

Technical Manual
Pergola
MEGA





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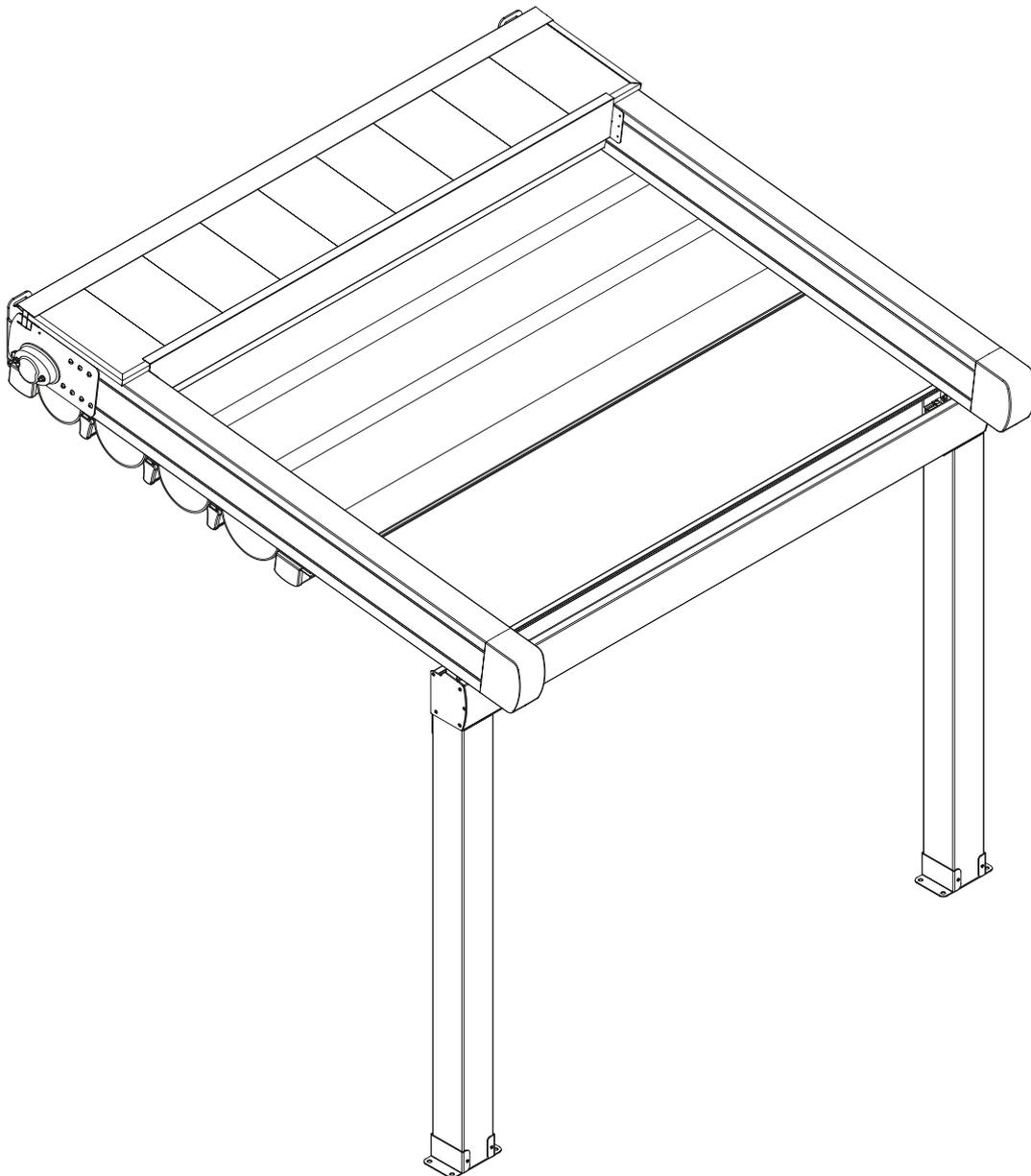
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Mega

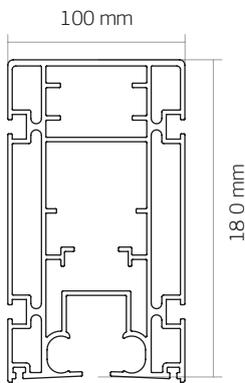
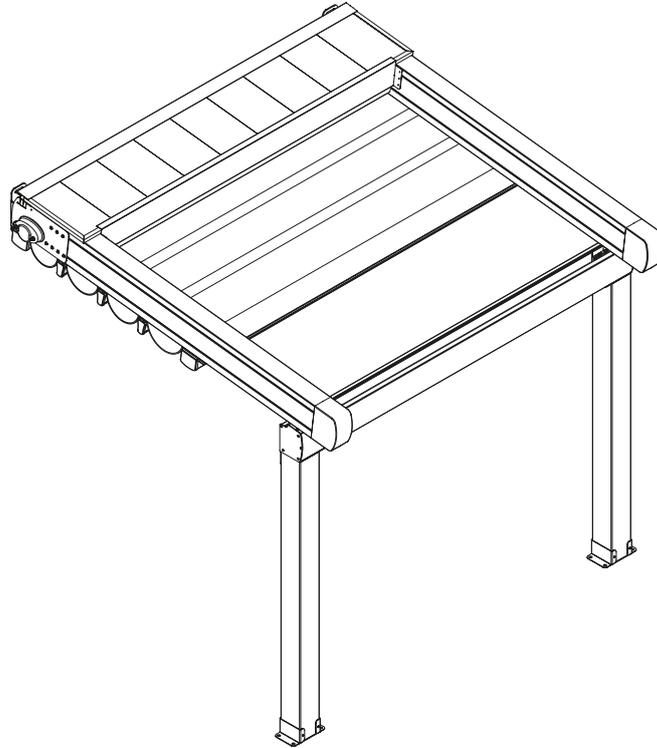
General view of the pergola

Metaform SA once again innovates and offers a folding aluminum pergola , ideal for large surfaces, which undoubtedly makes the difference.

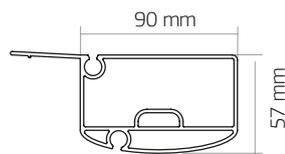
With special tubular motor and without any accessories, achieves full combination of simplicity - performance , and offers maximum coverage capability and shading.



Profile cross-sections



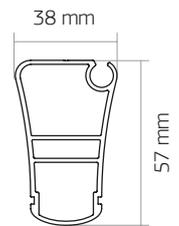
① rafter 100X180



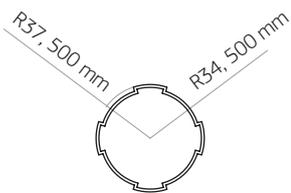
② wide counterweight, bottom 90x57



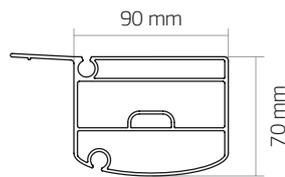
③ wide counterweight, top 90x57



④ narrow counterweight 38x57



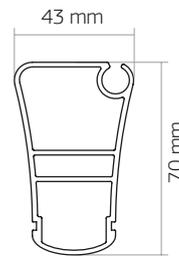
⑤ tube
(not shown in diagram)



⑥ wide counterweight, bottom 90x70



⑦ wide counterweight, top 90x70



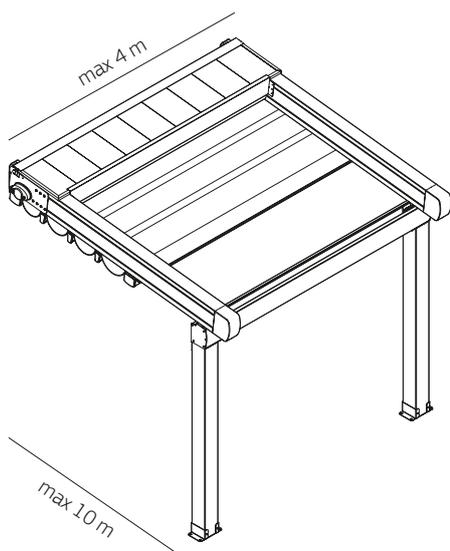
⑧ narrow counterweight 43x70

You can choose between counterweights 2-3-4 and 6-7-8

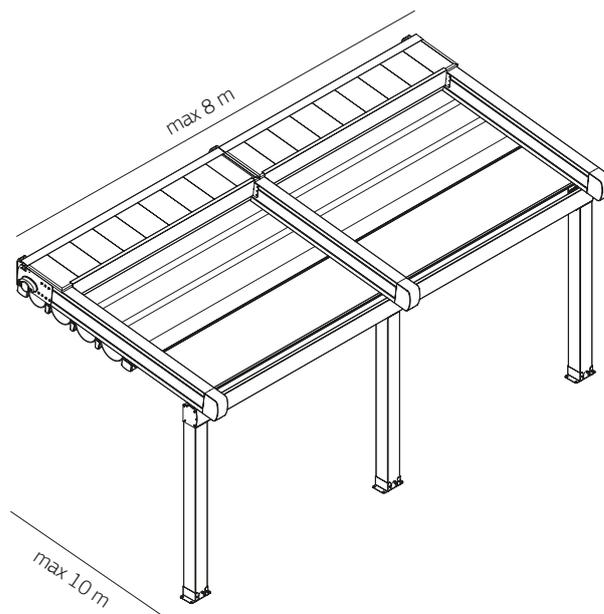
Mega

Maximum pergola projection & maximum rafter distance with 38x57 and 90x57 counterweights.

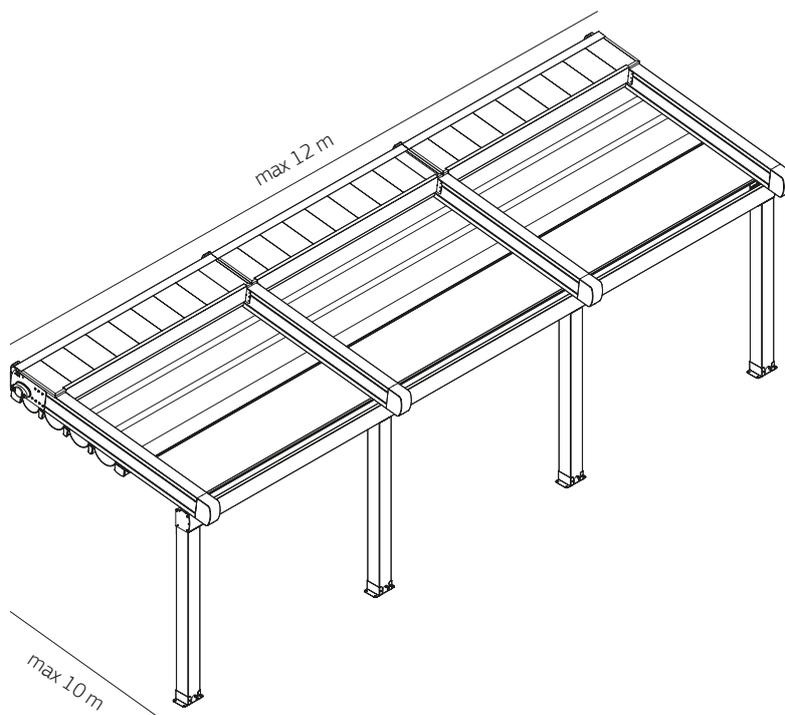
Maximum rafter-to-rafter distance with 38x57 and 90x57 counterweights is 4 metres.



2 rafters



3 rafters

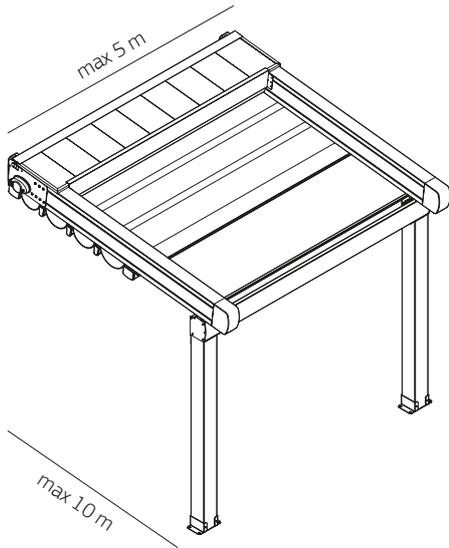


4 rafters

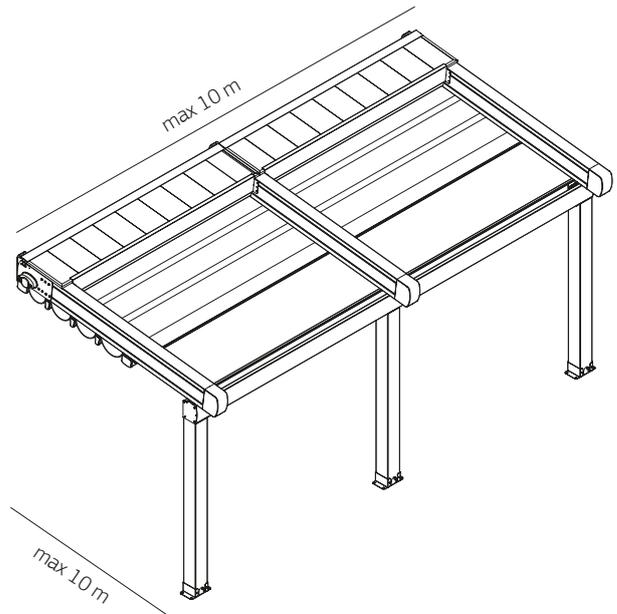
The Mega pergola can reach an projection of up to 10 metres and an axis length of up to 20 metres with six rafters.

Maximum pergola projection & maximum rafter distance with 43x70 and 90x70 counterweights.

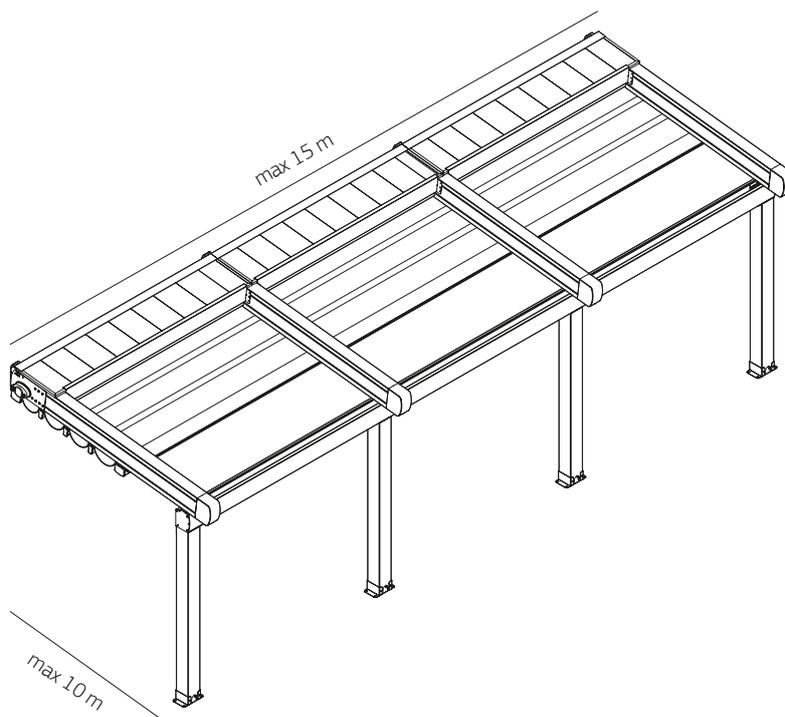
Maximum rafter-to-rafter distance with 43x70 and 90x70 counterweights is 5 metres.



2 rafters



3 rafters

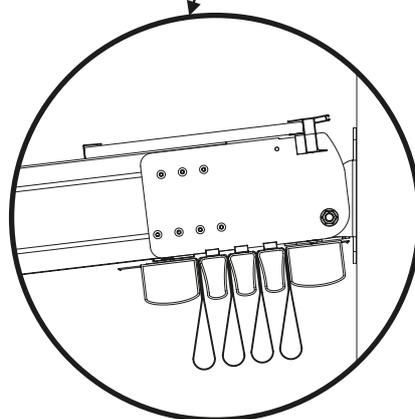
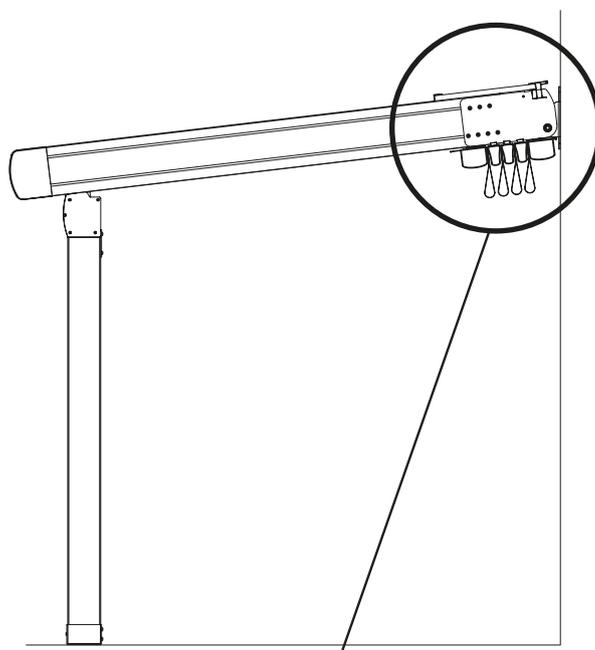


4 rafters

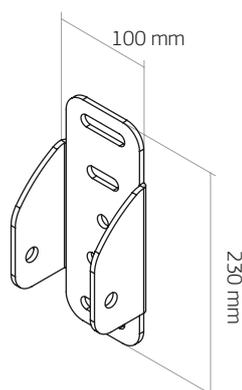
The Mega pergola can reach an projection of up to 10 metres and an axis length of up to 20 metres with five rafters.

Mega

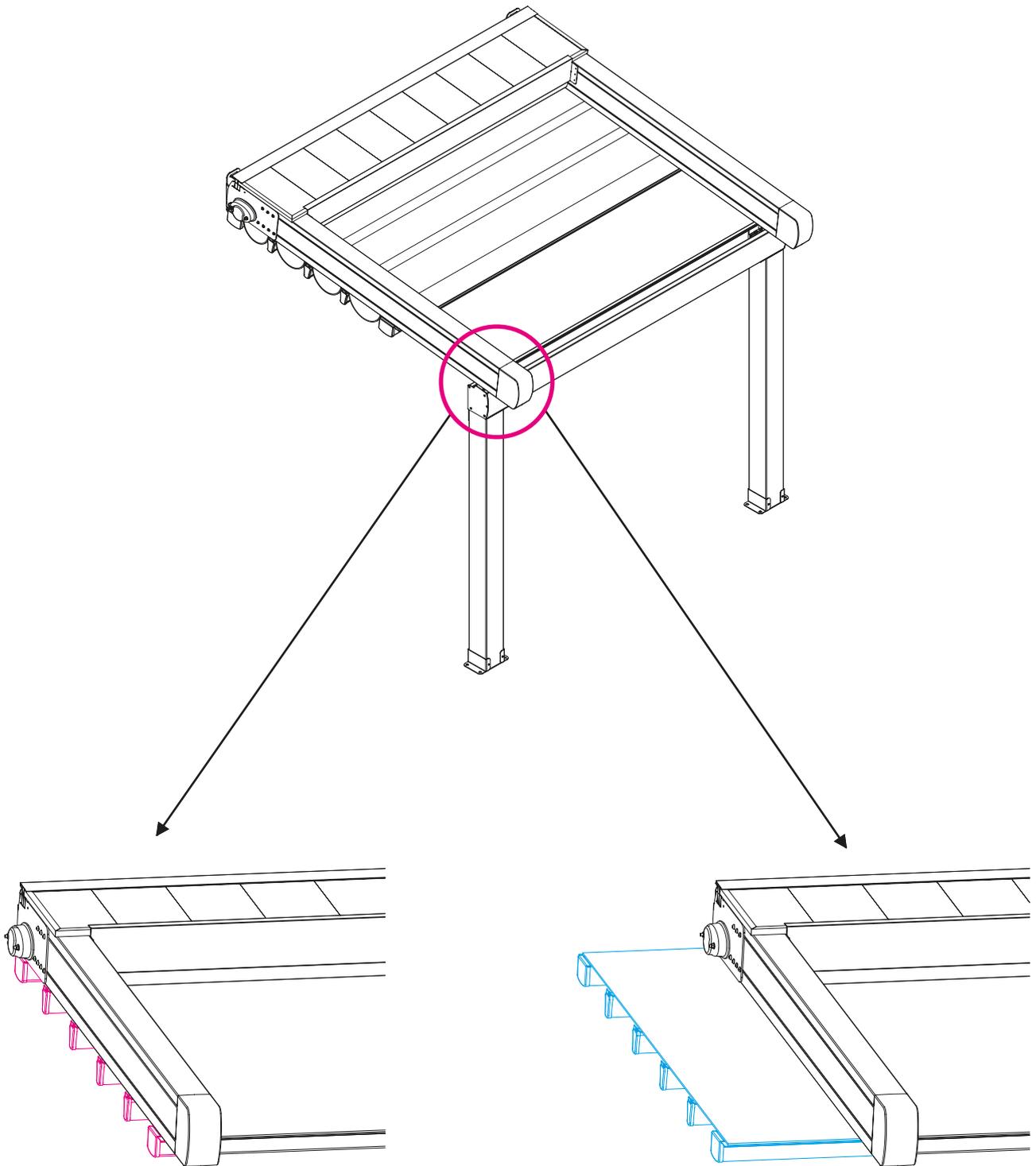
Pergola support options



wall base



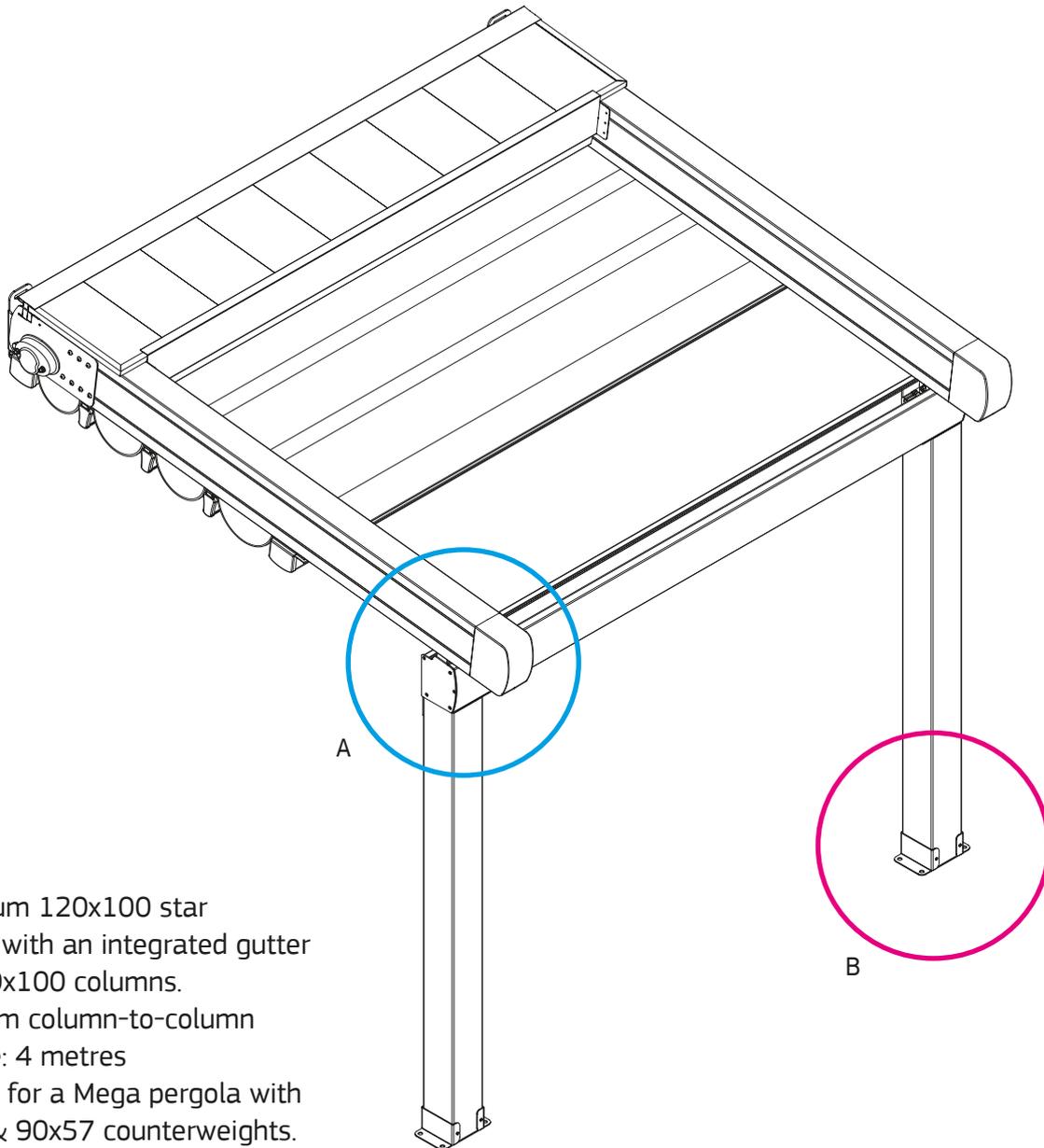
Counterweight overhang choice



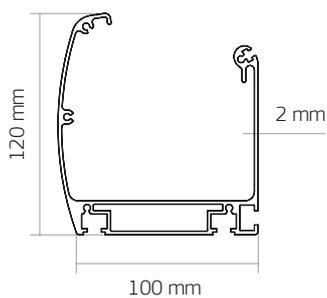
Counterweights can extend a minimum of 1cm from the rafter and a maximum of 80cm.

Mega

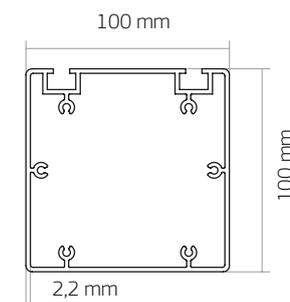
Details of the connection of a pergola with a 120x100 star parapet



Aluminium 120x100 star parapet with an integrated gutter and 100x100 columns.
Maximum column-to-column distance: 4 metres
Suitable for a Mega pergola with 38x57 & 90x57 counterweights.



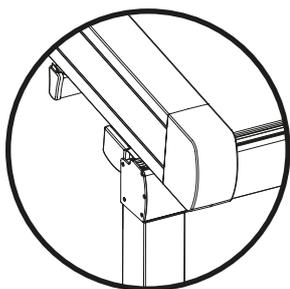
120x100 Parapet-gutter



100x100 Column

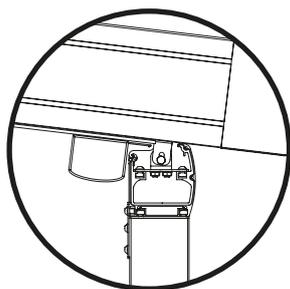
Details of the connection of a pergola with a 120x100 star parapet

Details of the rafter-parapet connection



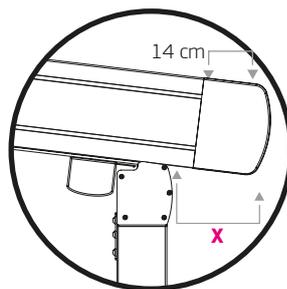
A1

External detail of Rafter-to-Parapet connection. The total parapet length is always 2 cm longer than the total pergola length.



A2

Internal Detail of Rafter-to-Parapet connection.

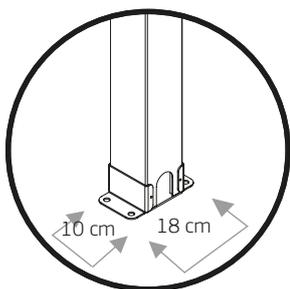


A3

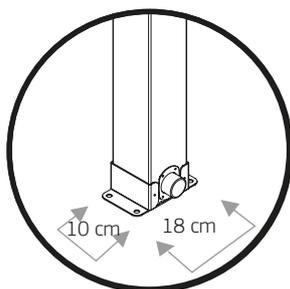
Support for a Mega pergola with an 14 cm Aluminium Cover (Corbel) on a 120x100 star Parapet.

the **X** in images A3, A4 indicates the total overhang of the rafter from the parapet. The minimum overhang is equal to the aluminium cover. The recommended overhang is equal to the aluminium cover + 5 cm

Details of parapet column and rainwater extraction



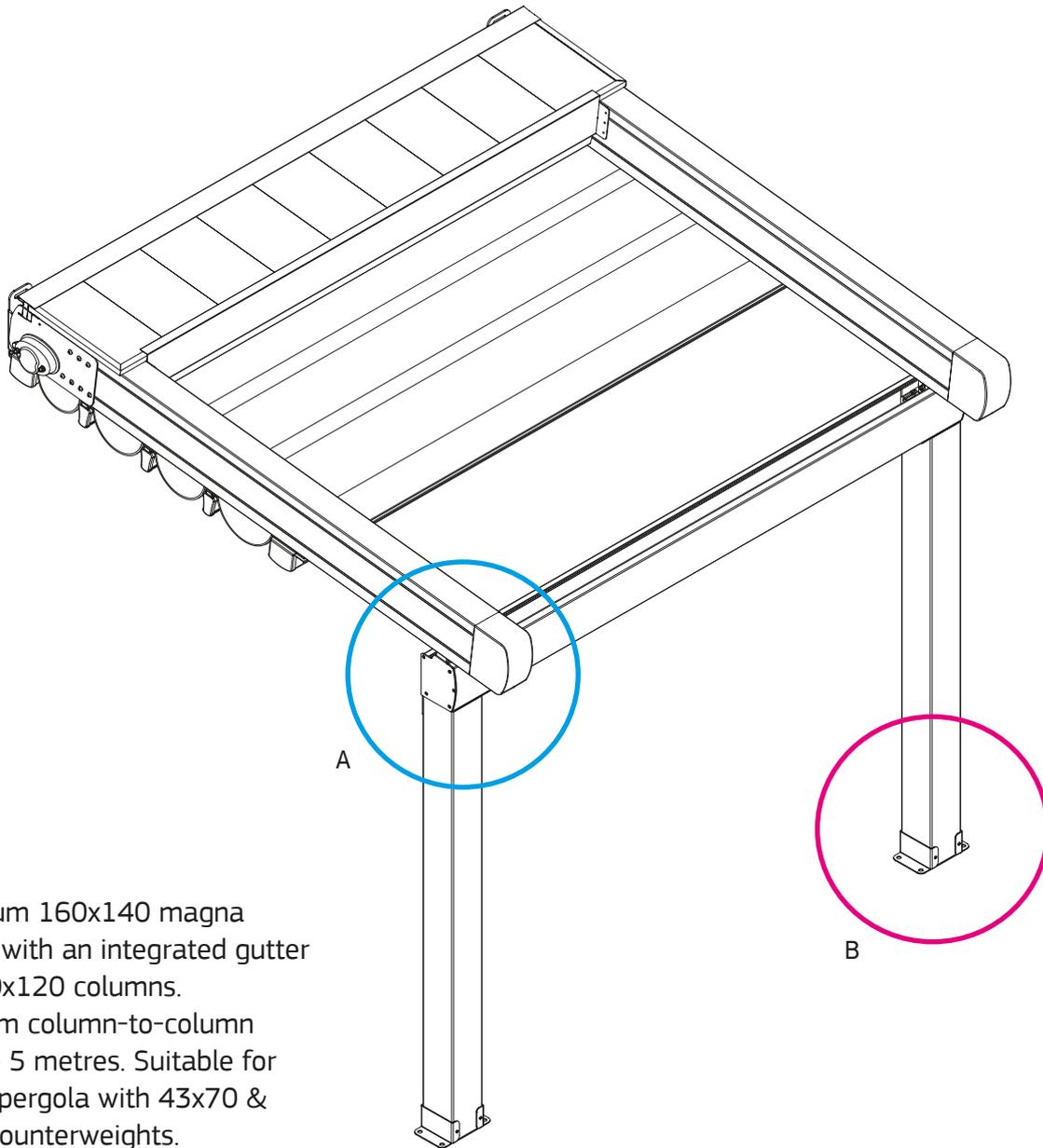
B1



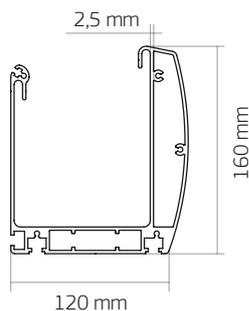
B2

Mega

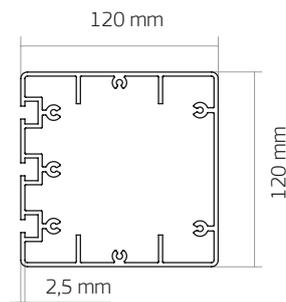
Details of the connection of a pergola with a 160x140 magna parapet



Aluminium 160x140 magna parapet with an integrated gutter and 120x120 columns.
Maximum column-to-column distance 5 metres. Suitable for a Mega pergola with 43x70 & 90x70 counterweights.



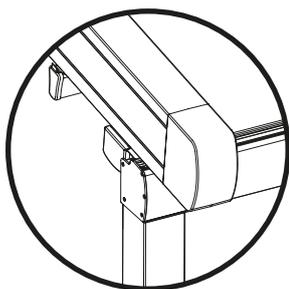
160x140 Parapet-gutter



120x120 Column

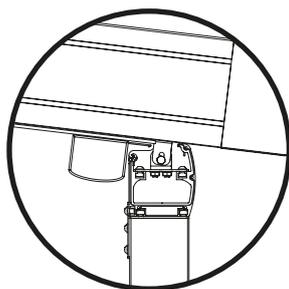
Details of the connection of a pergola with a 160x140 magna parapet

Details of the rafter-parapet connection



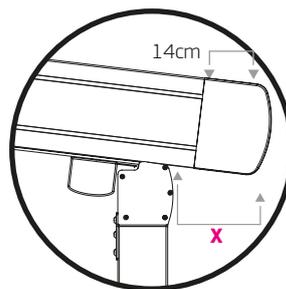
A1

External detail of Rafter-to-Parapet connection. The total parapet length is always 2 cm longer than the total pergola length.



A2

Internal Detail of Rafter-to-Parapet connection.

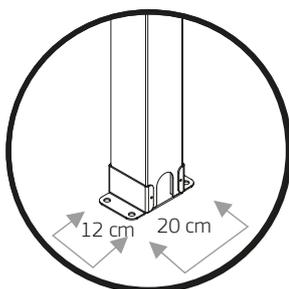


A3

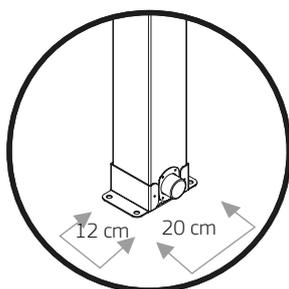
Support for a Mega pergola with an 14 cm Aluminium Cover (Corbel) on a 160x140 magna Parapet.

the **X** in images A3, A4 indicates the total overhang of the rafter from the parapet. The minimum overhang is equal to the aluminium cover. The recommended overhang is equal to the aluminium cover + 5 cm

Details of parapet column and rainwater extraction.



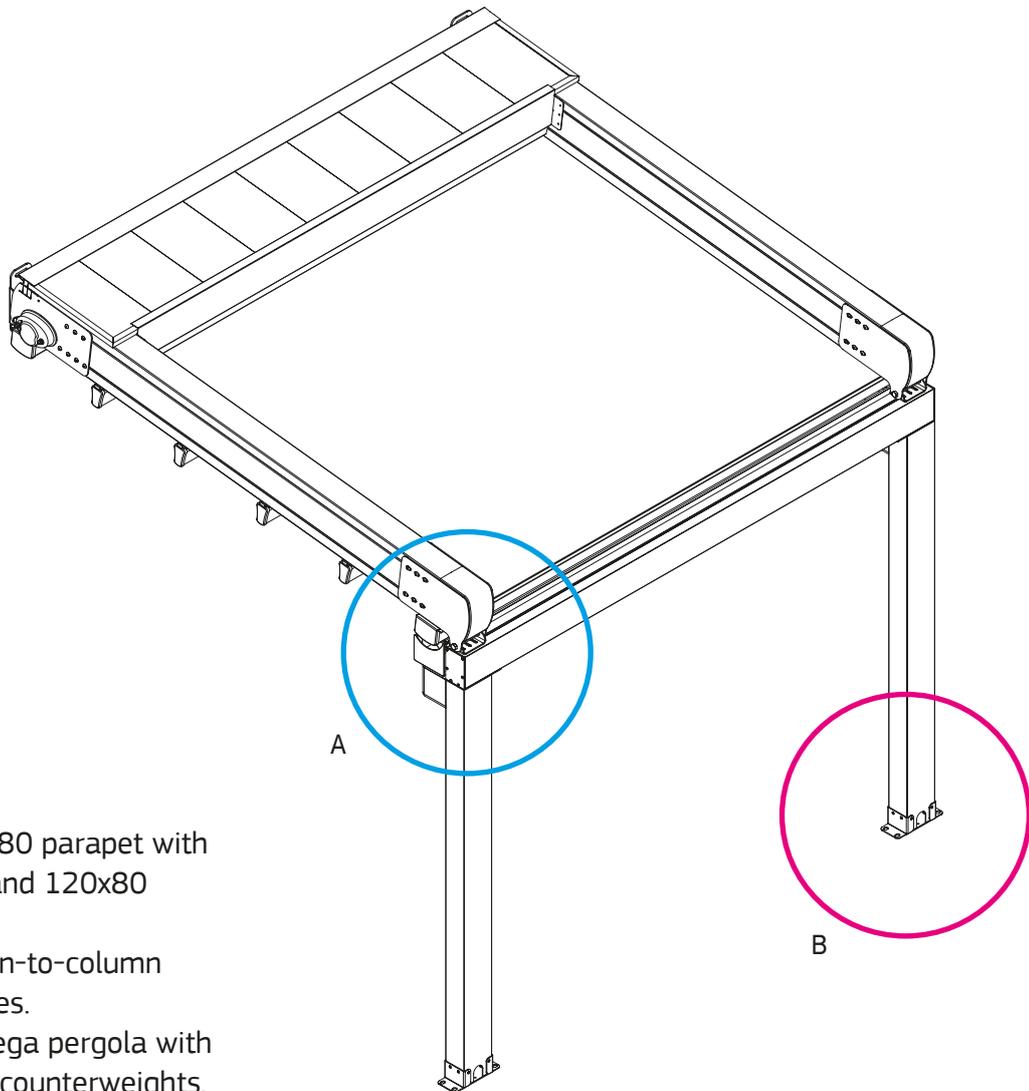
B1



B2

Mega

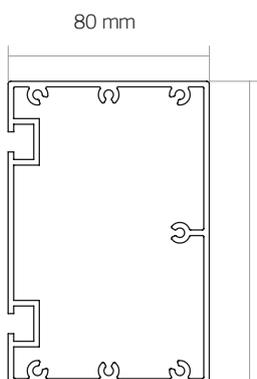
Choices for support of a Mega pergola with a 120x80 parapet



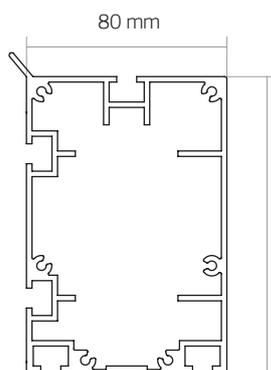
Aluminium 120x80 parapet with an extra gutter and 120x80 columns.

Maximum column-to-column distance: 4 metres.

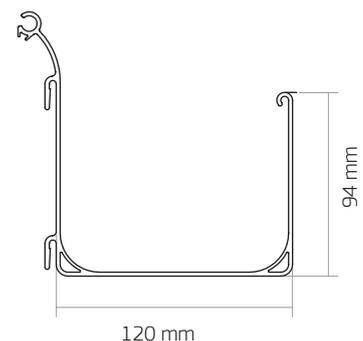
Suitable for a Mega pergola with 38x57 & 90x57 counterweights.



120x80 Column



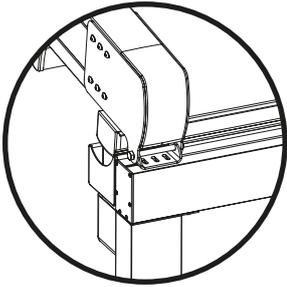
120x80 Parapet



140x120 Gutter

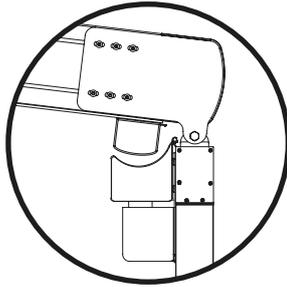
Choices for support of a Mega pergola with a 120x80 parapet

Details of the rafter-parapet connection



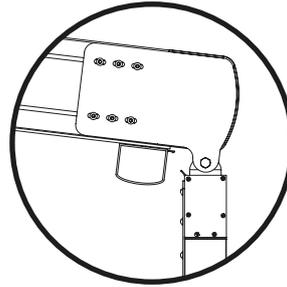
A1

External detail of Rafter-to-Parapet connection. The total parapet length is always 2 cm longer than the total pergola length.



A2

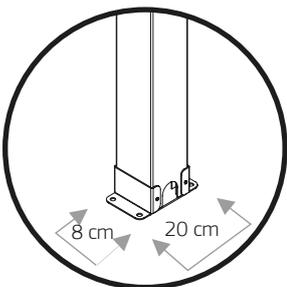
Mega pergola with a face rafter on the 120x80 parapet, 14 cm Aluminium Cover (Corbel) with an extra 140x120 gutter.



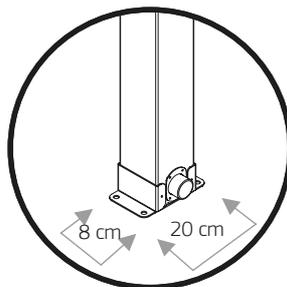
A3

Mega pergola with a face rafter on the 120x80 parapet, 14 cm Aluminium Cover (Corbel).

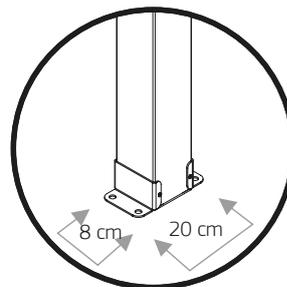
Details of parapet column and rainwater extraction.



B1



B2

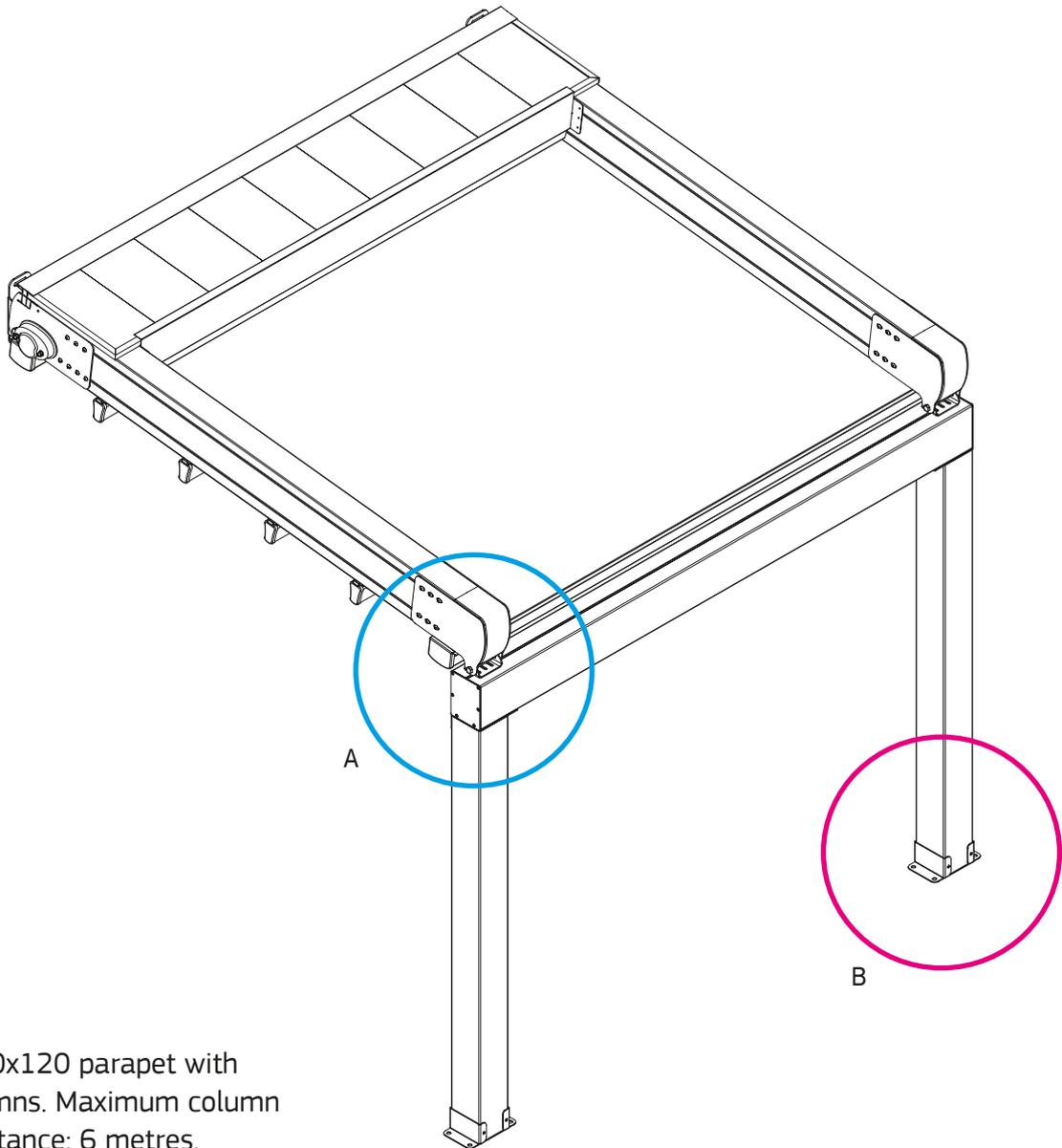


B3

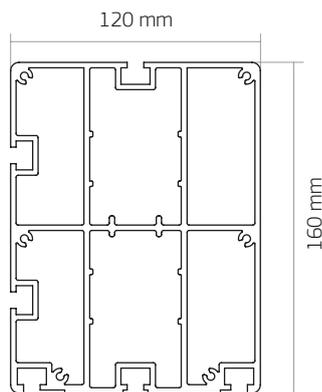
Parapet column without rainwater extraction

Mega

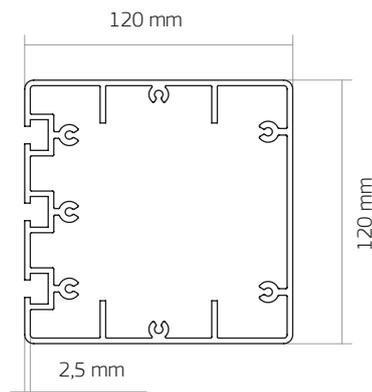
Details of the connection of a pergola with a 160x120 parapet



Aluminium 160x120 parapet with 120x120 columns. Maximum column-to-column distance: 6 metres.



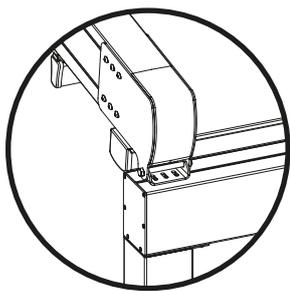
Parapet 160x120



Column 120x120

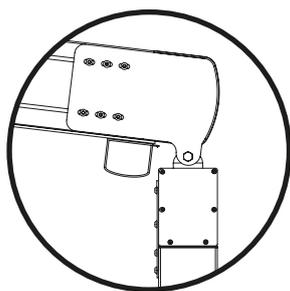
Details of the connection of a pergola with a 160x120 parapet

Details of the rafter-parapet connection



A1

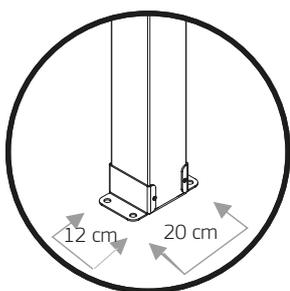
External detail of the Rafter-to-Parapet connection. The total parapet length is always 2 cm longer than the total pergola length.



A2

Mega pergola with a face rafter on the 160x120 parapet, 14 cm Aluminium Cover (Corbel).

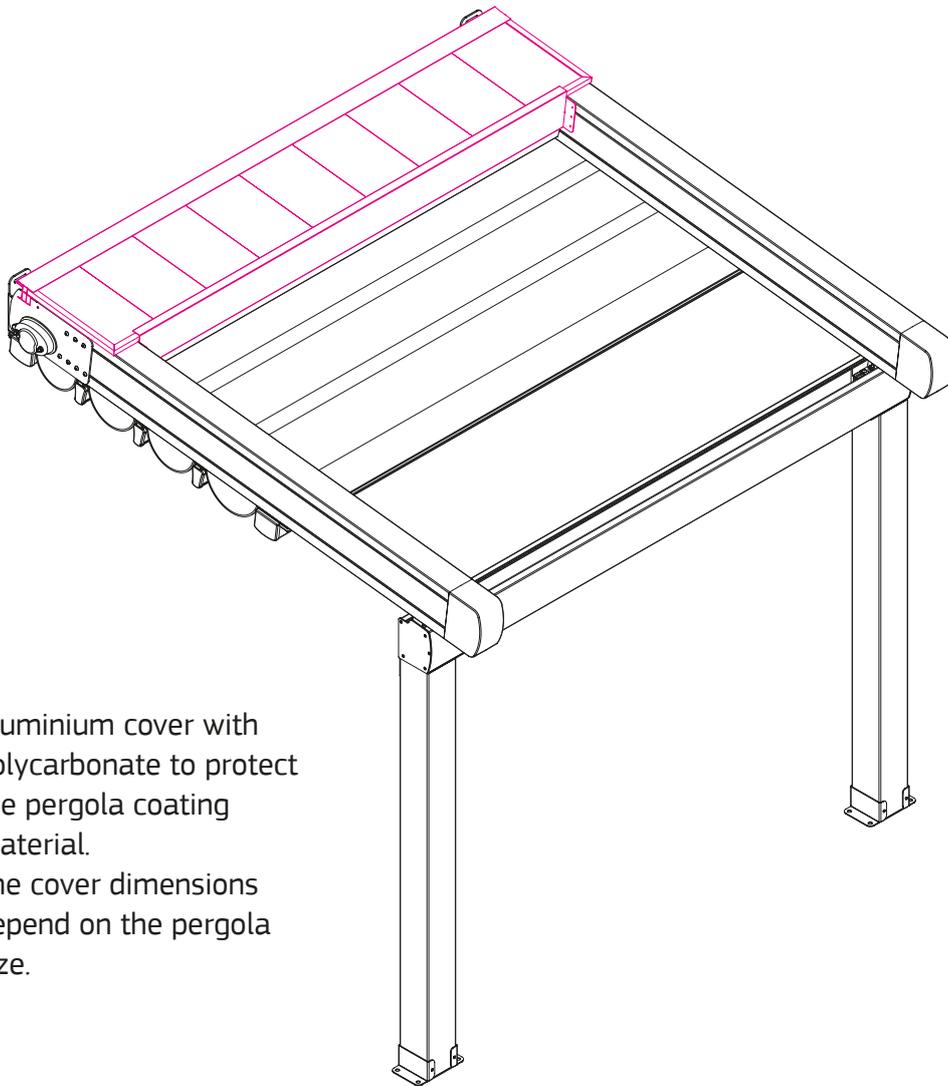
Details of the parapet column and rainwater extraction



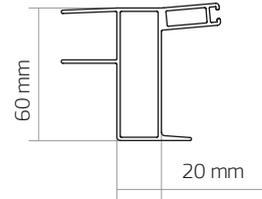
B

Mega

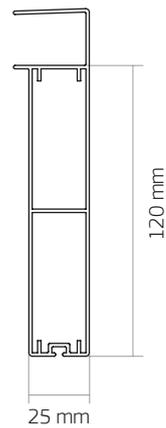
Mega pergola with cover



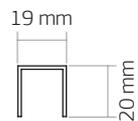
Aluminium cover with polycarbonate to protect the pergola coating material.
The cover dimensions depend on the pergola size.



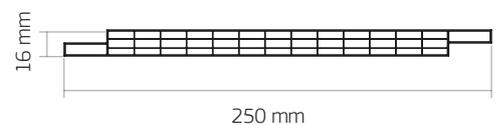
A. Cover support profile



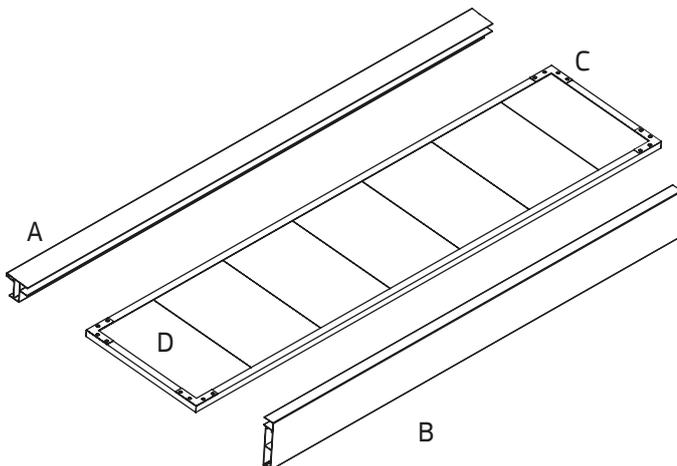
B. Cover stabilisation profile



C. Cover frame profile.



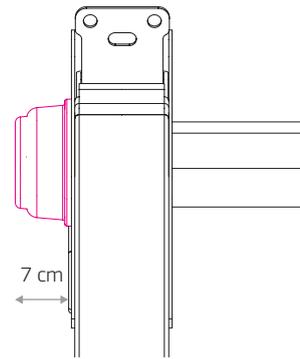
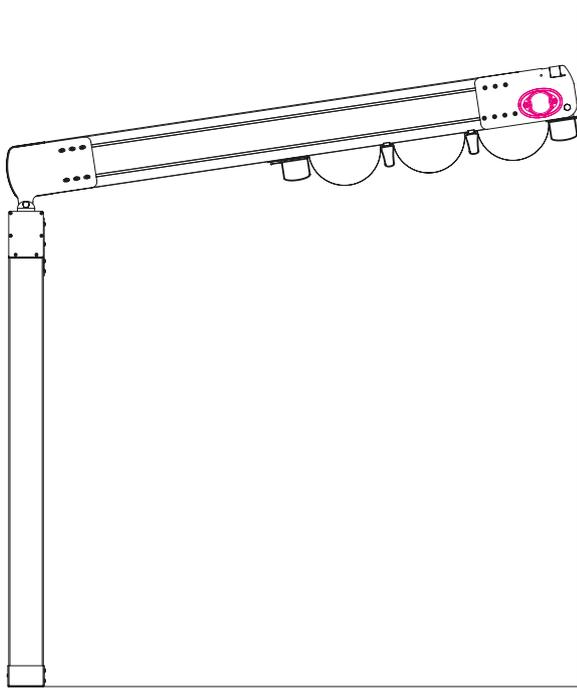
D. Polycarbonate



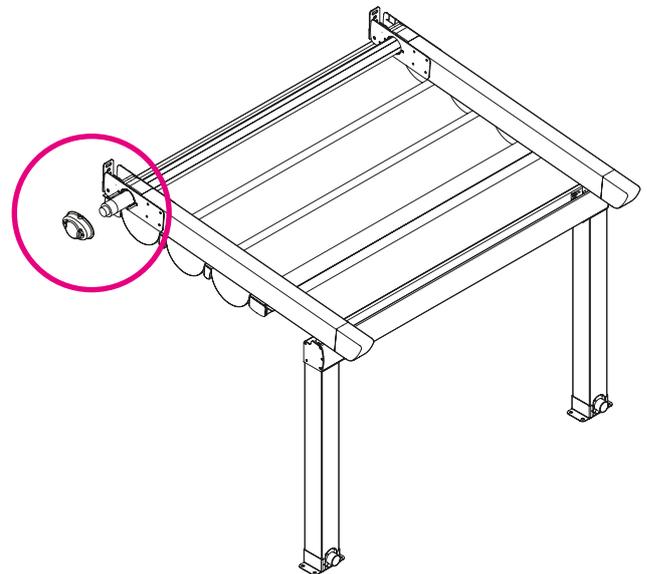
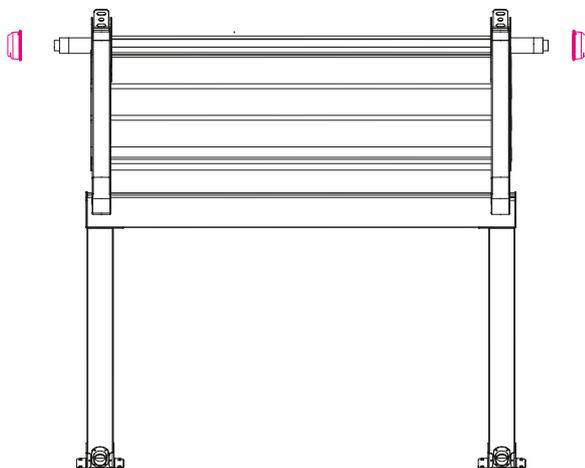
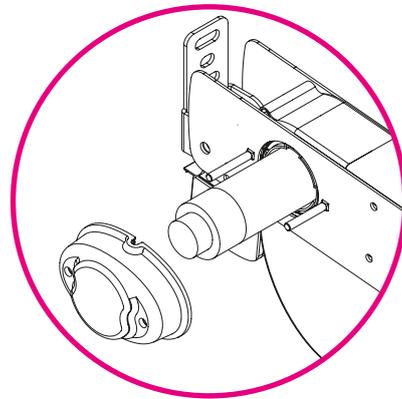
Released cover

Motion transmission motor

Motion is transmitted in the Mega pergola by a tubular motor
For pergolas with large areas and special requirements, two tubular motors can be installed.

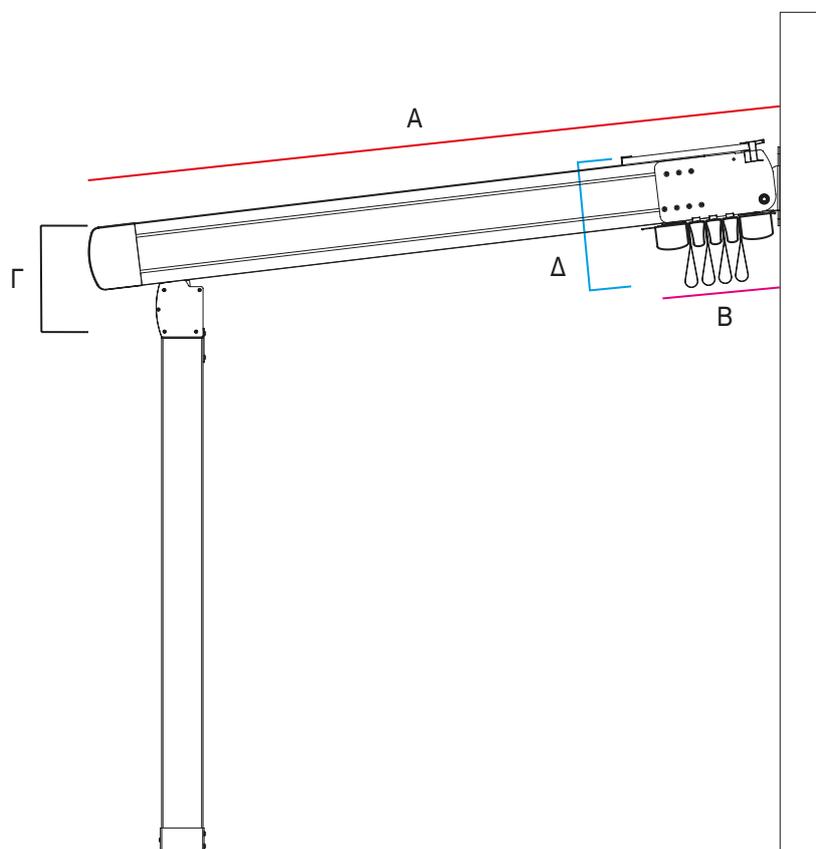


Motor cover detail



Mega

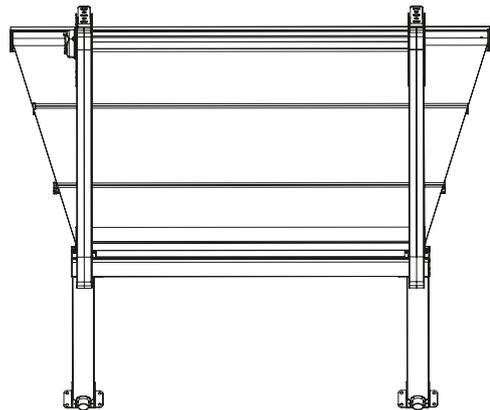
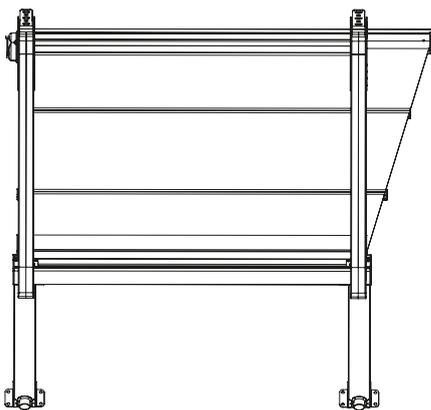
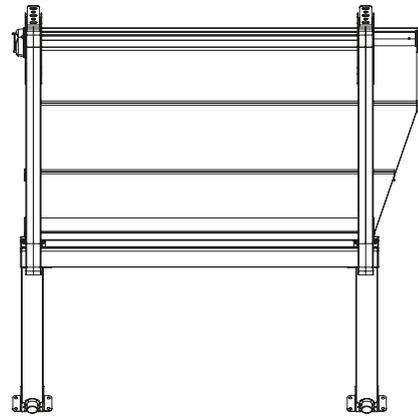
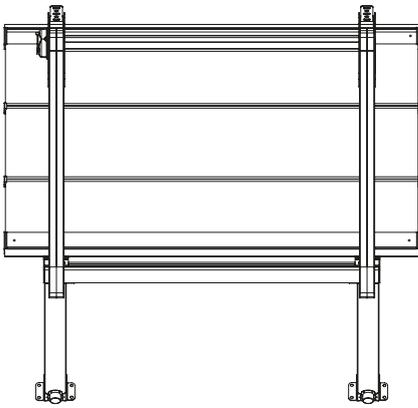
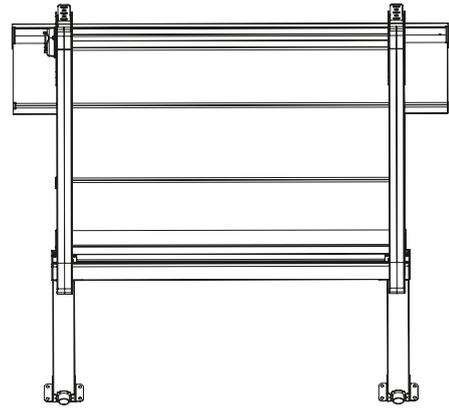
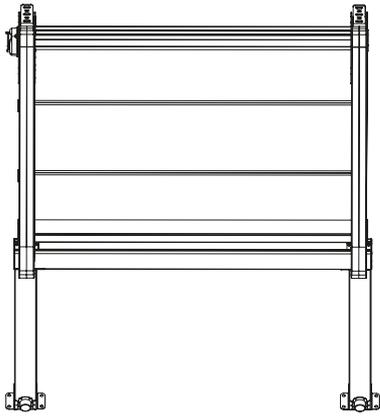
General information on pergola installation



A	B	Γ	Δ
Projection	Distance of Retracted Counterweights	Gradient	Depth
250	43,5	32,5	49,25
300	50	39	48,00
350	56,5	45,5	47,17
400	56,5	52	51,33
450	63	58,5	50,14
500	69,5	65	49,25
550	76	71,5	48,56
600	82,5	78	48,00
650	82,5	84,5	50,50
700	89	91	49,82
750	95,5	97,5	49,25
800	102	104	48,77
850	108,5	110,5	48,36
900	108,5	117	50,14
950	115	123,5	49,67
1000	121,5	130	49,25

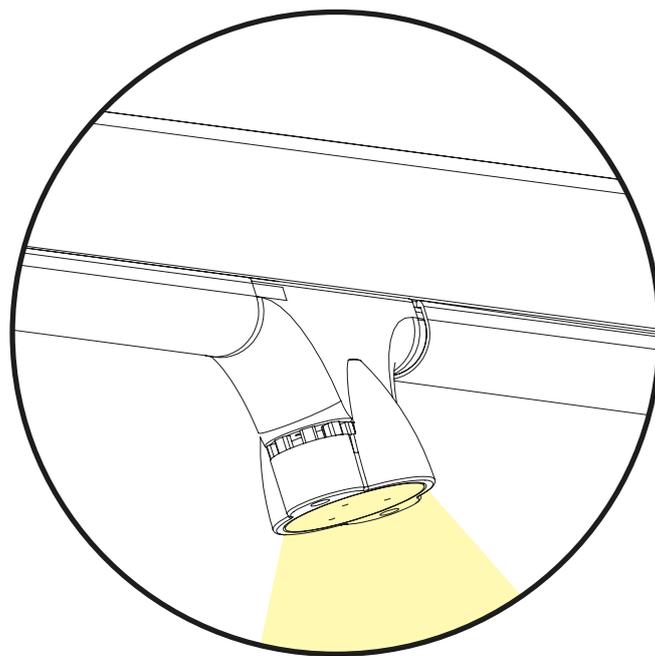
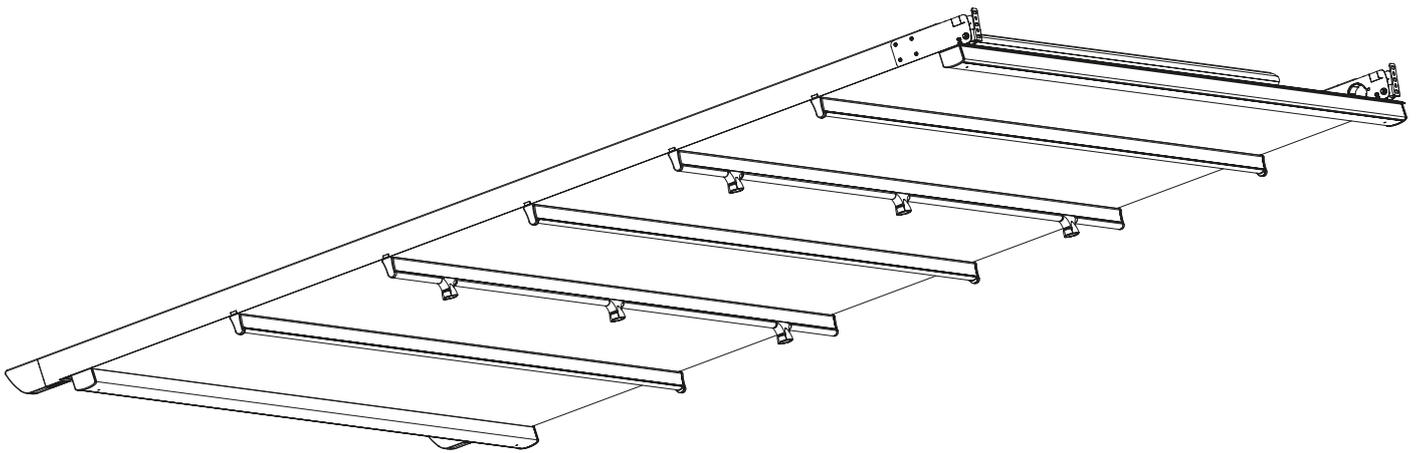
Measurements are in centimeters

Special pergola applications



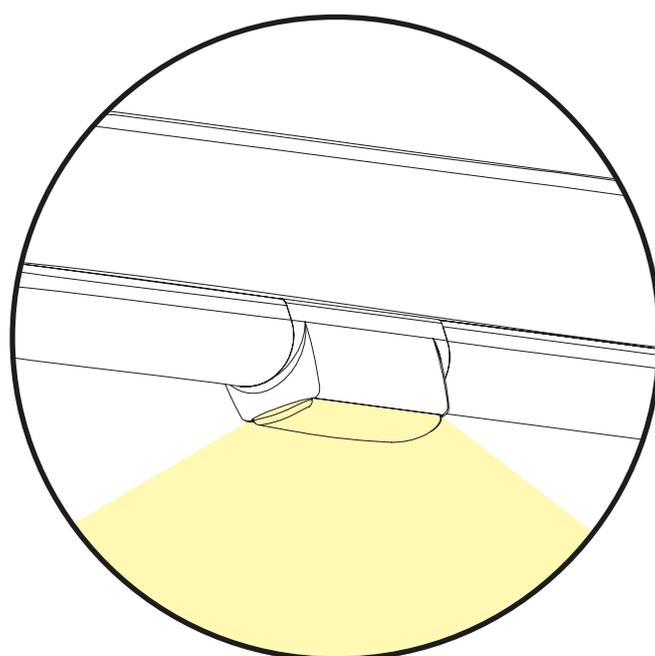
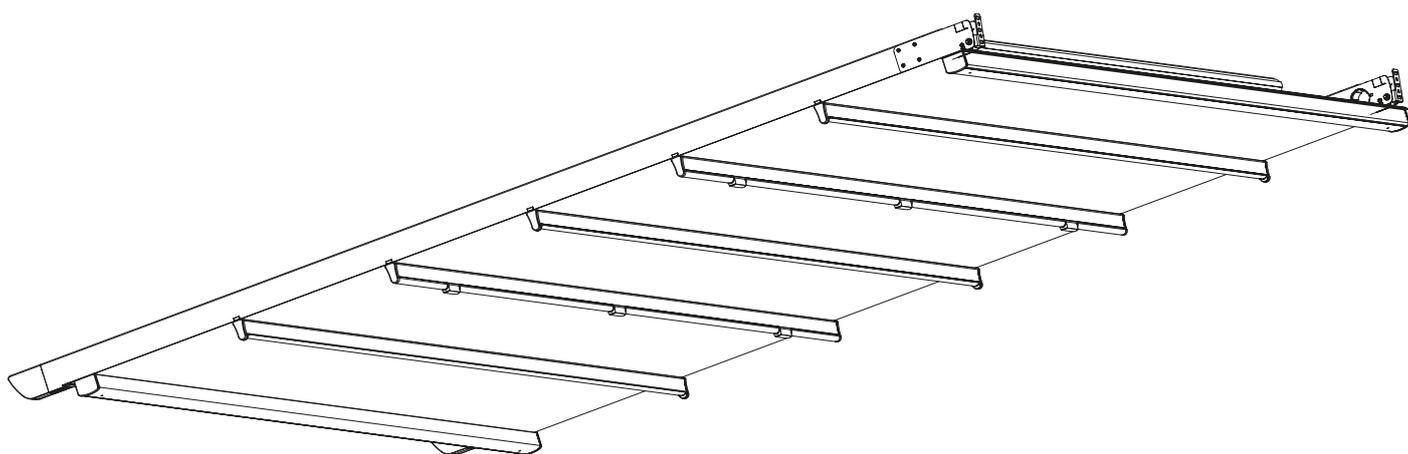
Mega

Lighting system



Lighting system with spot-type lighting fixtures.
LED 12V lamps with a beam angle of up to 60°. In two lighting colours,
Cool White and Warm White.

Lighting system

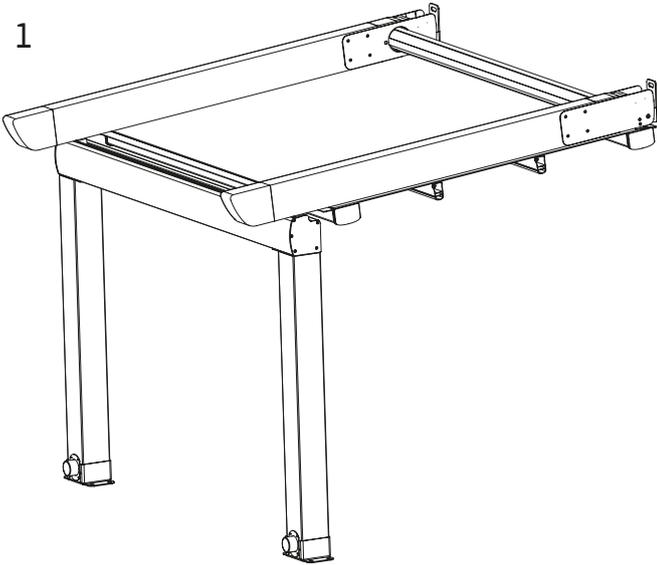


Lighting system with flat lighting fixtures.
LED 12V lamps with a beam angle of up to 150°. In two lighting colours,
Cool White and Warm White.

Mega

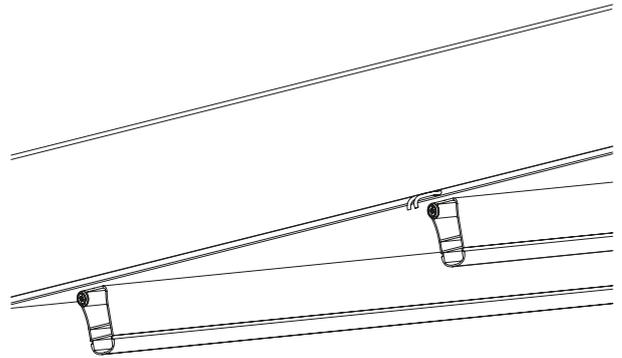
Lighting system
Installation instructions

1



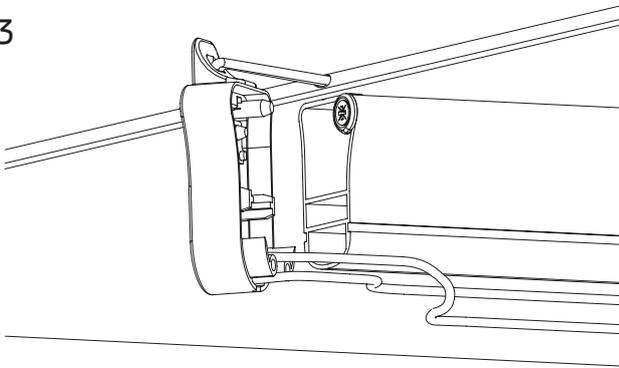
Mega Pergola Installation

2



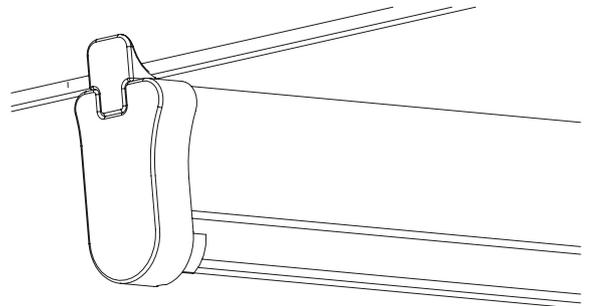
Select the counterweights that will have lighting and open a small hole on the coating material above them - then extract the cable couplers.

3

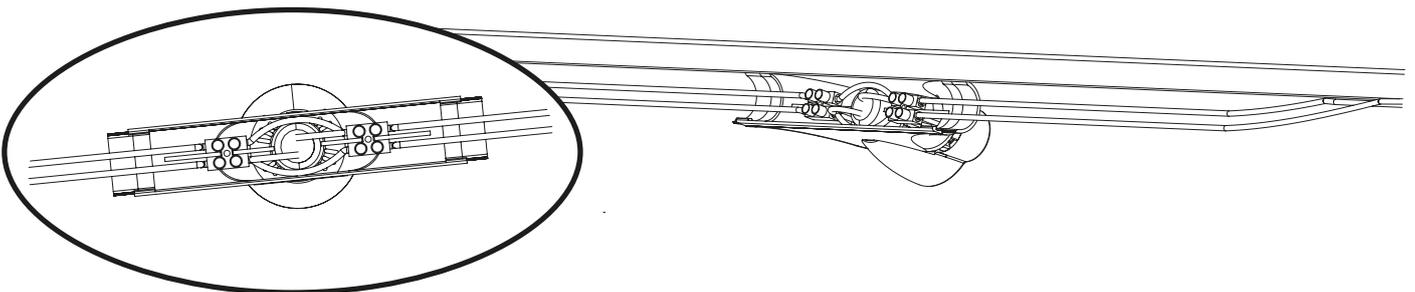


Thread the cables through the plastic counterweight stoppers

4



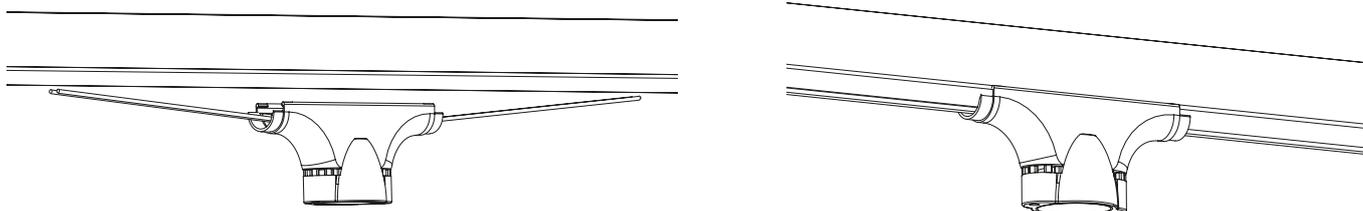
5



Connect the cables to the lighting fixture. Take one section of the cable found in the packaging and connect it from one lighting fixture to another

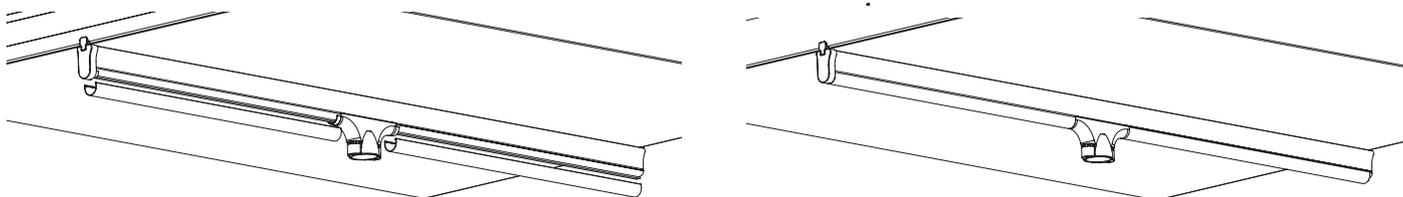
Lighting system Installation instructions

6



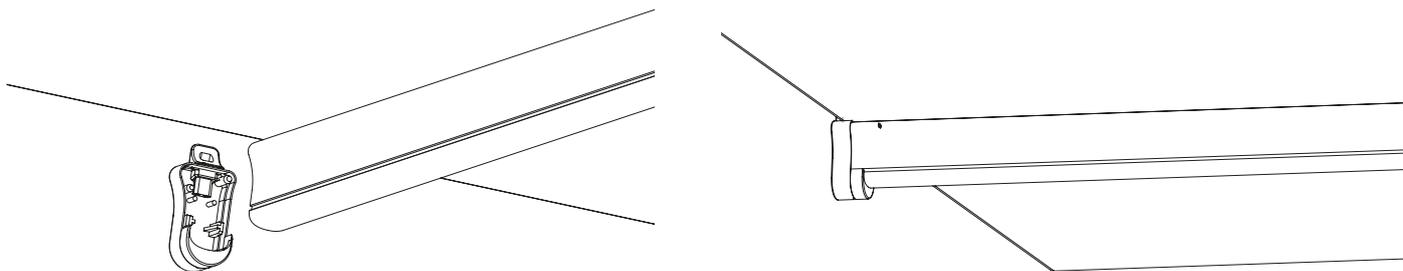
Clamp the lighting fixtures to the counterweights.

7



Cover the cables with the special profiles found in the packaging.

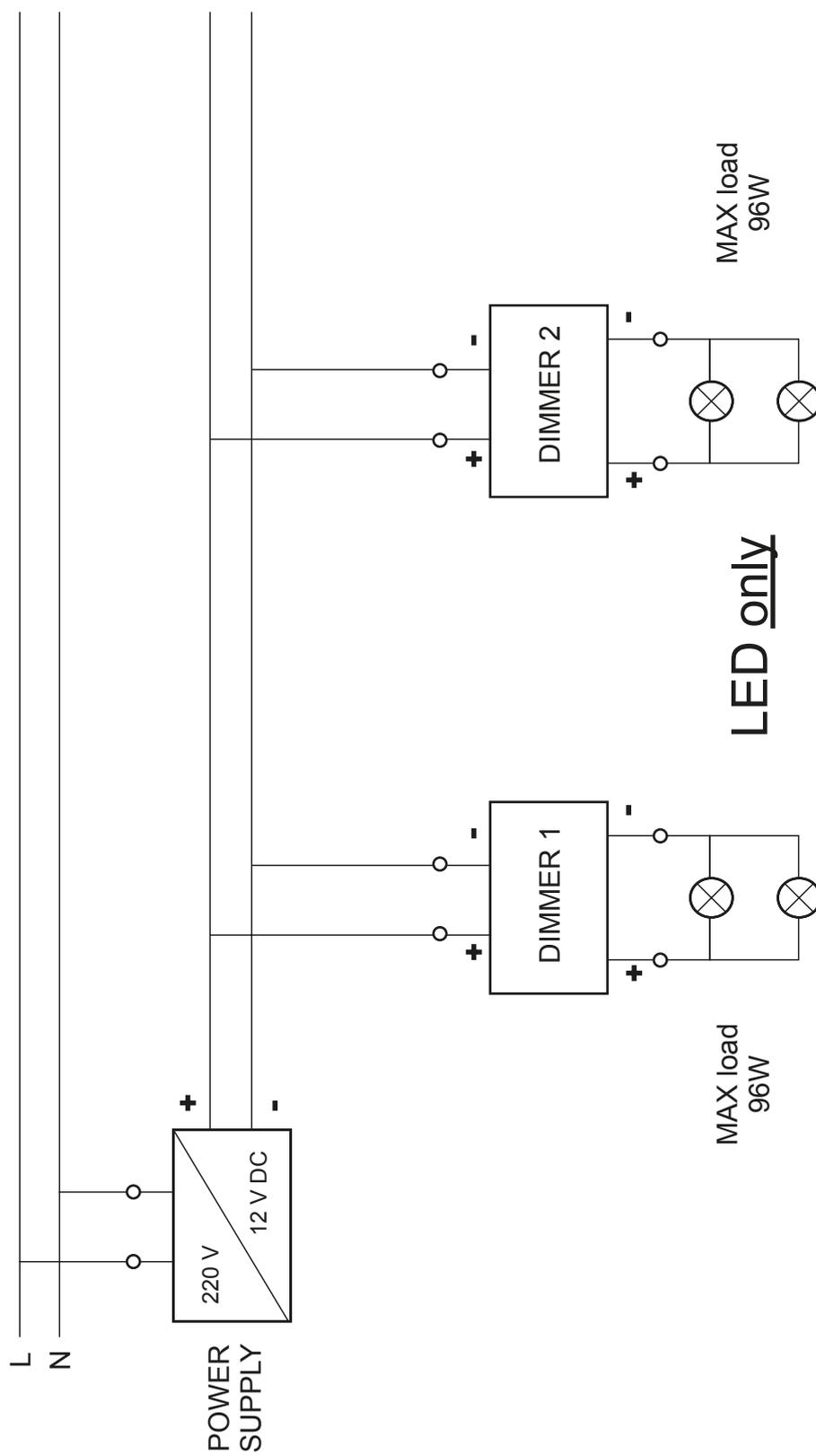
8



Finally, install all the plastic parts of the counterweights.

Mega

Lighting system
Installation instructions





Δήλωση Επίδοσης | Declaration of Performance

PEP/CPR/13561/13

1	Προϊόν / Product type	ΤΕΝΤΑ ΠΕΡΓΚΟΛΑ Τύπου Mega / CONSERVATORY AWNING Type Mega	
2	Κωδικός αναγνώρισης / Product type reference	MEG	
3	Προοριζόμενη χρήση / Intended use	Σύστημα σκίασης εξωτερικής χρήσης / Shading system for external use	
4	Κατασκευαστής, διεύθυνση επικοινωνίας / Manufacturer, address	METAFORM Α.Ε 12ο χλμ. Θεσσαλονίκης - Λαγκαδά, 572 00, Θεσσαλονίκη / METAFORM S.A. 12th Km Thessaloniki - Lagadas, 572 00, Thessaloniki	
5	Εξουσιοδοτημένος αντιπρόσωπος, διεύθυνση επικοινωνίας / Authorised representative, address	ΔΕΝ ΕΦΑΡΜΟΖΕΤΑΙ / N.A	
6	Εναρμονισμένο Πρότυπο / Harmonized standard Ref	EN 13561:2004 + A1:2008 "Εξωτερικές περσίδες – Απαιτήσεις επιδόσεων και ασφάλειας" / EN 13561:2004 + A1:2008 "External Blinds – Performance requirements including safety"	
7	Σύστημα αξιολόγησης της απόδοσης / System of assessment and verification of constancy of performance	4	
8	Ουσιώδη χαρακτηριστικά / Essential Characteristic	Δηλωθείσα απόδοση / Declared Performance	
	Αντοχή σε ανεμοπίεση / Wind resistance	Μοντέλο / Model	Κλάση / Class
		MEG01	3
9	Κοινοποιημένος Φορέας / Notified Body	Εξέδωσε το Πιστοποιητικό Συμμόρφωσης / Issued the Certificate of Conformity	
	ΔΕΝ ΕΦΑΡΜΟΖΕΤΑΙ / N.A.	ΔΕΝ ΕΦΑΡΜΟΖΕΤΑΙ / N.A.	
10	Η απόδοση του προϊόντος που ταυτοποιείται στα σημεία 1 και 2 ανταποκρίνεται προς την απόδοση που δηλώθηκε στο σημείο 8. Η παρούσα δήλωση απόδοσης εκδίδεται με αποκλειστική ευθύνη του κατασκευαστή που ταυτοποιείται στο σημείο 4. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Υπογραφή για λογαριασμό και εξ ονόματος του κατασκευαστή από / Signed for and on behalf of the manufacturer by: Φραγκόπουλος Στυλιανός - Υπεύθυνος Ποιότητας Fragoroulos Stelios – Quality Manager		
	Τόπος και ημερομηνία έκδοσης / Place and date of issue	Υπογραφή / Signature	
	Θεσσαλονίκη / Thessaloniki ____/____/20__		

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SHADING SYSTEMS

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