



Technical Manual

MAXISCREEN



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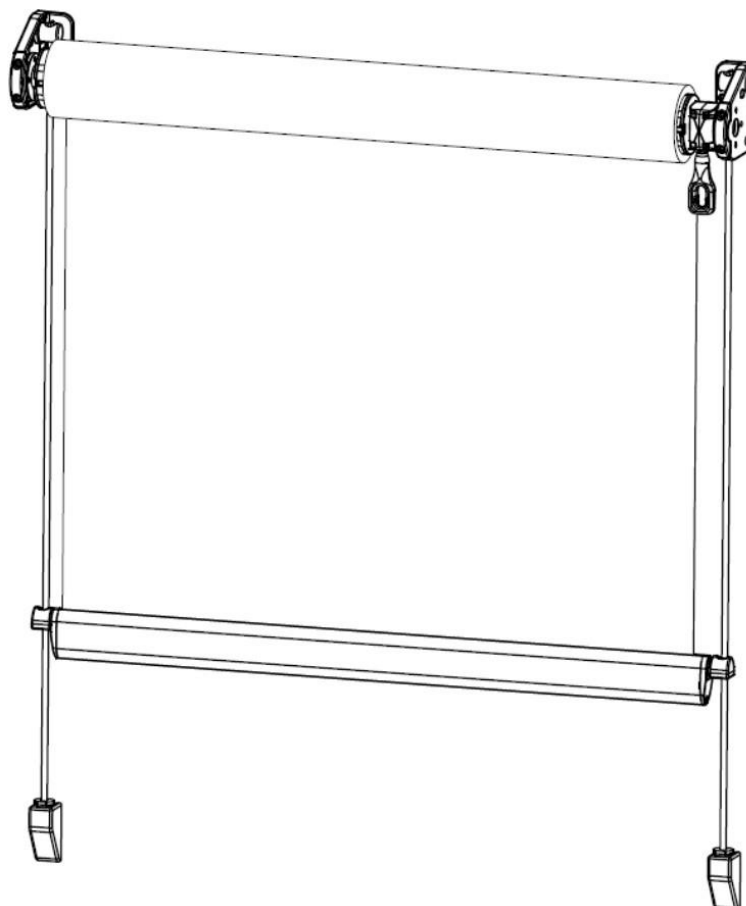
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Descriptive specifications

1 – GENERAL CHARACTERISTICS

Awnings that use the MAXISCREEN vertical system are the ideal vertical awnings for installations that require the light in large spaces to be managed and controlled but want minimal impact on the structure of glass walls, windows and façades.

The attractive support structure – which is both contemporary and minimalist – will increase your installation possibilities while also greatly reducing the installation time needed.

2 – DESCRIPTION OF THE SYSTEM

The advanced technology of the MAXISCREEN system provides a series of advantages which guarantee maximum performance from the awning:

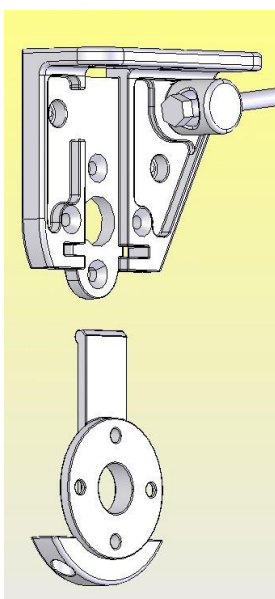
- Improved durability
- Enhanced strength
- Easy installation: As the bracket structure includes end guides and a gearbox or motor, assembling the section that holds the fabric is greatly simplified.

As with any sun protection system, this product also seeks maximum suitability for each installation in terms of two intrinsic necessities:

- Dimensions
- Demands (sun, wind, rain)

To address these factors, the materials chosen in the manufacture of this product are of vital importance.

3 – DESCRIPTION OF THE PARTS THAT MAKE UP THE AWNING



- A multifunctional, adaptable bracket structure that can be installed anywhere: frontal, ceiling or between walls.
- The roller tube, inside which the fabric is rolled up and from which it extends, that is not equidistant from the ends of the bracket to minimise its size and facilitate the positioning of the bracket.
- Despite its small size, it can hold rolls of fabric that have up to a 5-metre drop.
- A gearbox guide system and aluminium end guides adaptable for vertical positions to ensure support while being lowered and raised.
- A bolt-type anchor element for the tension system chosen (cord or rod) that can be positioned to the desired angle.

Descriptive specifications



- Hidden cord or rod restrictor bolt inside the tensor. This system enables the restrictor bolt to rotate inside the tensor while the blind is being pulled taut, preventing the cord from twisting and leading to a slackening of the blind.
- The head of the bolt is hexagonal to make it easy to tighten with a tube spanner when it is in any position.

The acrylic or high-tech fabric offers superior sun protection, and extends and retracts by rolling onto a steel tube.

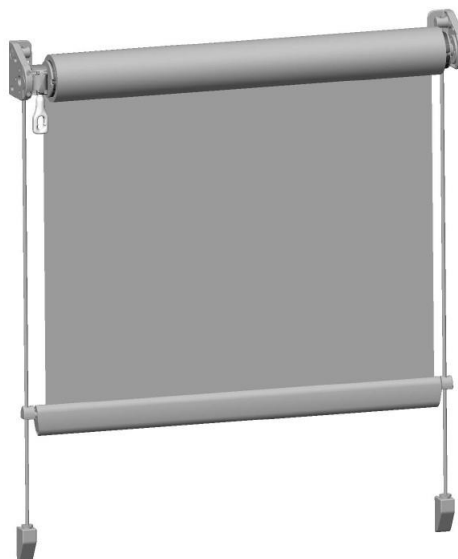
The rotational motion applied to the rolling tube when extending or retracting the fabric takes place using a gearbox with a 1:10 ratio, operated with a crank or by means of an electric motor located inside one end of the rolling tube.

At the other end, a polyamide bearing ensures technically calculated support so the system operates smoothly and perfectly every time.

The fabric extends smoothly, helped by the counterweights in the load bar.

4 – FINAL CONSIDERATIONS

- Thanks to our manufacturing processes and their corresponding management controls we have been awarded the ISO-9001:2008 certification for design and manufacturing.
- Our compliance with the requirements of European standard EN 13561 allows us to issue a Statement of Conformity for the CE marking.
- The application of the conditions required by EAA/Qualicoat standards allow us to offer a 3-year guarantee on lacquer finishes.



Descriptive specifications

5 – COMPONENT SPECIFICATIONS

DIMENSIONS			
	Geometry	Section (2mm)	Mt (4cm)
Front 3656 profile	-	431.97	Ixx= 17.47 Iyy= 4.36

TECHNICAL CHARACTERISTICS						
Structure	Manufacturing	Material used	A*	B*	C*	D*
Components	Cast	Aluminium	170	80	5	55
Roller tube	Profile	Steel	296	195	28	89
8mm guide rod	Extrusion	AISI-304				
3mm cord	19 x 0.6 braid	AISI-316				
Side guides	Injection	Polyamide 6				
Restrictor bolts	Mechanised	AISI-303				
Hexagonal tensor	Mechanised	AISI-303				

DESCRIPTION		
A*	Resistance to traction	Rm (Mpa)
B*	Stretch limit	Rp 0.2 (Mpa)
C*	Elongation	A50 mm (%)
D*	Brinell hardness	HBS

MAXIMUM WIDTHS AND DROPS, DEPENDING ON THE Ø OF THE ROLLER TUBE AND TYPE OF		
Ø 65 mm		
	WIDTH	DROP (m)
With screen fabric (0.6 mm thick and horizontally)	3.50	7.00
With acrylic fabric (0.5 mm thick and vertically stitched)	3.50	5.00
Ø 70 mm		
	WIDTH	DROP (m)
With screen fabric (0.6 mm thick and horizontally)	4.00	6.50
With acrylic fabric (0.5 mm thick and vertically stitched)	4.00	4.00
Ø 80 mm		
	WIDTH	DROP (m)
With screen fabric (0.6 mm thick and horizontally)	5.00	5.00
With acrylic fabric (0.5 mm thick and vertically stitched)	5.00	3.00

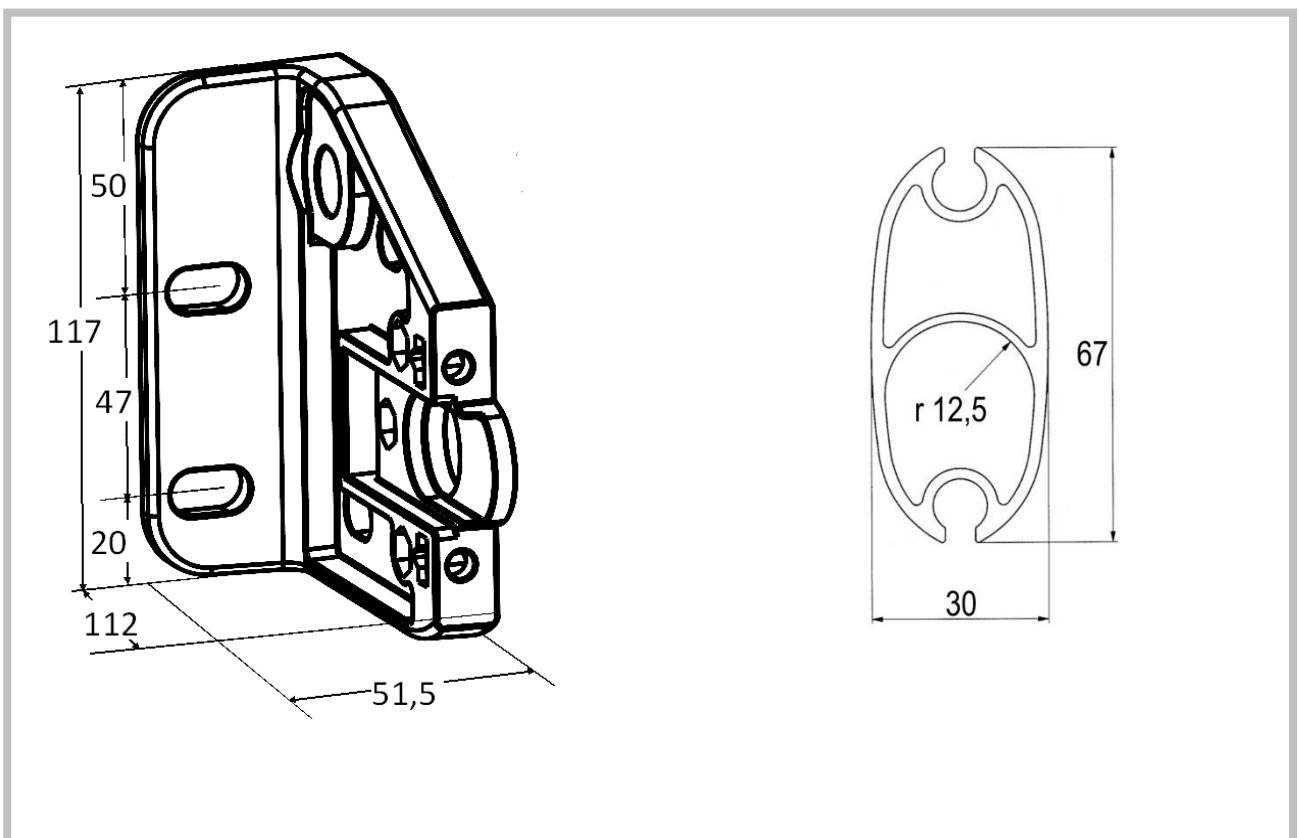
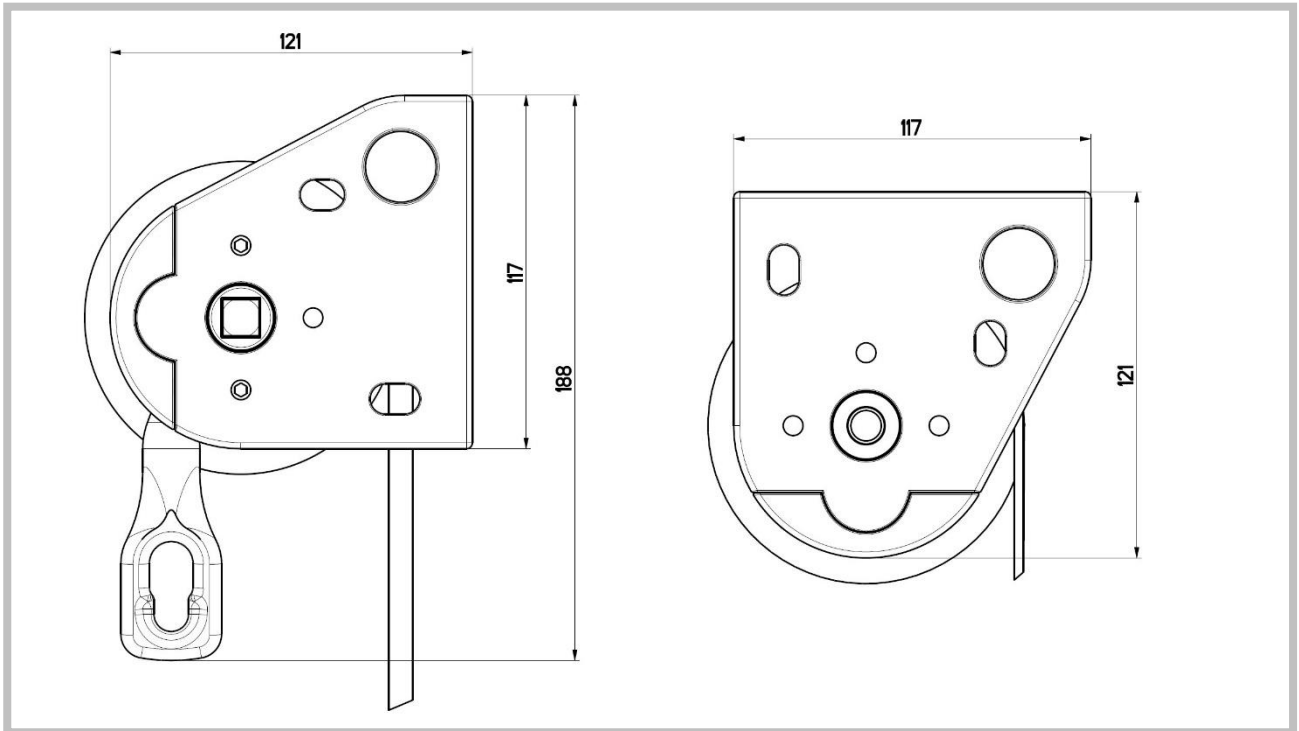
5 – CUTTING, SELECTION, AND CLASSIFICATION TABLES

EN 13561 STANDARD – WIND CLASSIFICATION TABLE			
CLASSIFICATION	RANGE (Km/h)	BEAUFORT	
CLASSIFICATION 0	0 to 19	1-3 Beaufort	Leaves and small twigs constantly moving.
CLASSIFICATION 1	20 to 28	4 Beaufort	Dust and loose paper raised. Small branches begin to move.
CLASSIFICATION 2	29 to 38	5 Beaufort	Branches of a moderate size move. Small trees in leaf begin to sway.
CLASSIFICATION 3	39 to 49	6 Beaufort	Large branches in motion. Umbrella use becomes difficult.

			MOTOR SELECTION TABLE							
			WIDTH (m)							
			1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
DROP (m)	ROLLER TUBE Ø 70	1.50	6 Nm						10 Nm	10 Nm
		2.00								
		2.50								
		3.00								
		3.50								
		4.00								
		4.50							6 Nm	10 Nm
	5.00	6 Nm	10 Nm							
	ROLLER TUBE Ø 80	1.50	6 Nm						10 Nm	
		2.00								
		2.50	6 Nm				10 Nm			
		3.00								
		3.50	6 Nm			10 Nm				
		4.00								
4.50		6 Nm			10 Nm					
5.00										

ASSEMBLY ALLOWANCES vertical MAXISCREEN			
	OUTER. GEARBOX GEARBOX	INNER	SOMFY MOTOR
			L-87
FABRIC	L-143	L-140	L-115
FRONT DROP BAR GUIDE	L-138	L-100	L-100
PROFILE Ø 3 mm.	H-20	H-20	H-20
STAINLESS GUIDE ROD Ø 3 mm	H-20	H-20	H-20
L= total width measurement H= total height			

6 – CROSS SECTIONS

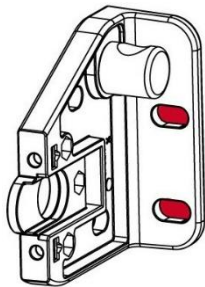


7 – ASSEMBLY INSTRUCTIONS

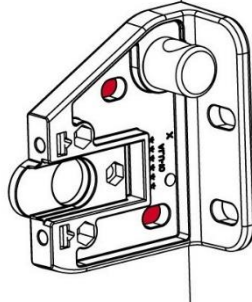
1 – Mounting the brackets

The brackets of this model allow it to be installed in three ways:

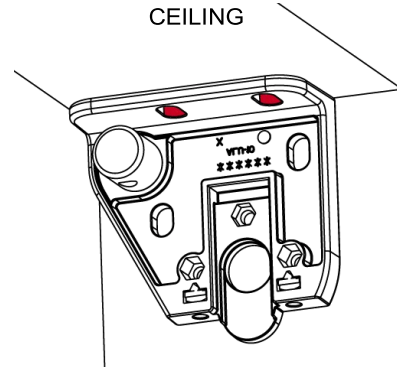
FRONTAL



BETWEEN WALLS

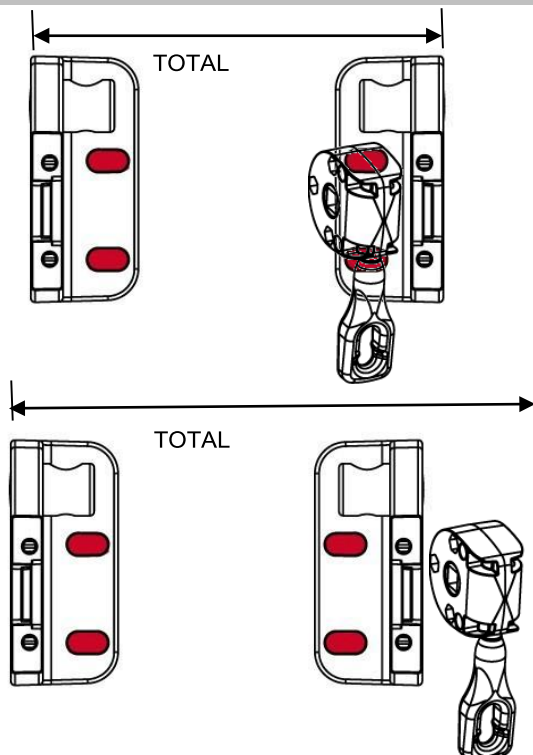


CEILING



IMPORTANT

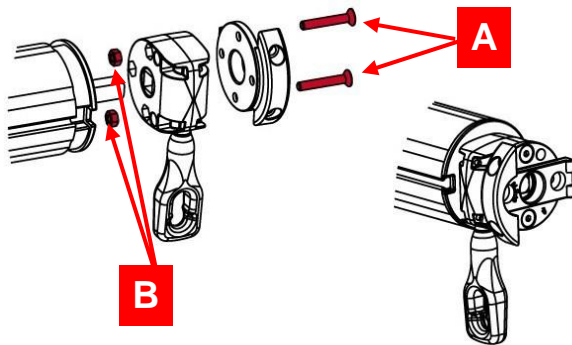
Carefully note and respect the position of the brackets to ensure that the angled side and the bolt that supports the rod or cord are in the correct position. As the roller tube is not located in the exact centre of the bracket, the ability to roll up the fabric is reduced if this position is not maintained. Likewise, the position of the bolt on the opposite side of the drop, allows the load bar to be closer to the mechanism when it is rolled up.



When the support system has been decided on, bear in mind that, if you choose a gearbox system, it can be installed inside or outside of the support structure and, therefore, the TOTAL measurements taken will be different.

If the system is motorised, the bracket for it will always be within the support structure.

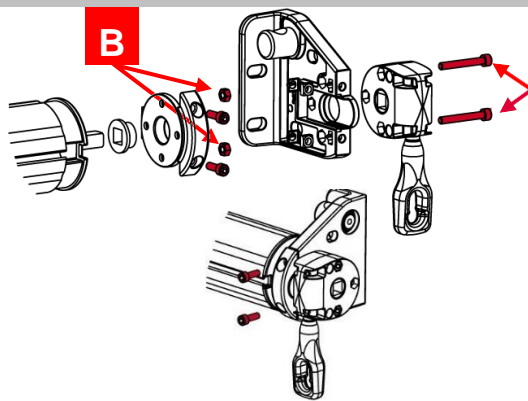
2 – Attaching the roller tube



GEARBOX ON THE INSIDE

Use DIN 7991 (A) screws to attach the gearbox to the bracket guide, attaching nuts (B) to the opening in the gearbox as shown in the drawing.

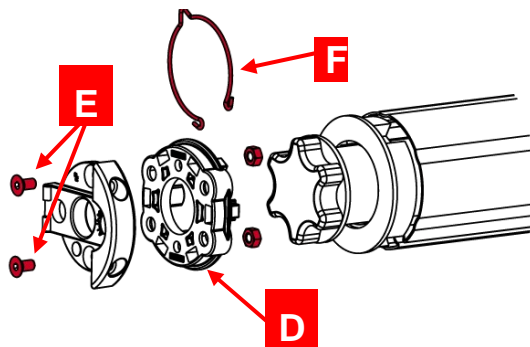
The screws for this anchor are in a separate kit (REF. 20000011000) from the brackets together with those needed for the following option.



GEARBOX ON THE OUTSIDE

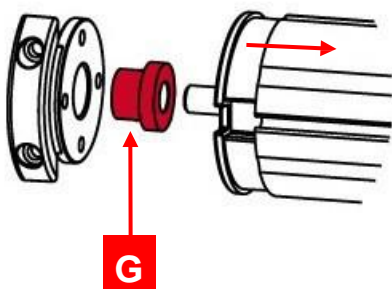
Attach the gearbox directly onto the bracket using DIN 912 screws (C). Make sure that the nuts (B) are placed between the bracket itself and the guide, in the openings designed for this purpose.

For the installation, attach said nuts and screw on the guide when you put the roller tube in place followed by the gearbox, or attach the gearbox to the rest of the assembly and insert the roller tube after from the side.



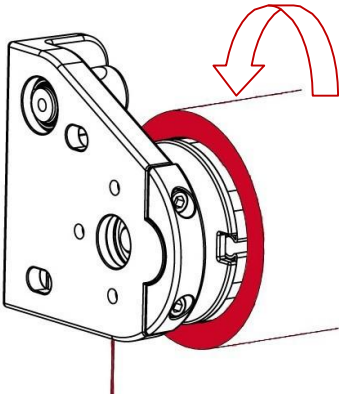
MOTOR

If you have chosen an electric motorised system, attach the HiPro bracket (D) motor to the bracket guide using screws DIN 7991 (E) (found in REF. 11002035050) to then clip the motor head to the above-mentioned bracket using the attachment clip (F).



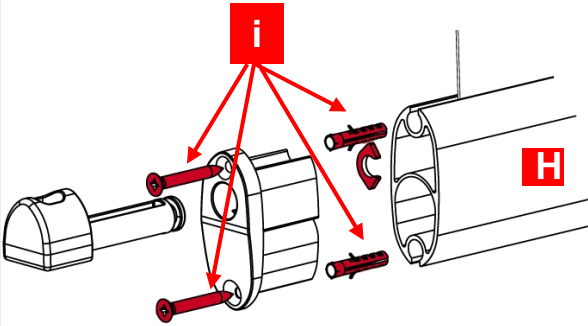
Place the end bearing on the opposite side and do not forget to insert the nylon end bearing (G) into the bracket guide, so that the axle of said end bearing adapts to the bracket guide.

3 – Installation of fabric



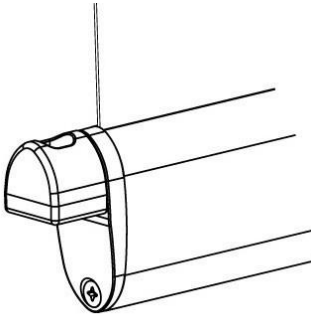
Use the motorised or gearbox system to help roll the fabric around the tube in the direction indicated in the drawing so that when it drops vertically it will be next to the cord of rod guide.

4 – Installing the load bar and the guide system



Insert the load bar onto the bottom of the fabric **(H)**, in the position shown in the drawing. This allows a solid or hollow 20-mm diameter counterweight to be inserted in the lower part of the bar, depending on the requirements of the installation and the size of the product.

The fabric is attached to the profile with the same raw plug and screw.



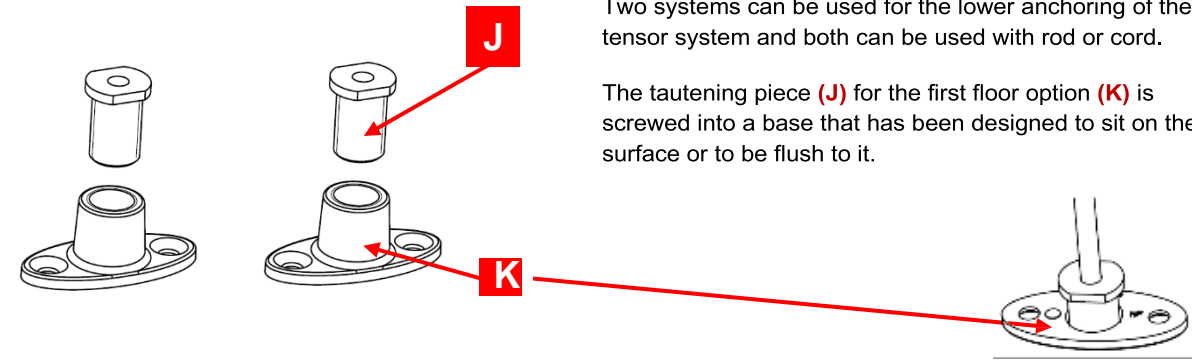
These side covers allow a rod or cord guide to be inserted into them or even a flat cap in the case of a free-drop or guide-free awning.

MAXISCREEN



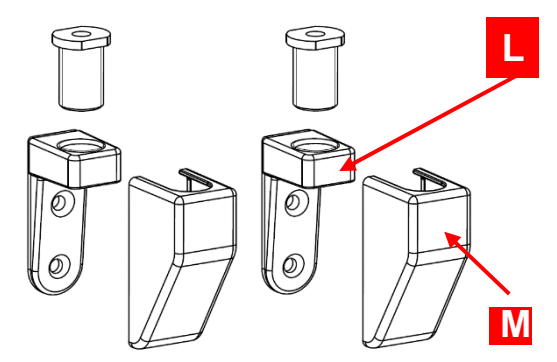
Assembly instructions

5 – Attaching the tensor system



Two systems can be used for the lower anchoring of the tensor system and both can be used with rod or cord.

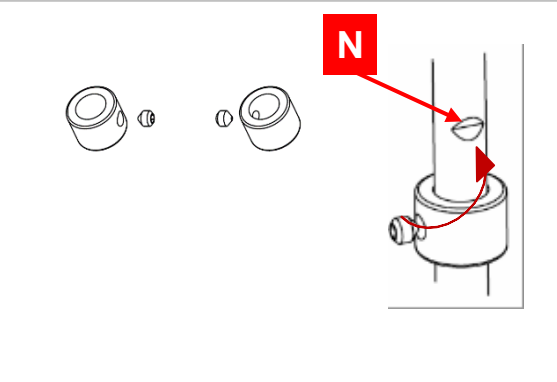
The tautening piece (J) for the first floor option (K) is screwed into a base that has been designed to sit on the surface or to be flush to it.



The second option, attached to the wall (L) is done using a square bracket into which the tautening piece is screwed.

A polyamide cap (M) hides both the bracket and the screws.

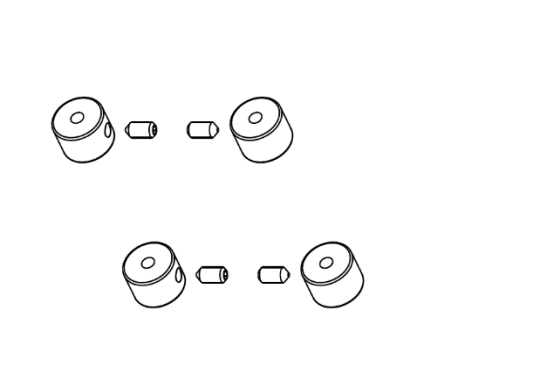
This cap is only manufactured in black or white.



Regardless of the system previously chosen, a rod assembly kit must be ordered if this tension system has been chosen.

This consists of two restrictor rings to be attached to the lower end of the rod, inside the actual tautening piece.

For the correct attachment of the steel rod, it is advisable to make a small cut (N) where the pin can then be screwed in.



The cord option comes with four pieces as the rod has a flat end that is attached to the bracket nut (upper part), but for the cord, restrictor rings must be attached to both the upper and lower parts.

IMPORTANT

For the system to work correctly it is important to ensure that the two guides are perfectly parallel, regardless of whether you have chosen a rod or cord system.

8 – EXAMPLES OF INSTALLATIONS





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