drains at up to 0.04 l/s/m² at maximum time of 5.3 minutes
- Electric drive: linear motor ELERO Picolo XL (230V AC)
- LED Strip lighting (24V) optional. LED strips are installed just above the louvre gutter on both projection beams
- Standard Colours: Gun Metal, Perla
 - Note: It is possible to have a mix of colours on a Louvre Roof. Example: posts, cross beams, projection beams and gutters in Perla and the louvres in Gun Metal. There is no surcharge with a mix of standard colours
- External durable powder coating system with 60-100 micrometers thickness of coating (Standard PN-EN ISO 2360)
- Special (non-standard) colours are available with a surcharge of 20% with an extra 12 working days lead time

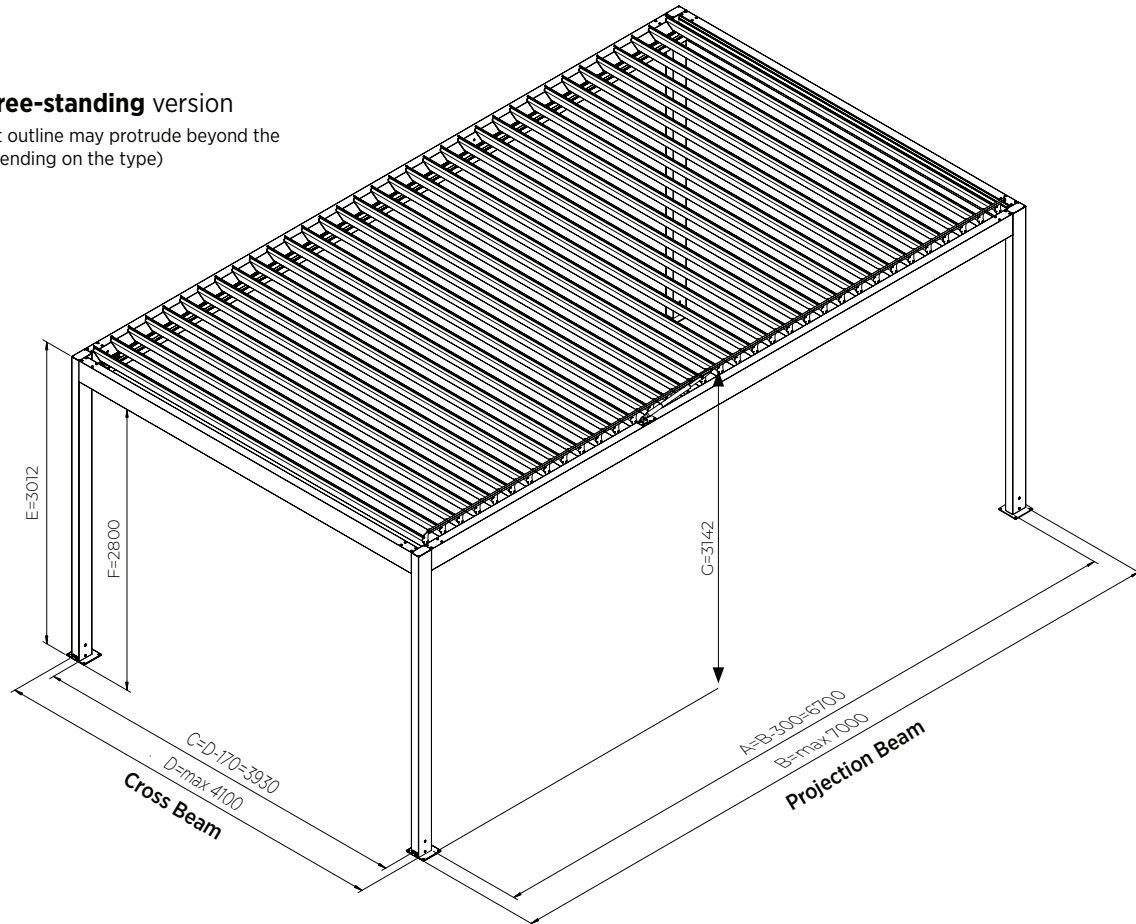
PLANNING/CONSENTS

- Maximum size possible louvre roof without requiring a building consent:
 - When the Louvre Roof is freestanding (not attached a building) is 30m² providing the louvre roof is at ground level
 - When attached to a building is 20m² providing the louvre roof is at ground level
- Louvre Roofs irrespective of size installed on floor levels 1 and above, require a building consent
- Planning permission (PIM) may be required regardless of the louvre roof size
- The customer is responsible to apply and obtain a building consent and/or PIM if required
- Window Treatments NZ Ltd do not apply for building consents when required
- Irrespective of whether a building consent is required, all installations and fixings must meet NZ building code standards.

Installation Types

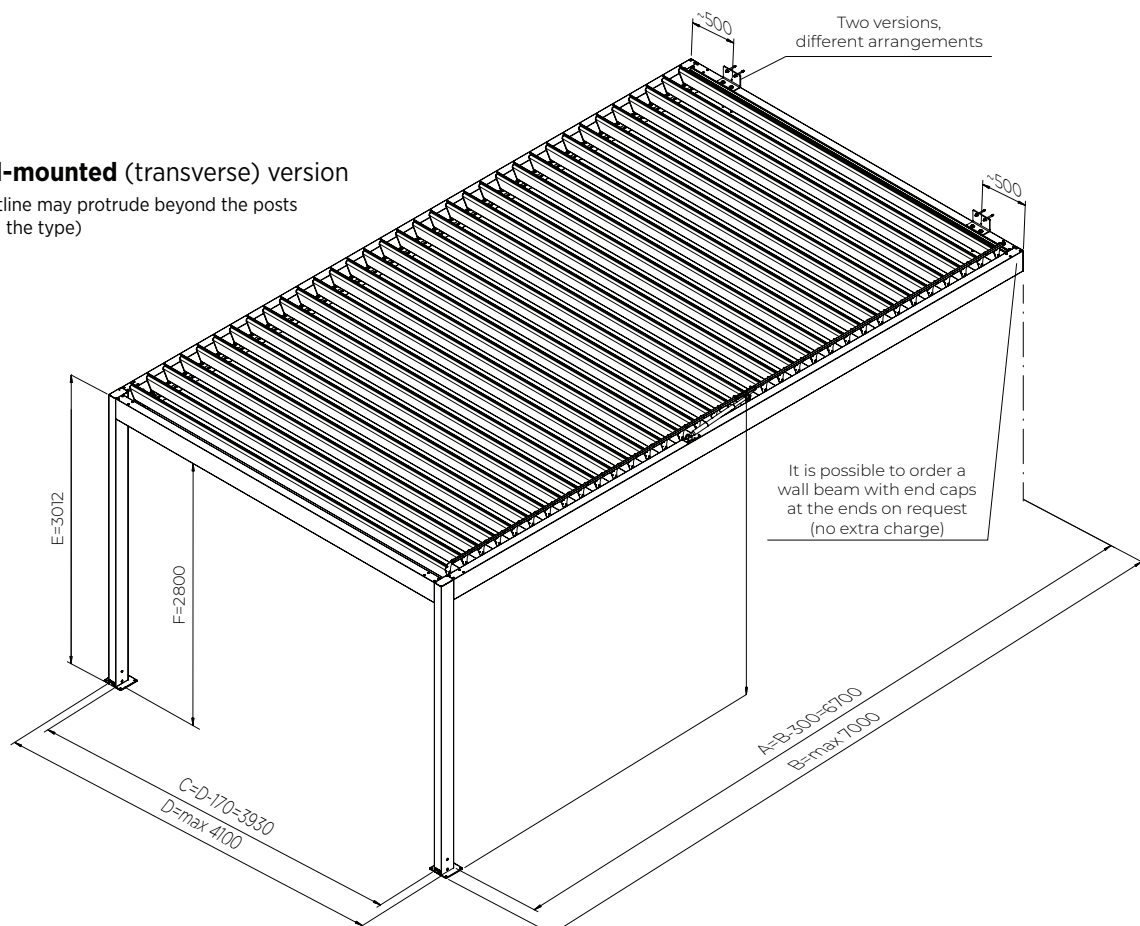
Single **free-standing** version

NOTE: foot outline may protrude beyond the posts (depending on the type)



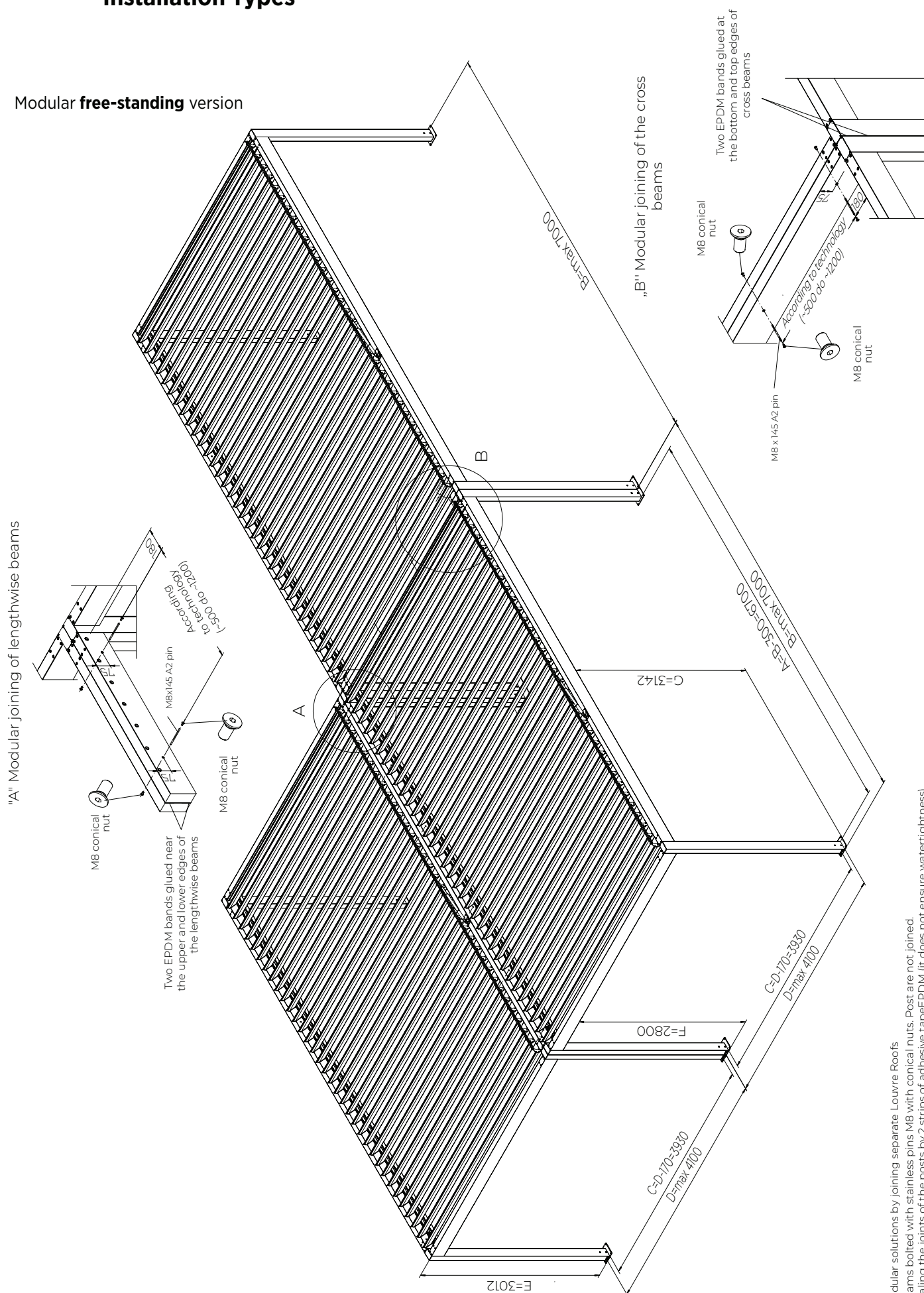
Single **wall-mounted** (transverse) version

NOTE: foot outline may protrude beyond the posts (depending on the type)



Installation Types

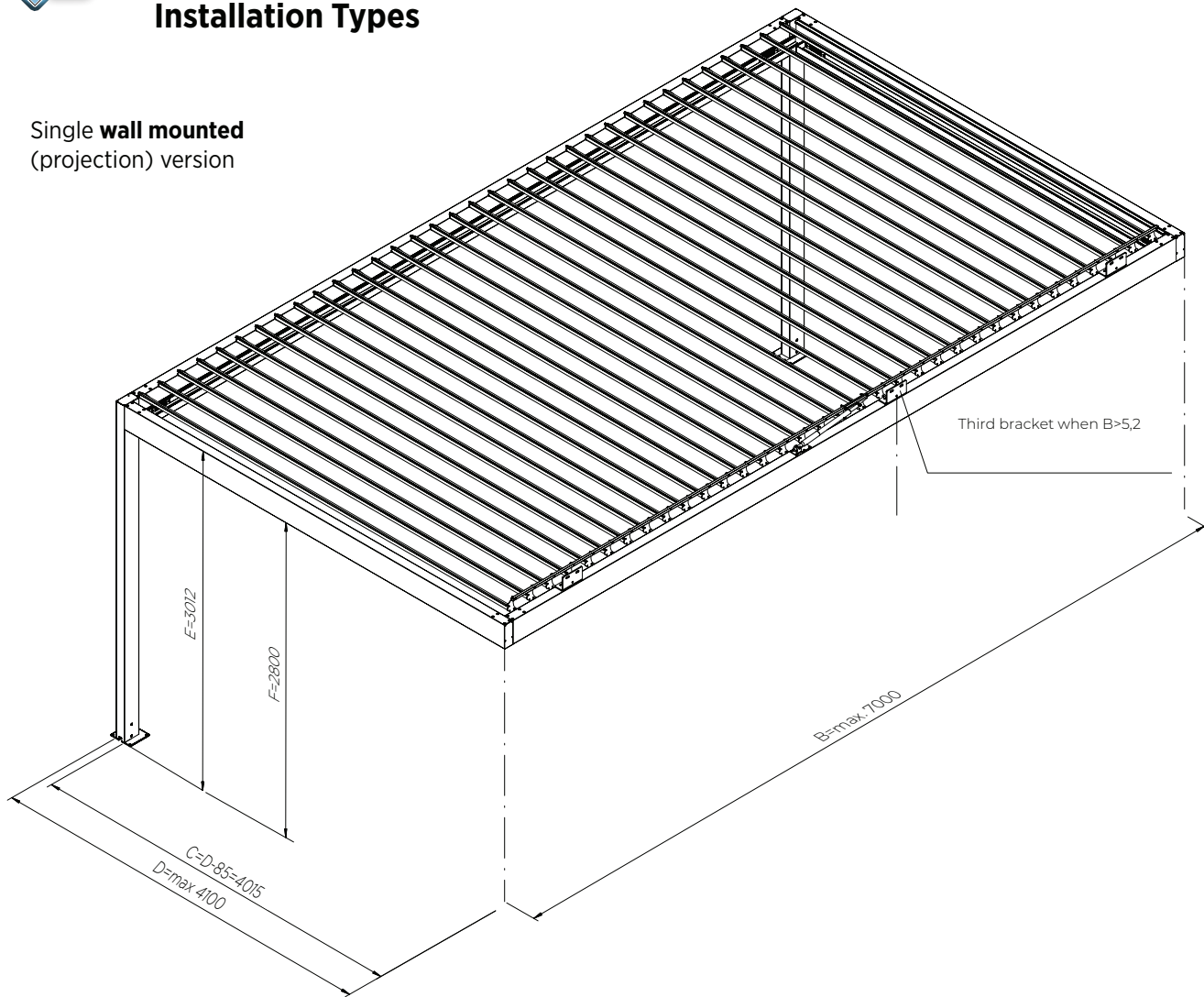
Modular **free-standing** version



Modular solutions by joining separate Louvre Roofs.
Beams bolted with stainless pins M8 with conical nuts. Post are not joined.
Sealing the joints of the posts by 2 strips of adhesive tape EPDM (it does not ensure watertightness).

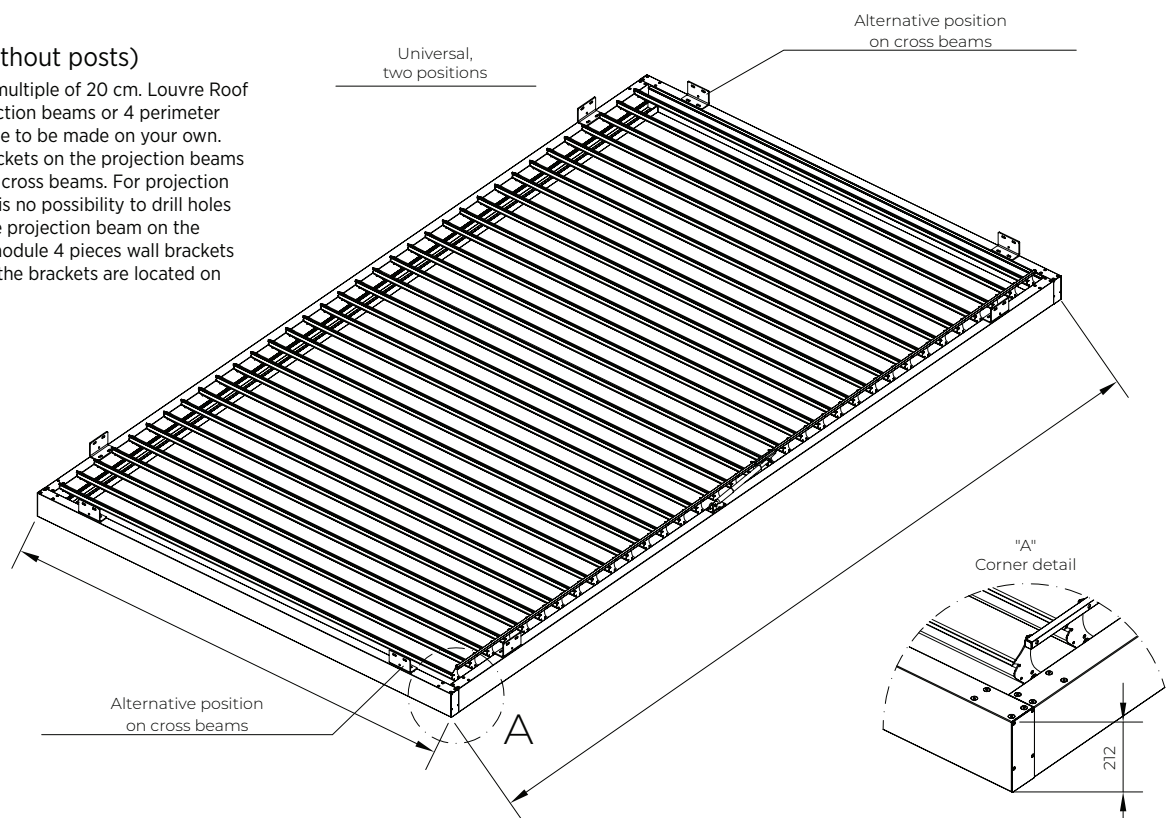
Installation Types

Single **wall mounted** (projection) version

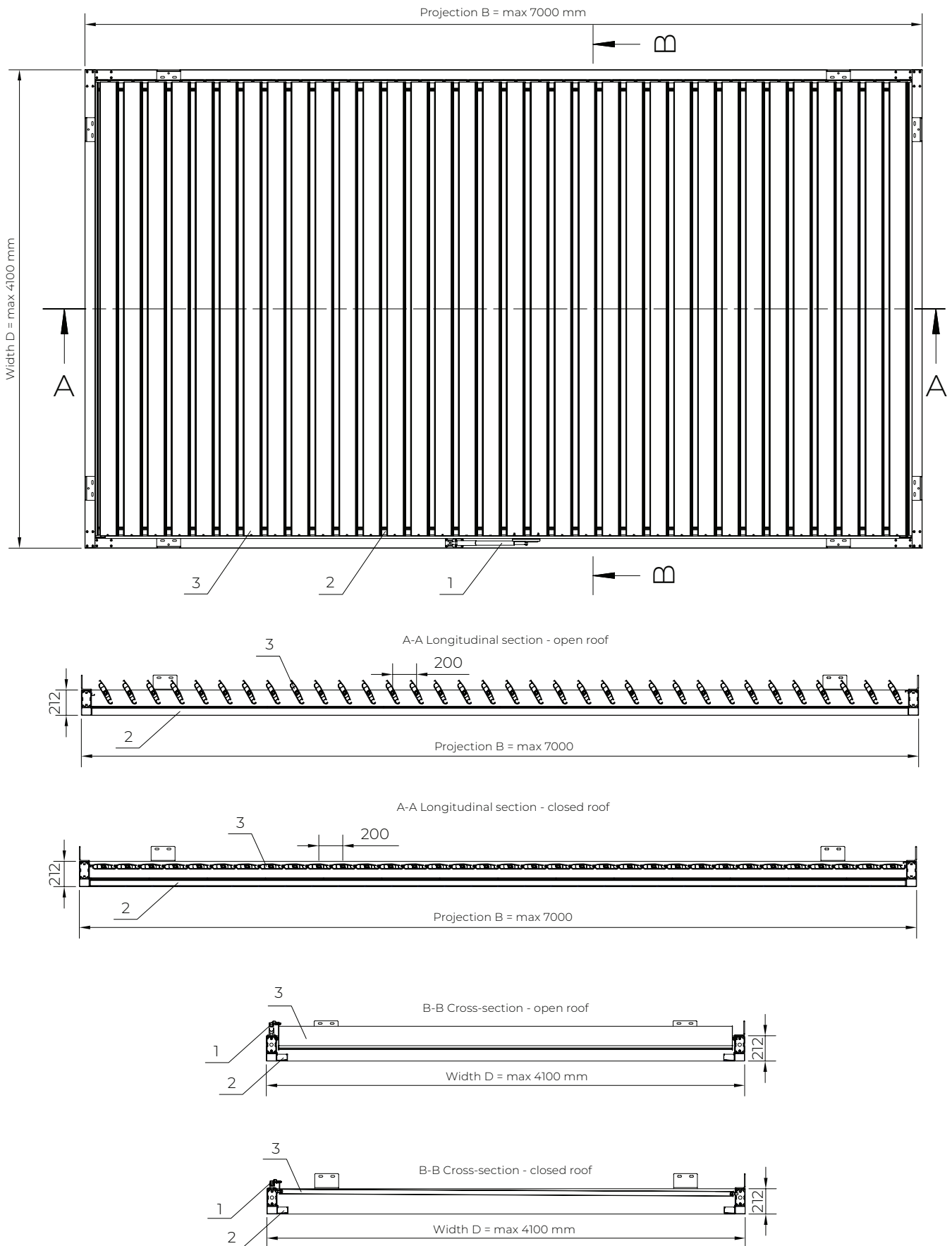


Roof version (without posts)

NOTE: Projection is a multiple of 20 cm. Louvre Roof has 2 gutters on projection beams or 4 perimeter gutters. Water drainage to be made on your own. Anchoring by wall brackets on the projection beams or alternatively on the cross beams. For projection of less than 2 m there is no possibility to drill holes for wall brackets in the projection beam on the drive side. For every module 4 pieces wall brackets are added. By default the brackets are located on projection beams.

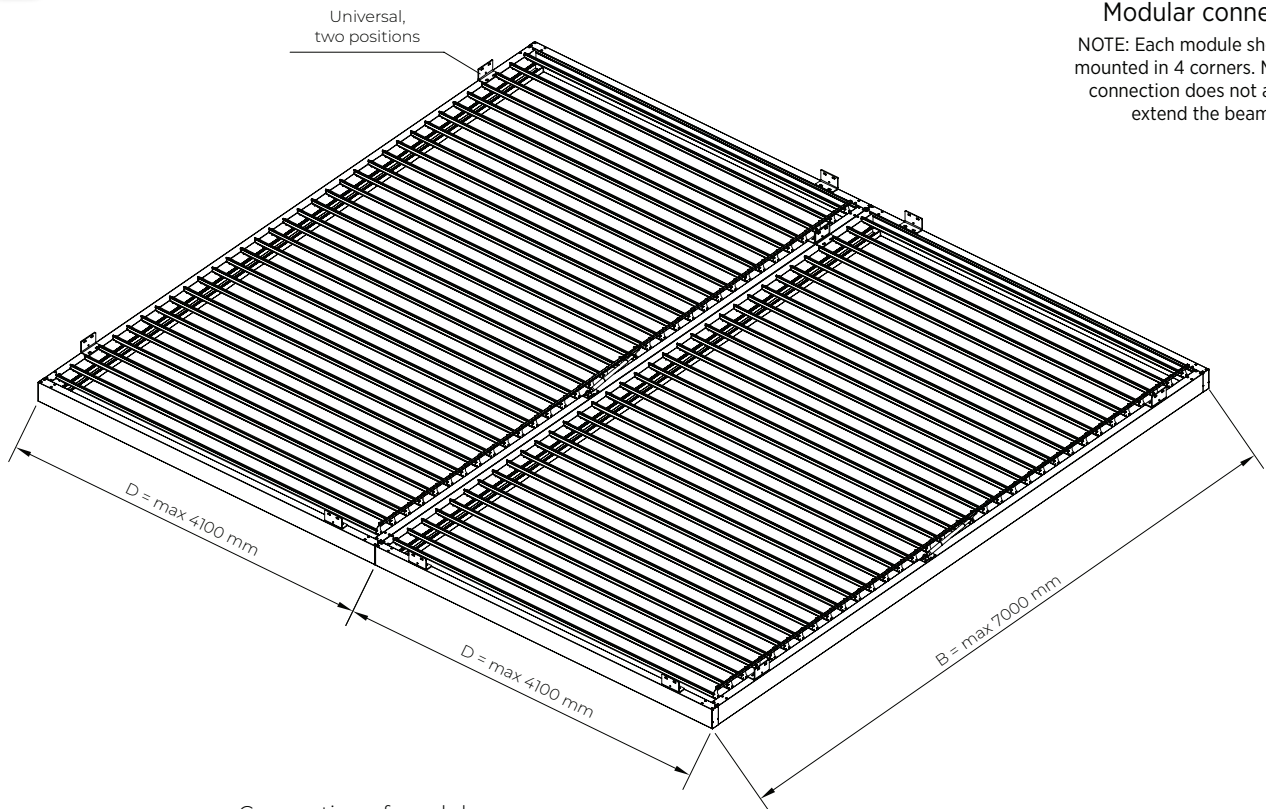


Views and sections

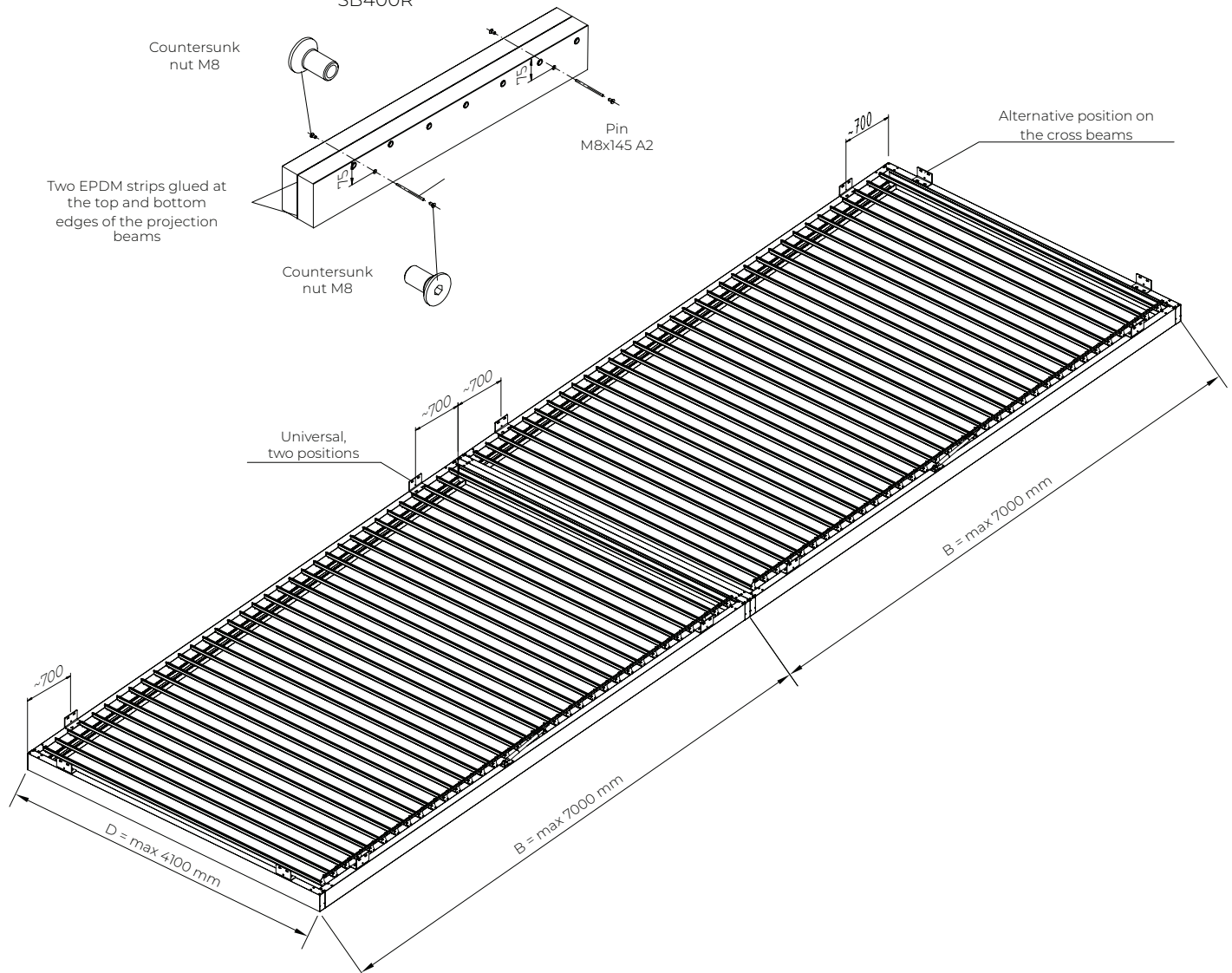


Modular connection

NOTE: Each module should be mounted in 4 corners. Modular connection does not allow to extend the beam spans.

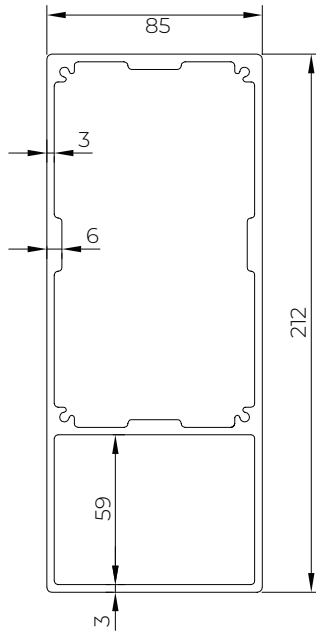


Connection of modules SB400R



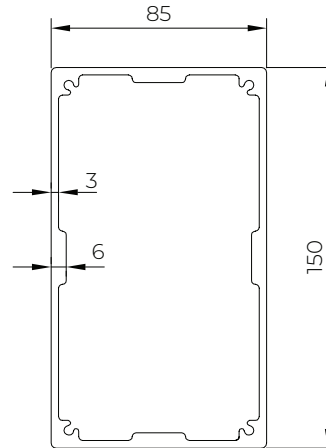
Cross-section of the profiles

Cross-section of the
projection and cross
beams (85x212)



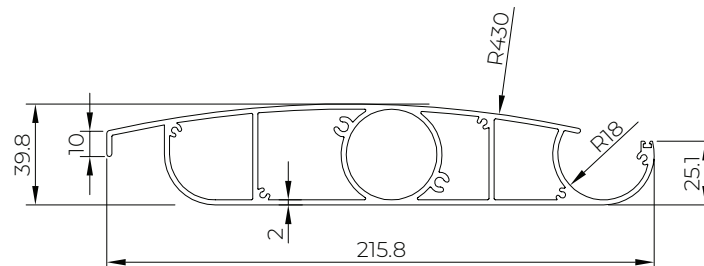
Material: EN AW6060 T66
Characteristics:
Mass 6.48 kg/m
Area 24.01 cm²
J1 291.31 cm⁴
J2 1216.58 cm⁴

Cross-section of the post
(85x150)



Material: EN AW6060 T66
Characteristics:
Mass 4.83 kg/m
Area 17.89 cm²
J1 215.9 cm⁴
J2 564.44 cm⁴

Cross-section of the blade
(216x40)



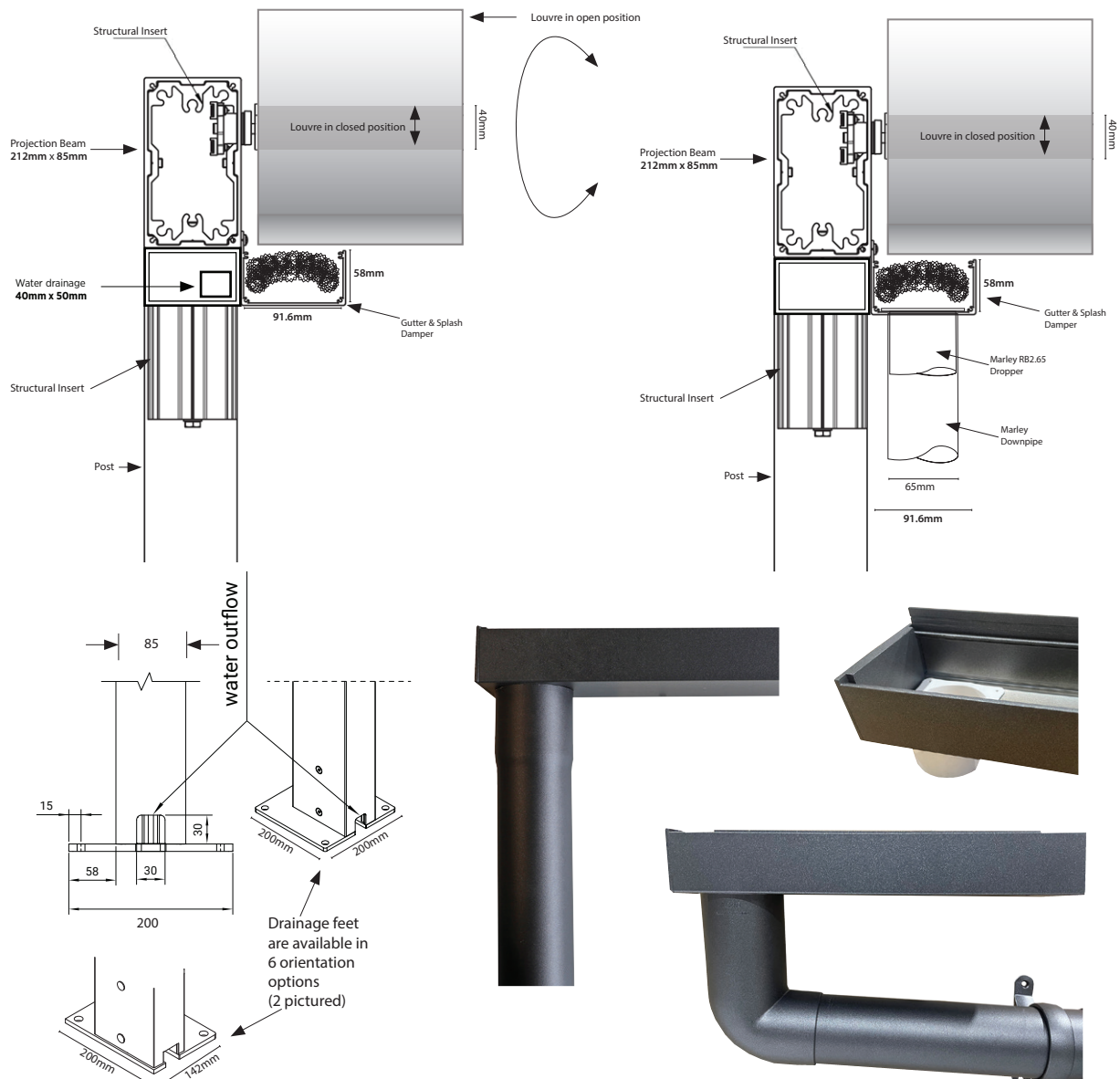
Material: EN AW6063 T66
Characteristics:
Mass 3.66 kg/m
Area 13.57 cm²
J1 439.1 cm⁴
J2 27.16 cm⁴

Louvre Roof – Gutters & Drainage

The Louvre Roof is a functional and aesthetic construction set with fixed roof made of rotating blades, which protect against the sun and rain.

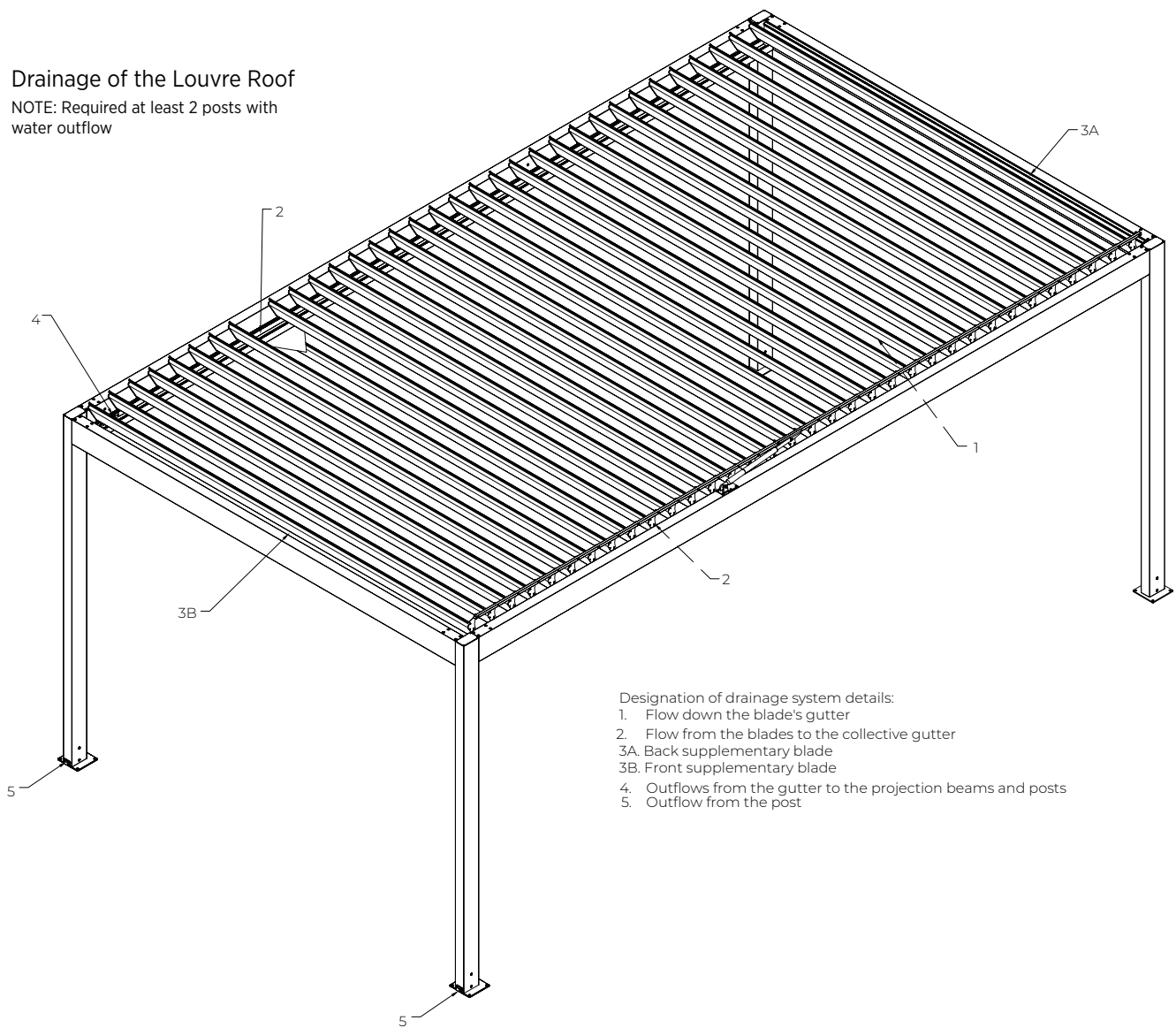
Gutters & Drainage

- The louvre roof and posts must be installed level.
- The gutters are installed level.
- Gutters with Splash Dampers are installed into gutters on both projection beams (one each side).
- Water from the gutters drain through a hole at the back of the gutter into the louvre roof post. The post is hollow which allows the water to drain and dissipate at the base of the post. However, in cases where the louvre roof is suspended between an existing structure which may prevent the use of standard louvre roof posts, Window Treatments can install a standard white RB2.65 Marley dropper to the underside of the gutter connected to a Marley downpipe with the water from the downpipe dissipating onto the base of the deck area. If required, the downpipe and associated parts can be painted by Window Treatments to match the colour of the louvre roof gutter. If a connection of the downpipe to the storm water is required, this work is to be carried out by a registered plumber/drainlayer. The cost of this work is not allowed for in the Window Treatments quotation. In addition, the fixing and position of down pipes (if required) may be affected if Securo's are installed into the sides of the louvre Roof so please discuss this with your Window Treatments Sales Consultant prior to placing your order.
- A selection needs to be made at the time of the order, which posts or if Marley down pipes will be used to drain water from the gutters to the ground.
- Small drip profiles (supplementary blades) are installed on both cross beams of the louvre roof. The small drip profiles are designed to deflect any drips from the last louvre closest to the cross beams.
- The louvre roof is weather proof but is not guaranteed to be water tight in adverse or storm conditions. The louvres must be opened when wind exceeds 65km/hr and or when snowing.



Drainage of the Louvre Roof

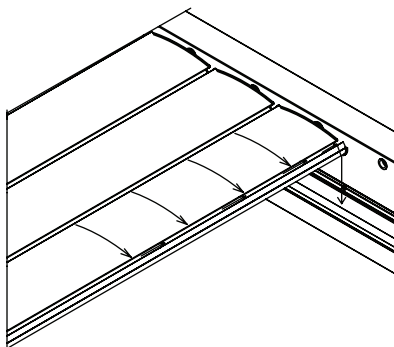
NOTE: Required at least 2 posts with water outflow



Designation of drainage system details:

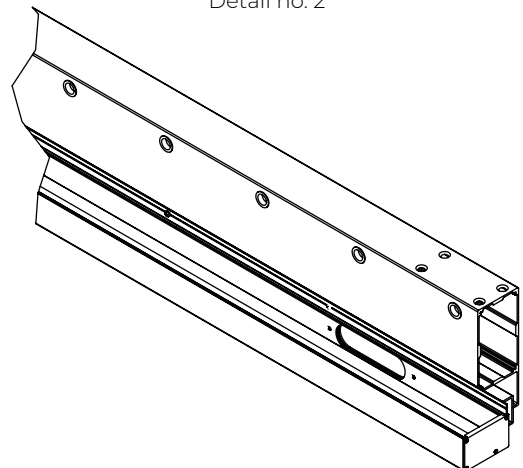
1. Flow down the blade's gutter
2. Flow from the blades to the collective gutter
- 3A. Back supplementary blade
- 3B. Front supplementary blade
4. Outflows from the gutter to the projection beams and posts
5. Outflow from the post

Detail no. 1



Flow down the blade's gutter
into the projection beam gutter

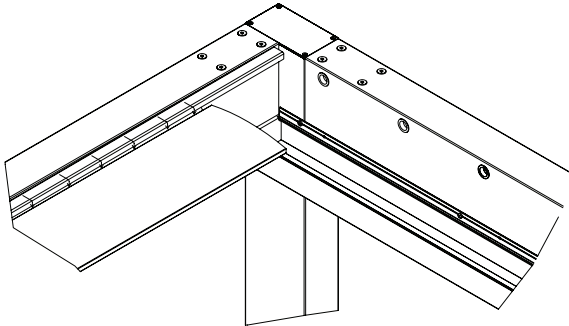
Detail no. 2



Flow down the gutter into the dropper or post

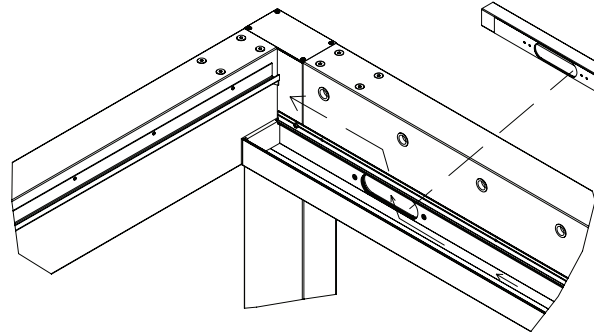
Drainage of the Louvre Roof

Detail 3



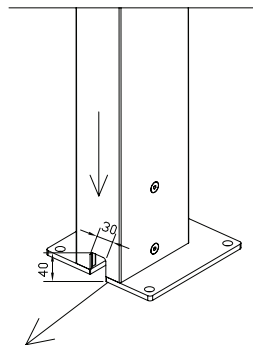
Flow from the back supplementary blade to the blade's gutter. Gutter without slope. NOTE: Extruded gutter as one whole segment.

Detail 4



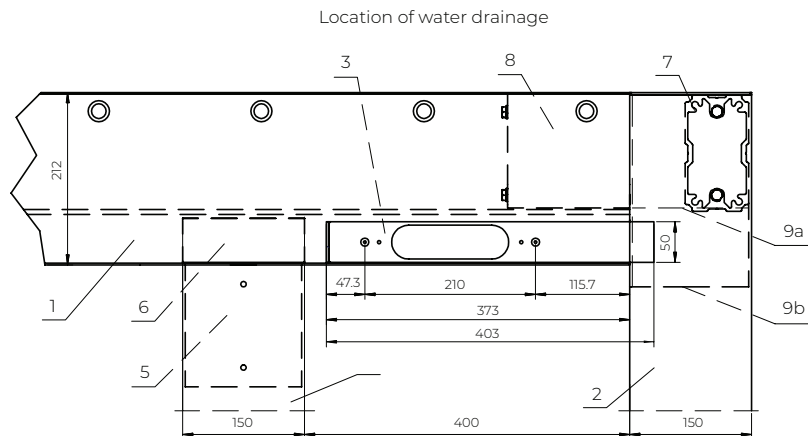
Slotted hole: 144x42 mm
Straight outflow (inside the beam) 34x44 mm.

Detail 5



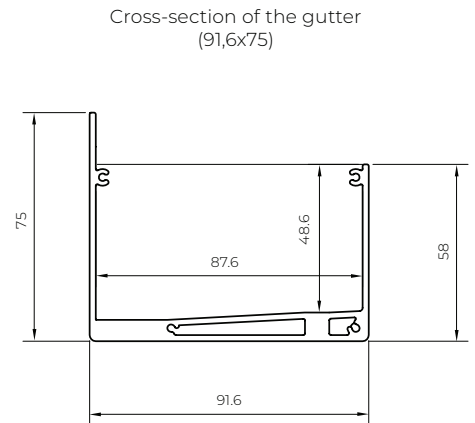
Flow down the beam profile and water outflow at the bottom of the post and foot undercut.

Overflows and outflows in the projection beams



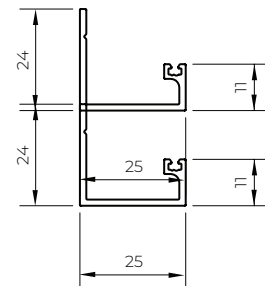
1. Projection beam 85x212 mm
2. Post 85x150 mm
3. Drainage 40x50 mm
4. Intermediate post 85x150 mm
5. Post connector
6. Reinforcing connector
7. Structural cross beam connector
8. Structural projection beam connector
- 9a. Short angle connector (when draining water)
- 9b. Long angle connector (in case of angle overflow)

Cross-sections of gutters drainage



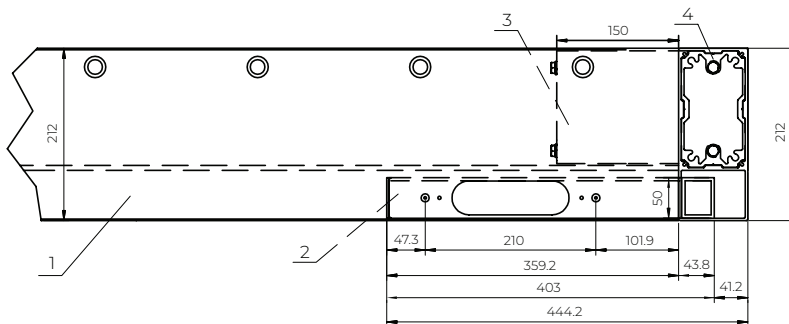
Material: EN AW6060 T66
Mass 7.99 kg/m

Cross-section of the front supplementary blade



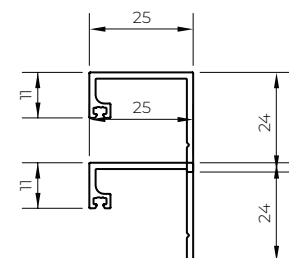
Material: EN AW6060 T66
Mass 0.25 kg/m

Location of angle overflow



1. Projection beam 85x212 mm
2. Angle water drainage 40x50 mm
3. Structural projection beam connector
4. Structural cross beam connector

Cross-section of the back supplementary blade



Material: EN AW6060 T66
Mass 0.25 kg/m

Louvre Roof – Louvre Direction

The Louvre Roof is a functional and aesthetic construction set with fixed roof made of rotating blades, which protect against the sun and rain.

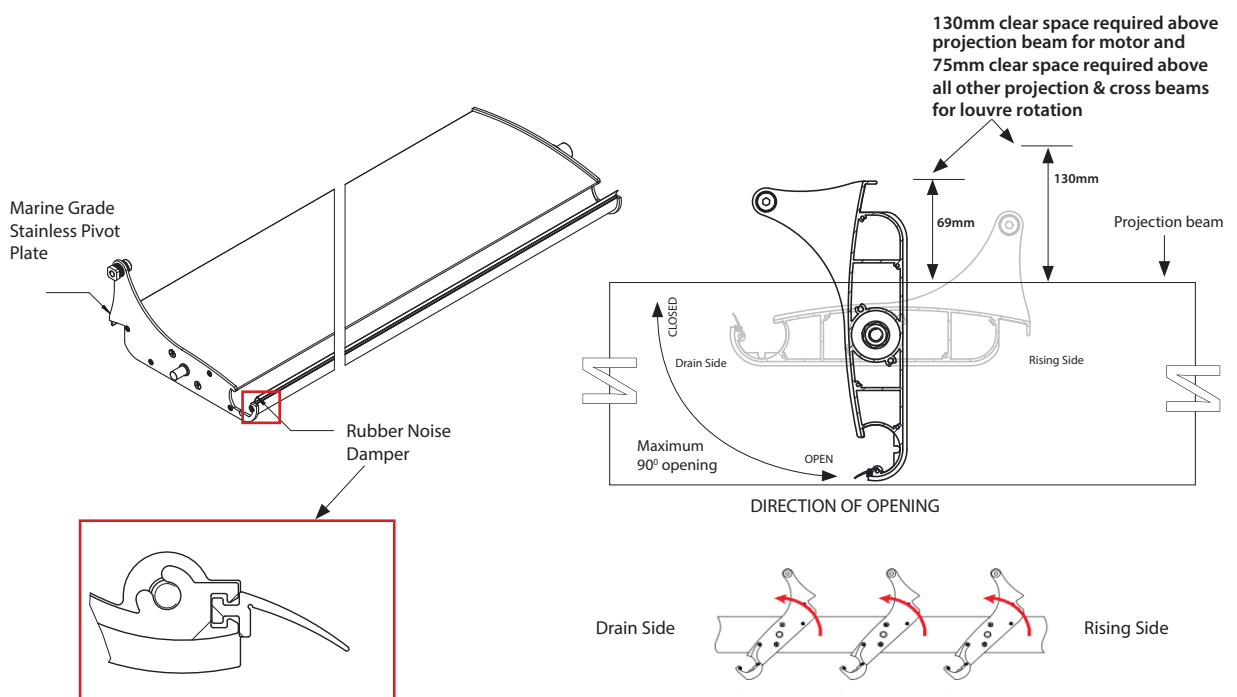
Choosing the Louvre Direction

Note: For clarity the “Front” of the Louvre Roof as mentioned throughout these Specifications, is when you are facing the Width (Cross) Beam of the planned Louvre roof, with the existing building directly behind it. The same approach is used when specifying the motor or crank side (left or right) of an Awning which is when you are facing the building.

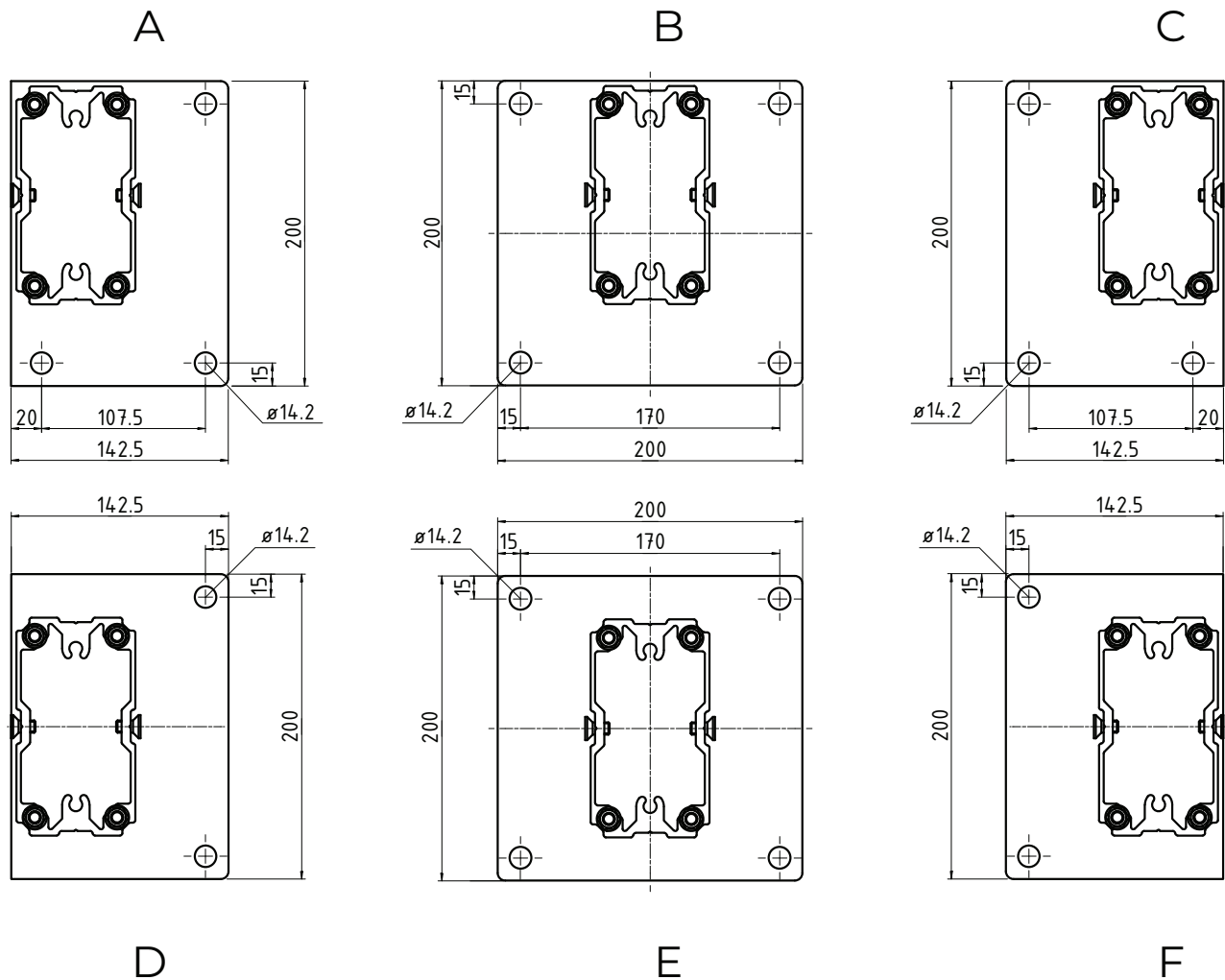
In New Zealand it is generally recommended that louvres lie on an East to West axis irrespective of the rotation direction. This means that the projection beams lie on the North to South axis. Louvre Roofs are primarily designed to provide rain and wind shelter. However, it is important to also consider the shading effect the louvre roof may have over an adjacent building or space and then to maximise or minimise this effect depending on the customers preference.

If sun shading to an adjoining building or space is not desired, we recommend the louvres rotate from the closed position to opening, with the rising side of the louvre (side without the drain), rising to the North, North/West or Westerly direction. This means that the maximum amount of direct sunlight possible will penetrate through the louvres to the ground below.

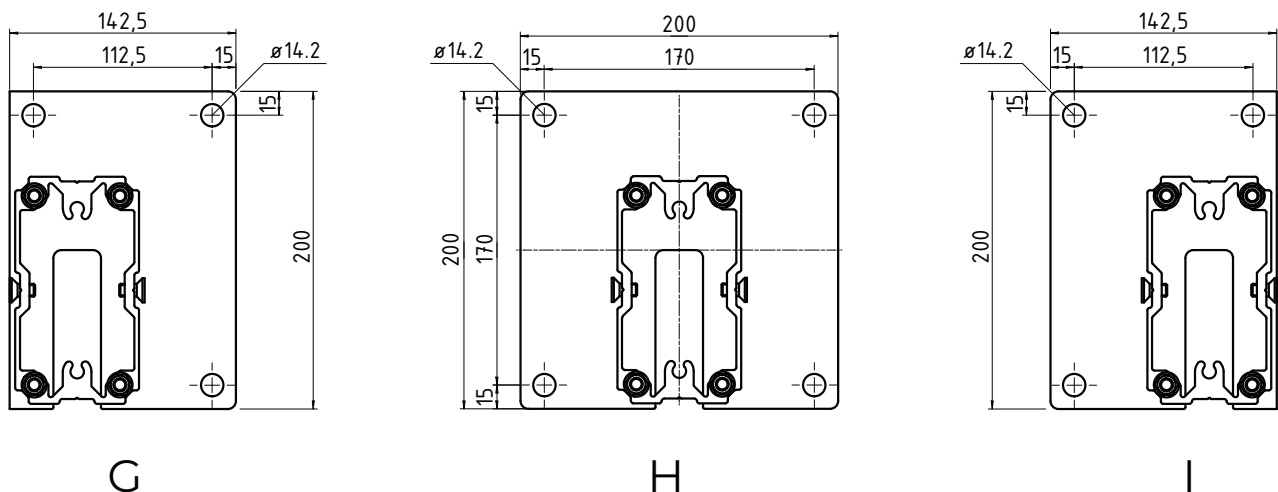
If sun shading to an adjoining building or space is desired, then the louvres should be facing opposite to the above which will block most direct sunlight.



Footing plate options without water outflow



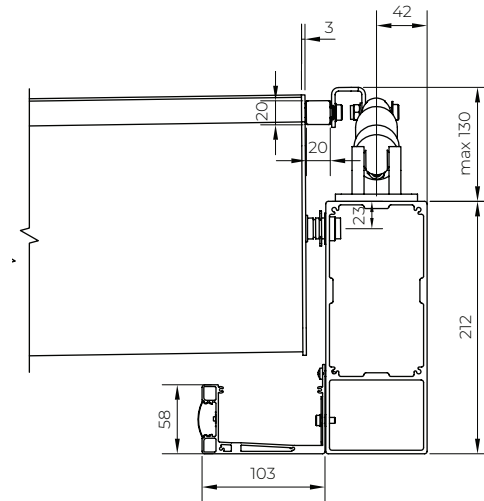
Footing plate options with water outflow



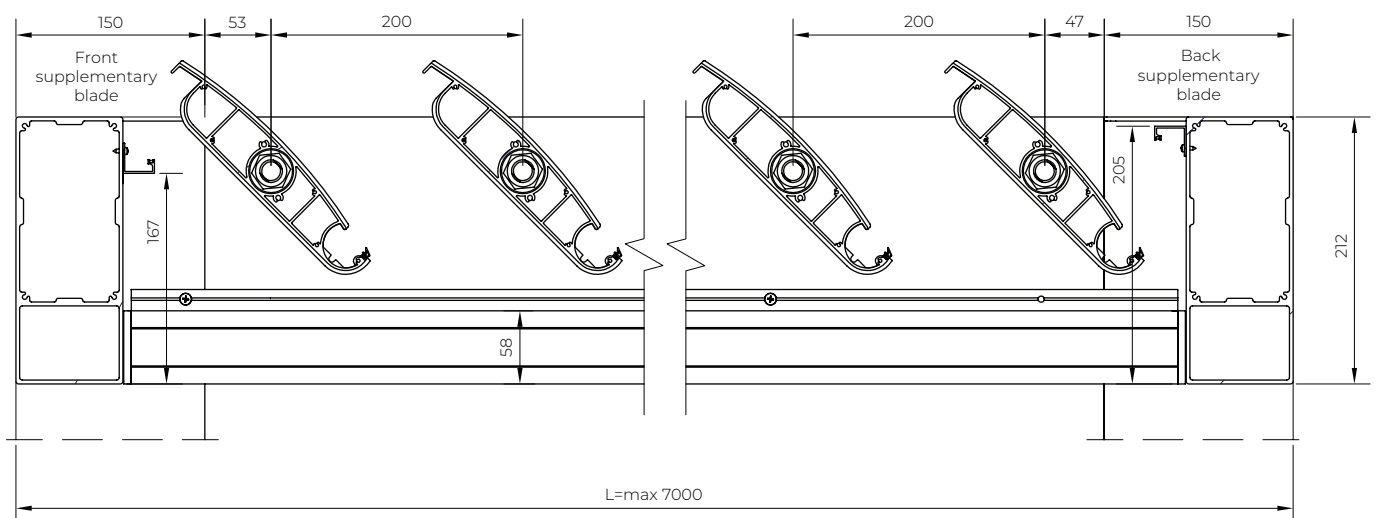
Feet from 8 mm thick aluminium sheet EN AW-5754, galvanized and powder coated

Cross beam detail

NOTE: There are elongated blade mounting shafts on the bearing side.

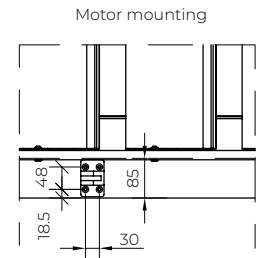
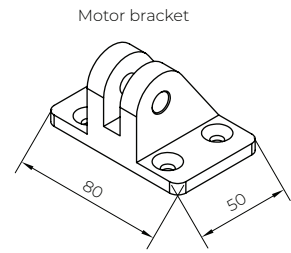
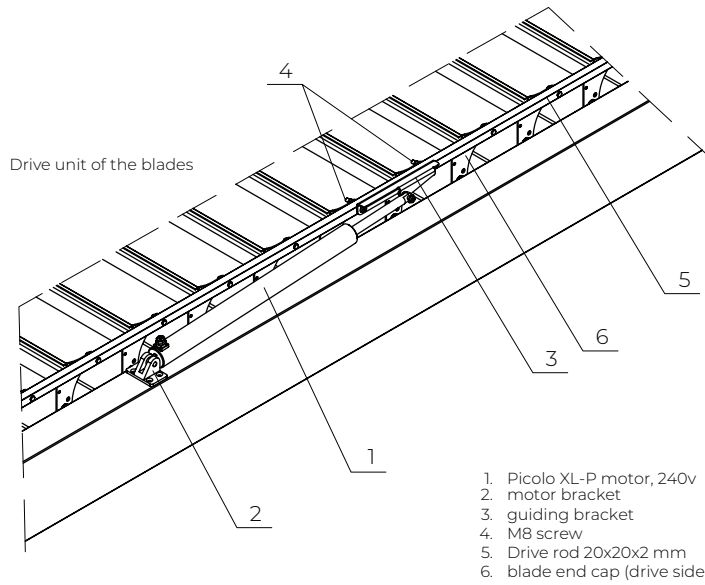


Projection beam detail (bearing side)



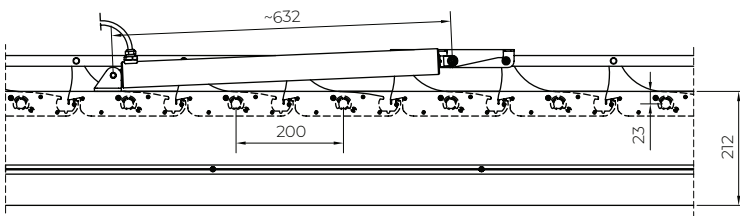
Drive unit, blade rotation range - Pico XL motor 240v

NOTE: The guiding bracket has a left or right version



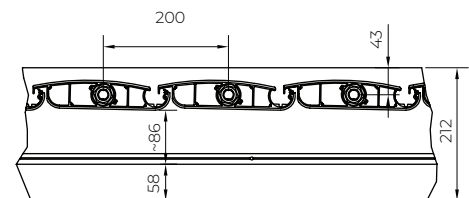
Mechanism and blade rotation range (motor Pico XL-P)

Drive side

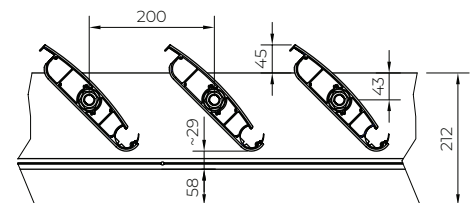
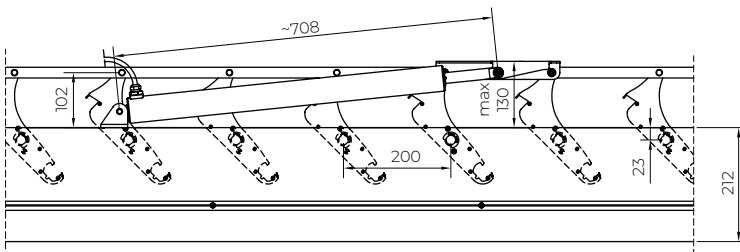


Bearing side

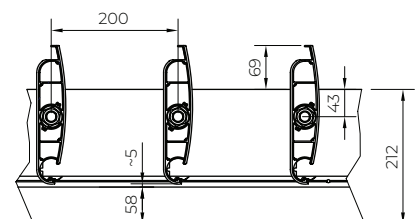
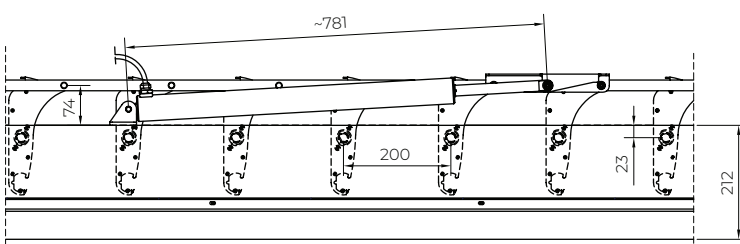
Closed blades



Blades with the maximum height of the motor's drive



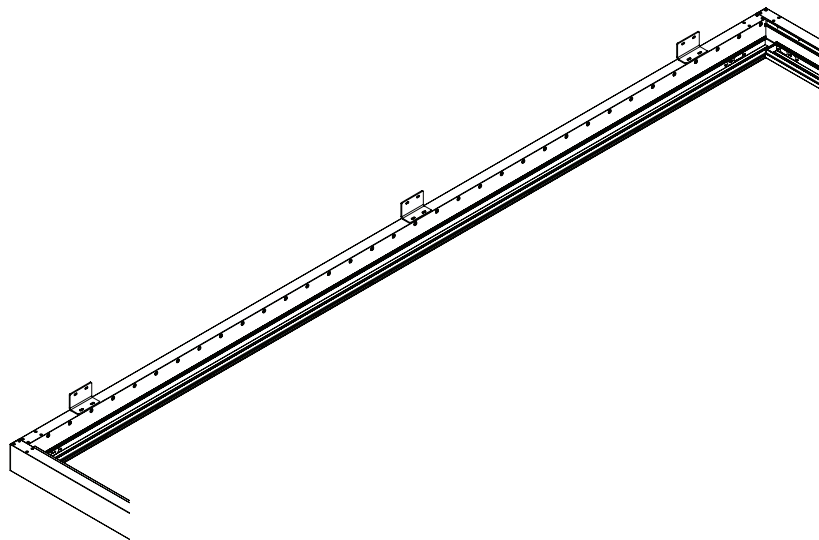
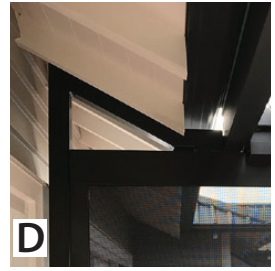
Open



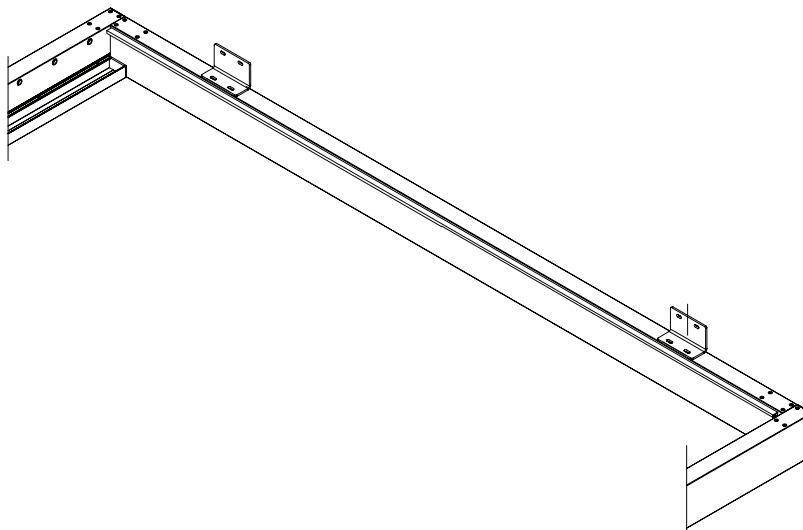
FIXING & FOOTINGS

All fixings and footings must meet NZ building code standards.

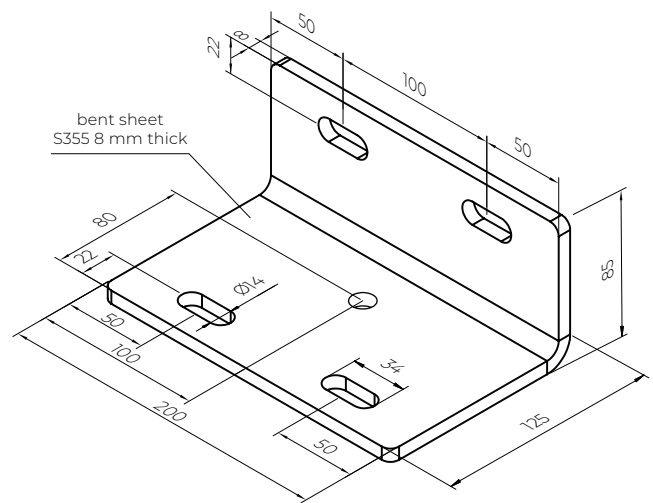
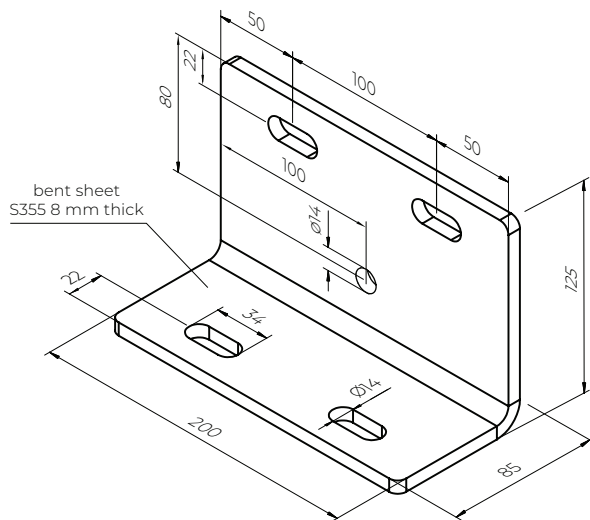
- All foundations and or suitable footings are provided by the customer.
- Foundations and footings are required to meet the building code and need to be perfectly level.
- Window Treatments NZ Ltd will secure the louvre roof posts to the foundation/footings provided by the customer.
- The footing plates which are fitted onto the bottom end of the posts, are available in 9 orientations including 6 with drainage holes. A footing plate needs to be selected for each post at the time of the final check measure.
- Face mounting brackets are available for standard installations.
- Additional costs will apply if any special wall mounting brackets or posts need to be engineered to suit a particular application – see pictures D & E take an extra 12 working days lead time



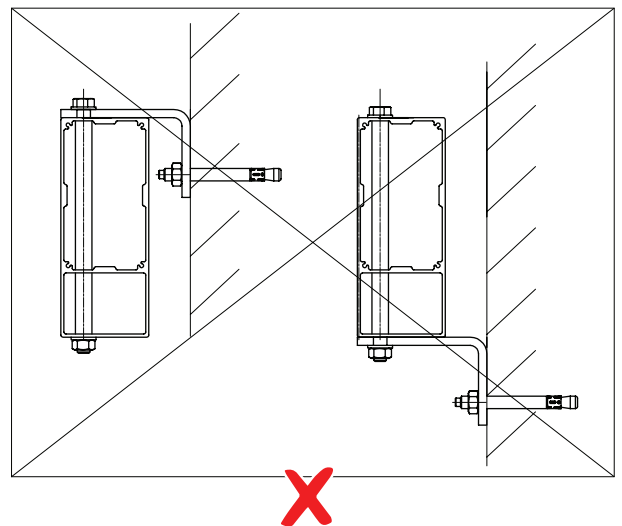
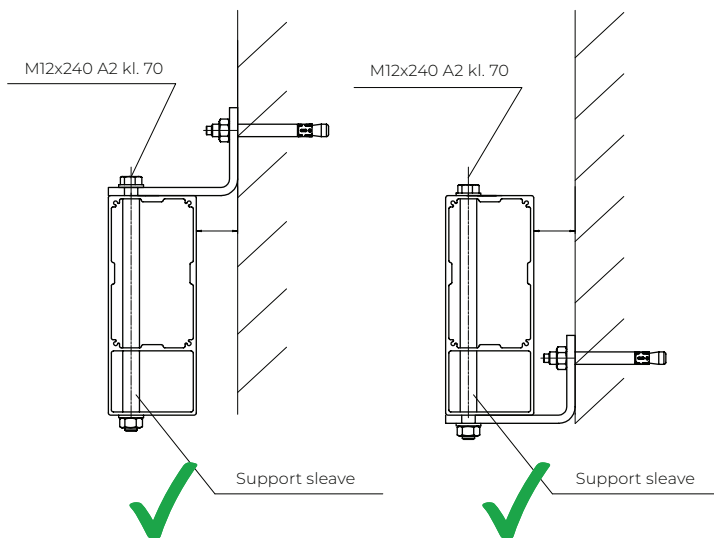
Wall-mounting of the cross beams



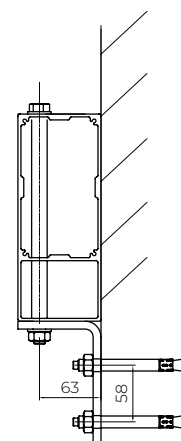
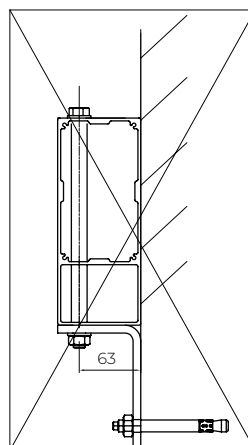
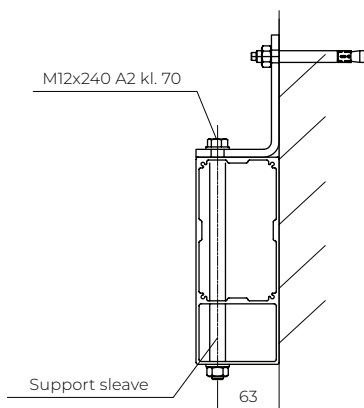
Universal wall brackets



Mounting options with a distance



Mounting options without distance

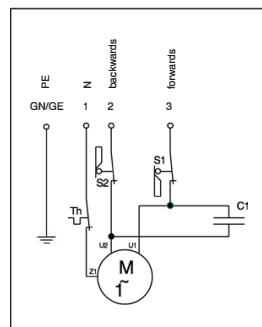


ELECTRICAL CONNECTIONS

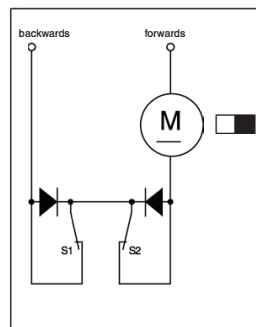
- The Louvre roof is installed by Window Treatments installers with a 240v Elero Piccolo XL-P external motor which is fastened to the middle of the top side, of one of the Projection Beams. The motor has a grey 4m power flex which is to be connected to the power supply by a registered electrician. Window Treatments can recommend an electrician to complete this work if necessary. Power cables and connections can be installed by the registered electrician, inside or outside the hollow Louvre roof beams and posts, however all such work must conform to the Electrical Code.



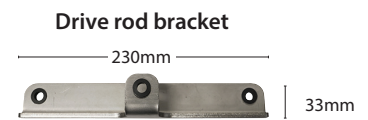
Drive - Piccolo XL-P motor
with rod bracket attached



WS0800/230V 1AC



GS0300/24V DC



- S1 = Limit switch
piston rod out
S2 = Limit switch
piston rod in
C1 = Capacitor (internal)
Th = Thermal protection

MOTORISATION

- All Louvre Roofs are motorised with a retro-styled stainless steel 240v Elero Picolla XL-P (German) motor (Manual control is not available).
- Integrated isolation relays enabling parallel connection of several actuators.
- Weather-resistant 230V linear actuator made of stainless steel.
- Additional isolation relays are not required.
- Reduced installation expenditure and higher security against incorrect use.
- Control of several linear actuators in parallel (without synchronisation).
- Motor can be installed on either projection side of the louvre roof but the selected side must be stated on the order.
- Motor is installed on the top of the projection beam (130mm clear space is required above the projection beam the motor is installed upon).
- Louvres in the open position project 69mm beyond the top of the projection and cross beams therefore 75mm clear space must be provided on all beams and cross bars to allow for this rotation.
- Louvres in the open position are flush with the underside of the projection and cross beams.
- Control options are:
 - Somfy Remote with Receiver - optional upgrade with a Connexoon Automation Hub
 - Hard wired to a wall switch or Hard wired to a Post mounted switch
- Wind or Rain Sensors. Note: it is not possible to install both a wind sensor and a rain sensor



Somfy Remote



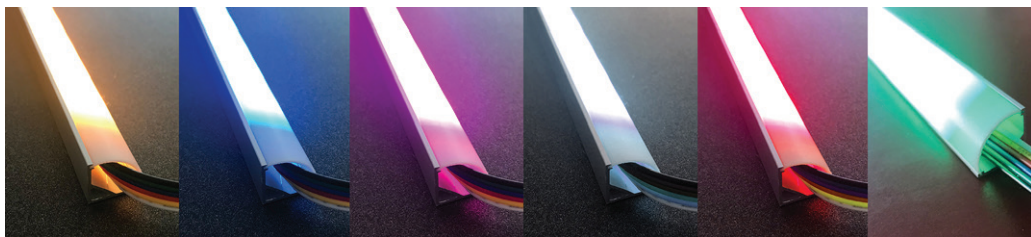
Post mounted switch

Louvre Roof – LED Strip Lighting (optional extra)

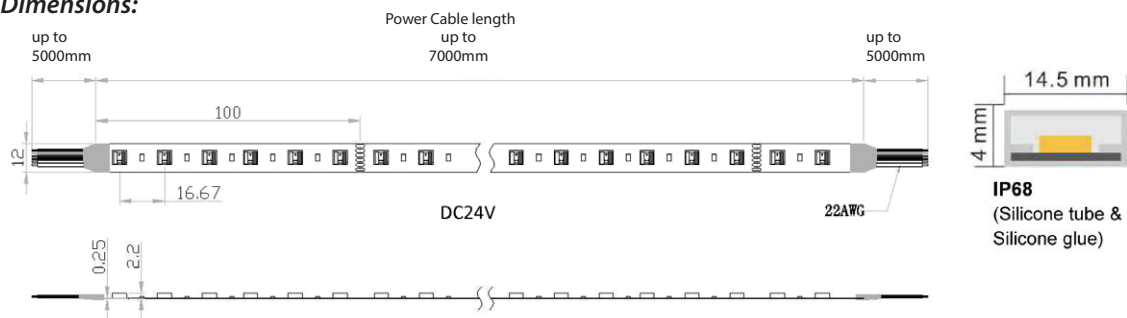
With the addition of our 24V LED lighting strips you can illuminate your outdoor living area allowing the opportunity to entertain guests and family during the hours of darkness. Easily controlled via a hand held remote you can change colour, brightness and mode of the lights allowing you to set the tempo of the evening. LED strips are installed just above the louvre gutter on both projection beams.

Features: Product Model SW-F5050RGBCTA30-WFO

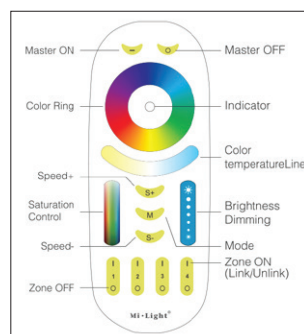
- Power supply 24V
- Power consumption 14.4 watt per metre
- IP Rating IP68
- Working Environment Temperature -25 to +450C
- Various Lengths available up to 7m
- Max connection length off one controller: 14m
- LED: quantity 60pcs per metre
- LED strip diffuser



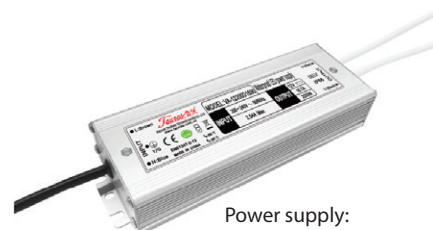
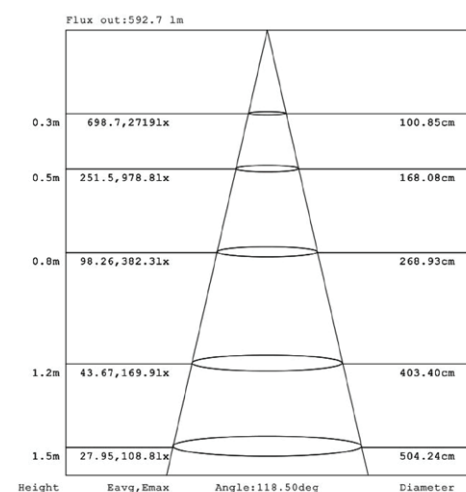
Dimensions:



Rainbow Controller
with 4 Zone Remote
Control 2.4G



Optical Lux Graph

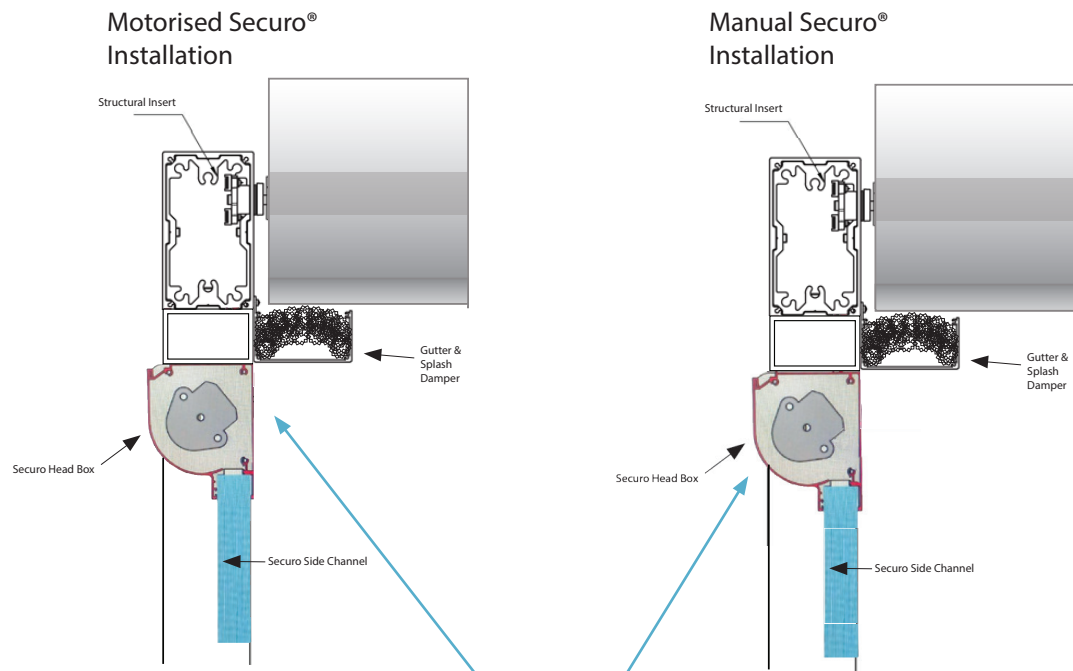


Power supply:
Constant Voltage 24VDC 200w IP66

Louvre Roof - Securo® Outdoor Blinds

SECURO® 110

- Motorised or Manual (crank) options
- Available in both PVC and Screen fabric and can be installed on all four sides of the louvre roof.
- Installation of Securo 110 can be inside (top fix) the beams and posts or face mounted on the outside of the beams and posts. Note: For face fix installations we recommend motorised Securo's for ease of operation.
- Maximum size with Techno Screen: W5.1m x D3.0m
- Maximum size with Clear PVC: W4.0m x 3.0m



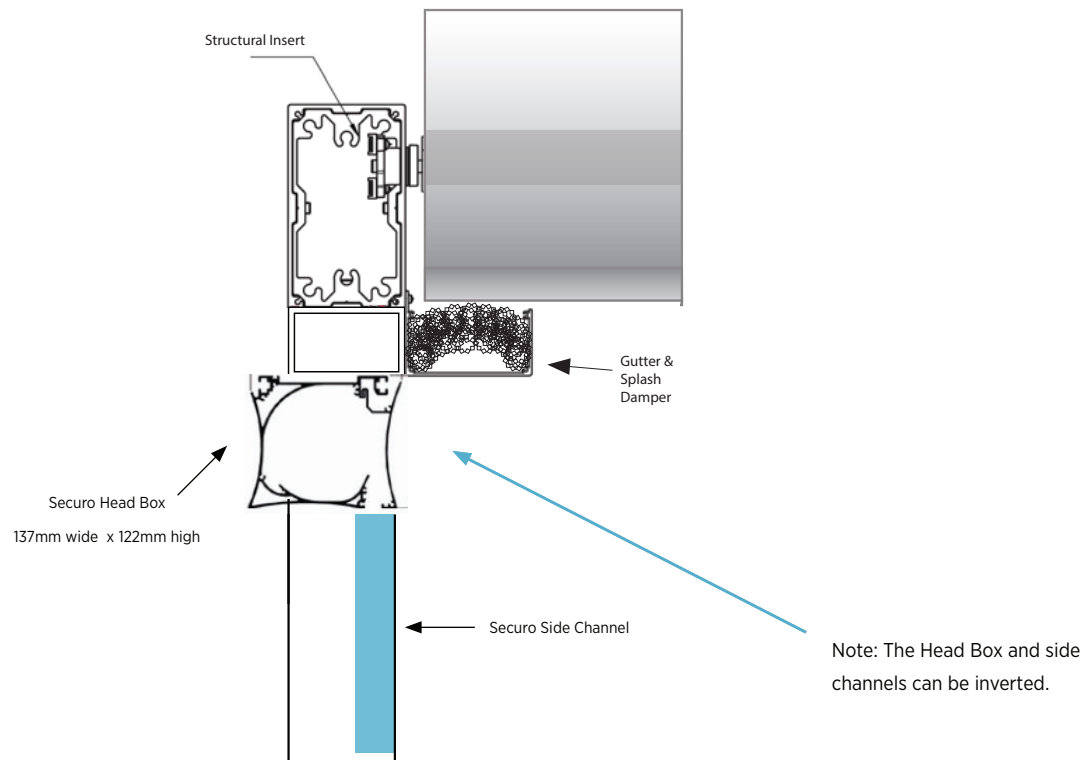
Note: The Head Box and side channels can be inverted so that the curved fascia faces inside rather than outside.

Louvre Roof - Securo® Outdoor Blinds

SECURO® MAX

- Motorised
- Available in Techno X Screen fabric and can be installed on all four sides of the louvre roof.
- Installation of Securo Max can be inside (top fix) the beams and posts or face mounted on the outside of the beams and posts.
- Maximum size with Techno Screen: W10.0m x D3.0m

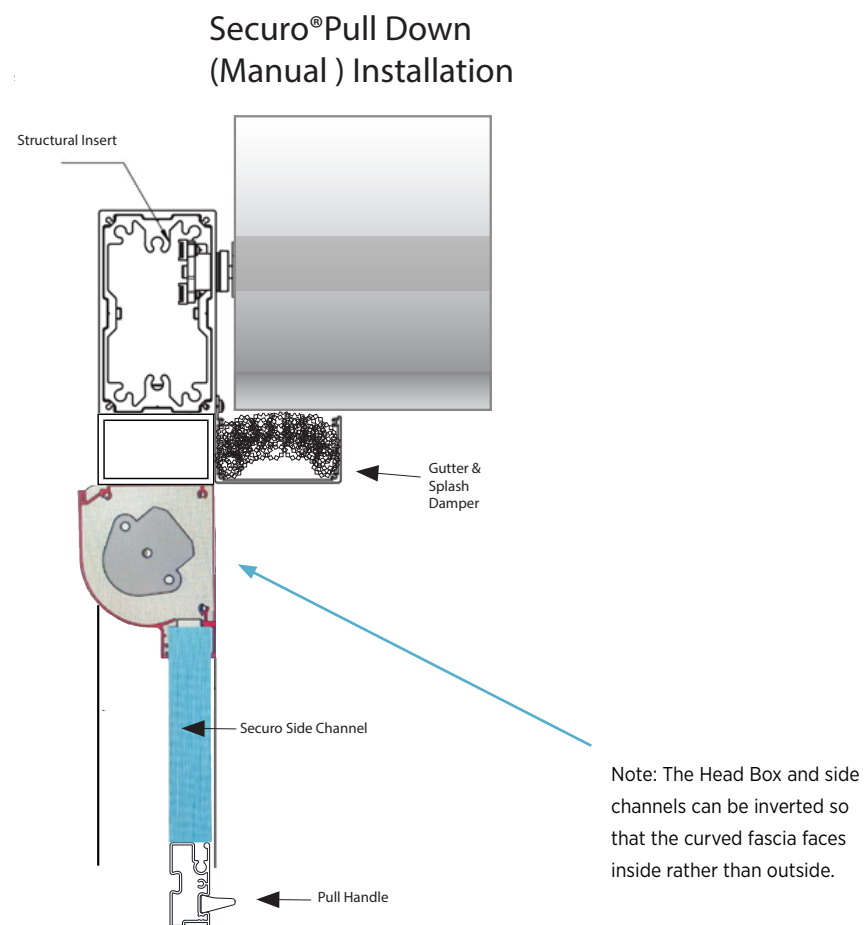
Motorised Securo® Max Installation



Louvre Roof - Securo® Outdoor Blinds

SECURO® PULL DOWN

- Manual system and can be installed on all four sides of the louvre roof.
- Operated easily by raising and lowering the blind using the handle or pull cord located on the bottom rail. Fabric tension is created with a spring inserted in the top tube within the cassette housing and the blind can be locked into the down position by simply tilting the bottom rail.
- Installation of Securo Pull Down can be inside (top fix) the beams and posts or face mounted on the outside of the beams and posts.
- Available with Phifer FR Patio Insect Screen or Soltis 88 exterior screen.
- Maximum size with 60mm x 60mm housing with Phifer FR Patio Insect Screen: W2.40m x W2.0m Drop
- Maximum size with 80mm x 80mm housing with Soltis 88 block out is W2.7m x D2.55m.

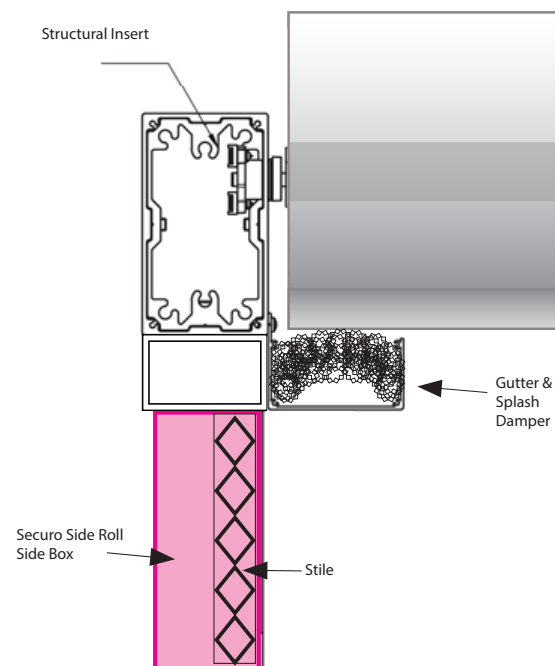


Louvre Roof - Securo® Outdoor Blinds

SECURO® SIDE ROLL

- Securo Side Roll (manual system)
- Available with Phifer patio insect screen and can be installed on all four sides of the louvre roof.
- Maximum size with Phifer patio insect screen: Single Screen - W4.0m x D2.7m, Double Screen - W8.0m x D2.7m.

Securo® Side Roll Installation



Louvre Roof – Product Operation, Owner Maintenance Guide & Warranty

PRODUCT OPERATION

Your installer will fully explain the operation of your Window Treatments Louvre Roof. Control of your louvre roof is either via a handheld remote, hardwired switch, or an automation system.

Ensure before opening or closing of the louvres there are no obstructions such as branches or debris that prevent the louvres from rotating freely.

The louvre roof is weather proof but is not guaranteed to be water tight in adverse or storm conditions. The louvres must be opened when wind exceeds 65km/hr and/or when snowing.

OWNER MAINTENANCE

Louvre Roofs installed in coastal areas require additional care by the owner to minimise deterioration and corrosion. For coastal areas we recommend regular (6 monthly) lubrication and cleaning of drives, metal parts and all components.

In addition, we recommend regular (monthly) removing & cleaning of all debris from the louvre roof gutters and louvres.

WARRANTY

1. The Company (Window Treatments NZ Limited) warrants that it will repair or make good any defects in materials or workmanship brought to its notice within a three-year period from the date of installation.
2. Following notice of a warranty claim, the Company shall have the right at a time convenient to both parties, to inspect the product.
3. If notice is not given within this three-year period the claim shall be deemed to have been waived.
4. No claim shall be accepted if any attempt to repair the defective goods is made by any person or persons not authorised by the Company to complete the repairs.
5. No claim shall be accepted if the defective goods have been modified or incorrectly maintained or incorrectly operated (refer to Product Operation & Owner Maintenance Guide).
6. Claims after the three-year warranty period will be charged at the normal labour and travelling rates at the time of the claim, plus the cost of any parts or components required.
7. Blinds, Securo's, Shutters, Awnings, Louvre Roofs and Insect screens installed in coastal areas will require additional maintenance by the owner to minimise deterioration and corrosion. For coastal areas we recommend regular (6 monthly) lubrication and cleaning of chain drives, metal parts and all components.
8. For Louvre Roofs in addition to clause 7 above, we recommend regular (monthly) removing & cleaning of all debris from the louvre roof gutters and louvres (refer to Product Operation & Owner Maintenance Guide).
9. Failure to clean and maintain products as per clauses 4, 7 & 8, will void the three-year warranty.