

Manufacturing and installation instruction

# Piazzola®

Pergola awning





**\* \* A T T E N T I O N \* \***

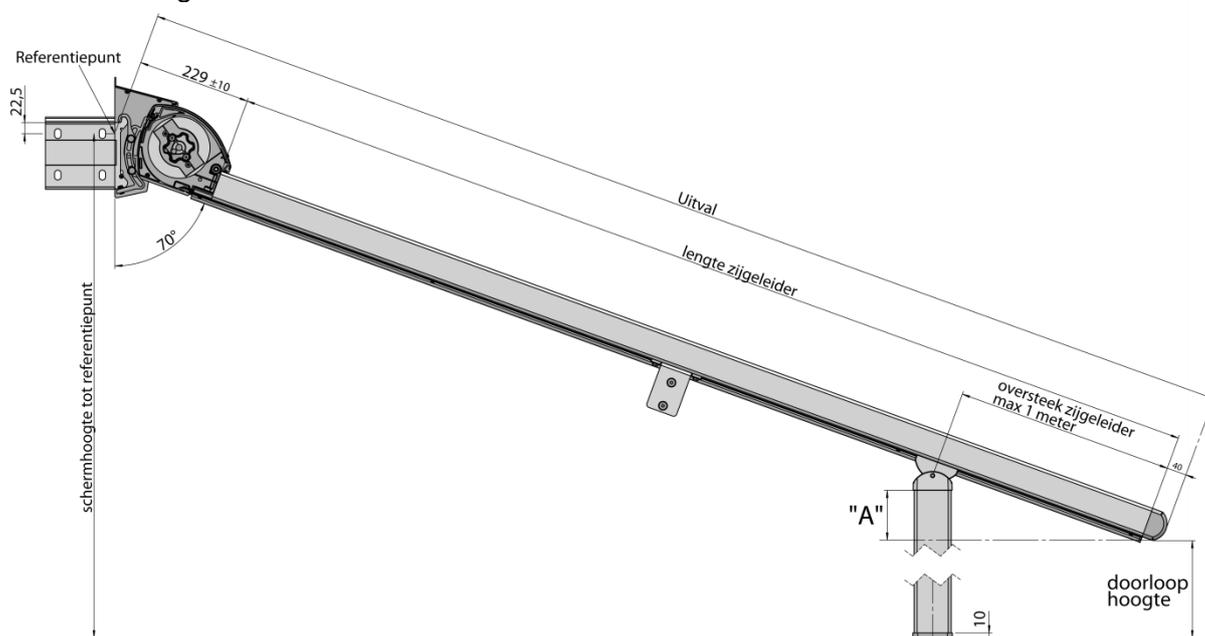
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## General information pergola awning Piazzola®

### Maximum and minimum width

Width	projection	
	150 to 349 cm	350 to 500 cm
from 200 to 250 cm	X	
from 251 to 600 cm	X	X

- Maximum fabric area 30 m<sup>2</sup> per awning section (acrylic fabric, Tibelly).
- When confectioning the fabric use a wide hem of 10 cm
- The front profile will start to bend at a free span of 4 m or more. This has no effect on the functionality of the system. Above 4 m, we recommend to use a tensioning system.
- Fabric winding method: Bottomwise.



### Cut sizes

	Control by ASA motor	Control by Somfy motor
Fabric roller	-57 mm	-61 mm
Bottom cover		-21 mm
Top cover		-22 mm
Wall cover		-0 mm
Upper front profile		-176 mm
Lower front profile		-175 mm
Side guide		Projection – 270 mm
Water gutter		Length side guide + 36 mm
Post		(when using 4217 015) Standing height + length "A" - 10 mm (when using 4217 145) Standing height + length "A" + length below ground level
Longeron		-154 mm
Longeron coupled system		Unit -115 mm
Longeron (fabric support)		-10 mm
Fabric		-155 mm
<b>Spare parts tension system</b>		
Tensioning wire		Front profile – 160 mm
Cover profile		Front profile – 274 mm

### Motor diagram

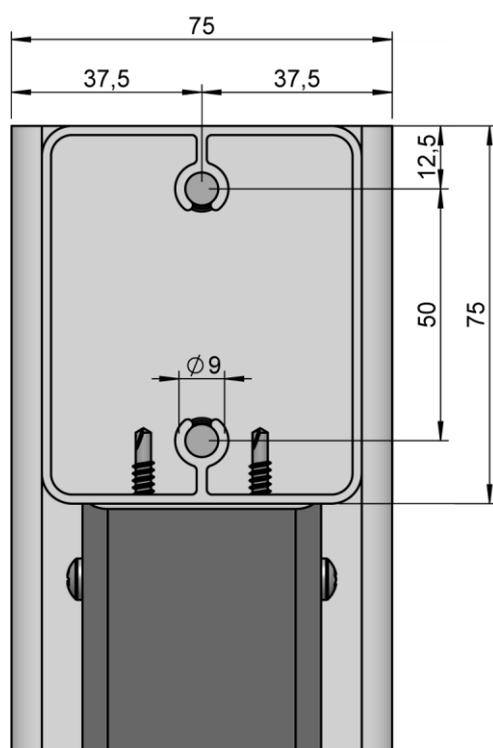
- Single system use 40 Nm.

### Remarks

- From 3.50 m projection install an extra support beam under the guide to support the fabric.
- When using the Piazzola during rain (light short rain), we always advise to use support beam(s) to support the fabric and the beam (s) apply to support the cloth and a lock set. The Piazzola should then be placed at an angle of at least 17 degrees.
- For a better water drainage, place rings in the fabric.

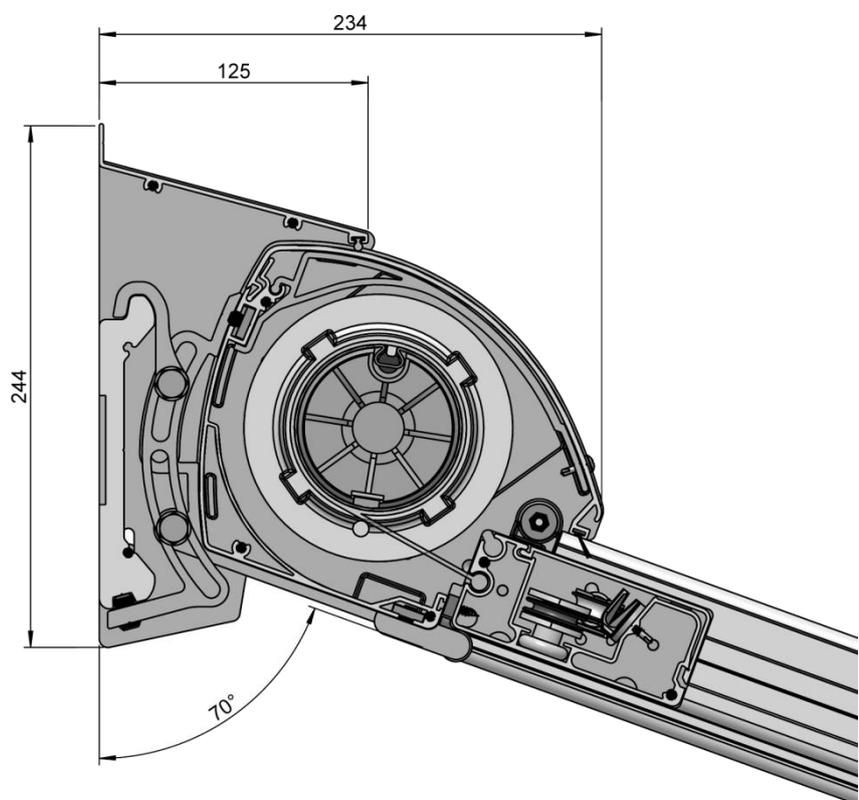
### Drawings

In the next drawings the main dimensions are displayed.



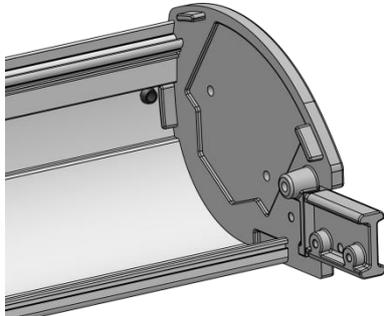
Side wall mounting

### Corner connection

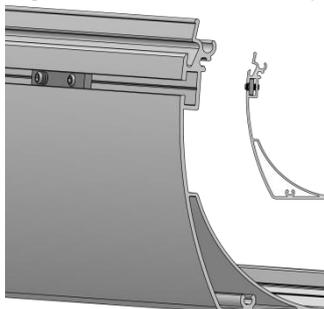


## Assemblage Piazzola®

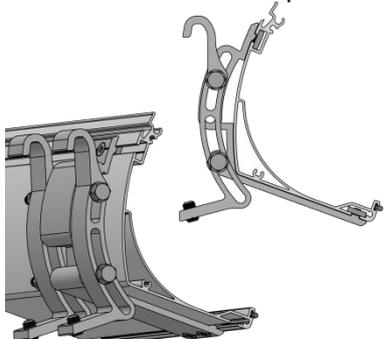
1. Cut the lengths into the right size (see cut sizes).
2. On the operation side, drill a hole of 11 mm in the bottom cover for lead-through of the motor cable. Fit a tulle in this hole.



3. Around the midpoint of the length drill a hole of 6,5 mm along the drill line in the groove of the bottom cover for placement of the top cover support. **Note:** No wall bracket can be placed here.
4. Slide the mounting plate with Allen adjustment screws in the same groove. Turn 1 Allen adjustment screw through the hole of 6,5 mm. Tighten the other Allen adjustment screws.

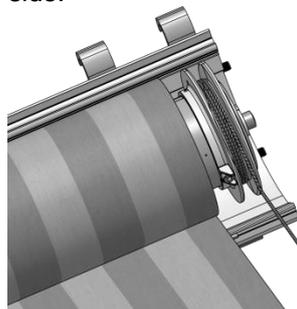


5. Slide the wall brackets into the bottom cover. Place the outside brackets at 10 mm from the outside of the bottom cover.
6. A third bracket is required if the width > approx. 4,50 m. It should be placed more or less in the middle.
7. Using screws, fasten all wall brackets to the bottom and backside.
8. Pull the PVC inserts strip into the bottom cover.



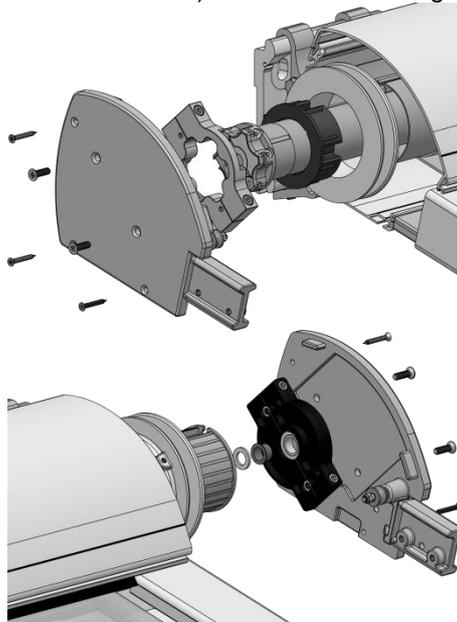
9. Slide the 2 PVC inserts into the fabric.
10. Wind up the fabric on the fabric roller.

11. Fit the cord pulleys.
12. Place the motor into the control side of the steel tube and insert the bearing plug on the bearing side.

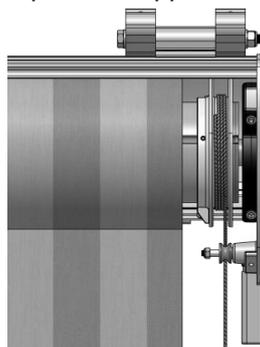


**Cord length per side:** 2x The projection plus 1,5x the width plus 1 m.

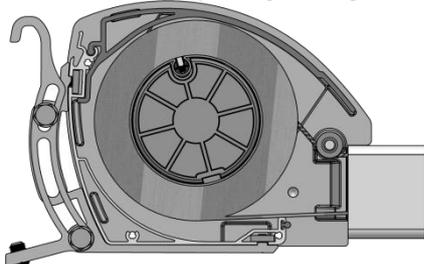
13. Make 4 windings of cord on the cord disk and ensure that the cord runs neatly. **Tip:** Apply double sided tape in the cord disk before winding the cord. The first 4 windings will then be fixed in place and will remain so during transport.
14. Assemble the top cover supports (bearing side and control side) as shown on the figure.



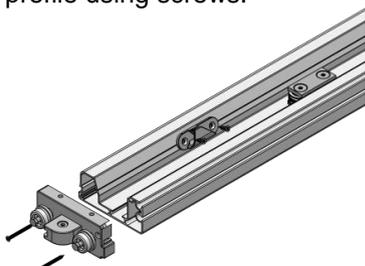
15. Use screws to fasten both top cover supports to the bottom cover.
16. Place the cord disks opposite the wheels on the top cover supports and fix these into place.



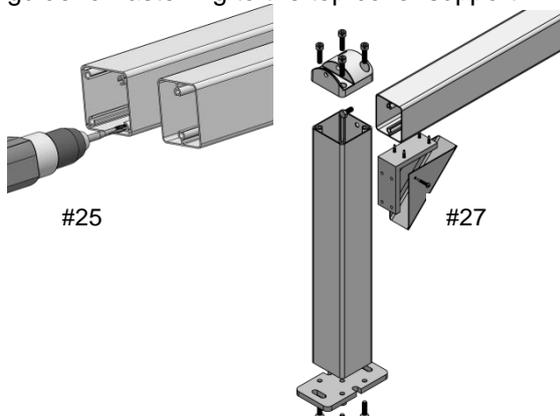
17. Hook the cover support into the bottom cover and place it a long side the Allen adjustment screw that is projecting through the cover.



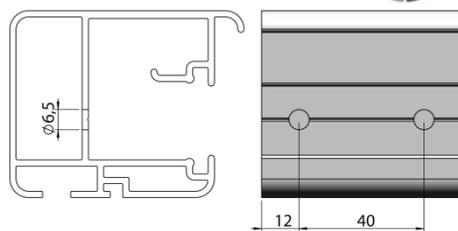
18. Hook the top cover into the bottom cover and use screws to fasten it to the ends of the top cover supports.
19. Attach the cord tensioners at 50 cm from the middle on the sloping side of the lower front profile. **Note:** Cord tensioners come in left and right versions.
20. Slide the central pulley into the opening in the lower front profile.
21. Slide the front profile against the fabric.
22. Fasten the guide blocks against the lower front profile using screws.



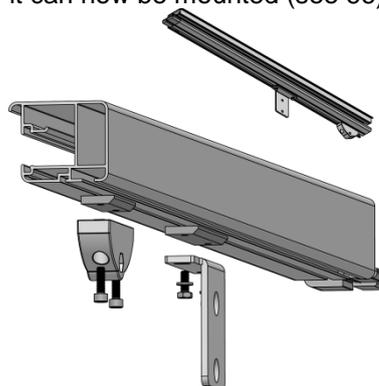
23. The support consists of 2 posts with hinge and footplate connected to a longeron.
24. Drill 2 holes into the post as shown in the figure.
25. Use a machine screwing tap M8 to tap a thread in the post and longeron. Provide sufficient lubrication. Minimum tap 25 mm.
26. Screw the bottom hinge at the top of the post and the footplate at the bottom with M8x50. Let them protrude  $\pm 15$  mm.
27. Drill 6,5 mm holes in the left and right side guide for fastening to the top cover support.



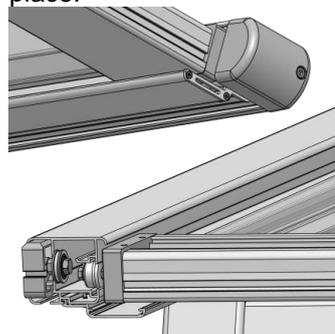
28. Slide the mounting plate of the fabric support into the side guide, place it in the required position and use it to fasten the support.



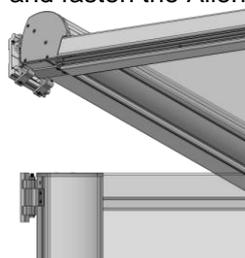
29. Slide the mounting plate of the top hinge into the side guide. Fasten the top hinge at the required position of the side guide. Leave space for the nut on the outside.
30. Insert the guide plate into the top of the side guide and slide into place. Use a rubber hammer to tap firm. Note: If the lock set is used, it can now be mounted (see 66).



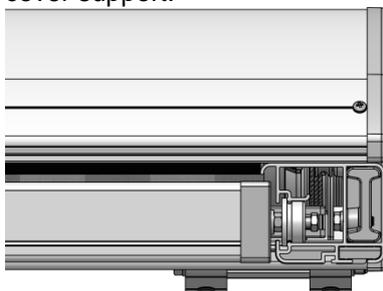
31. Take the water gutter sections and drill holes of 5 mm at intervals of  $\pm 60$  cm along the drill line
32. Screw a cover plate against the front of the water gutter.
33. Hook the water gutter sections into the side guide, keeping the cover plate on the front flush with the front of the side guide and screw into place.



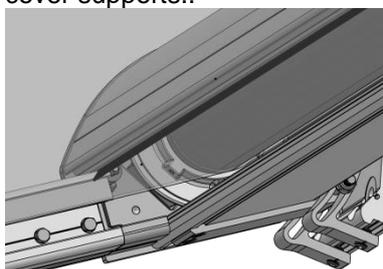
34. Fasten the mounting plate to the wall at a distance that is equal to the length of the screen, measured on the outside (when using a wall cover, deduct the thickness of the cover plate of the wall cover = 6mm).
35. Hook the wall brackets into the mounting plate and fasten the Allen screws on the underside.



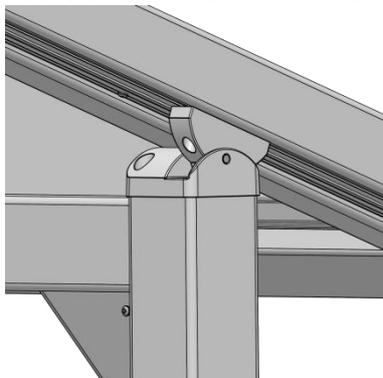
36. Extract the front profile by 30 cm.
37. Feed the cord along the wheel of the guide blocks into the front profile.
38. Slide the side guide over the wheels of the guide blocks and against the leg of the top cover support.



39. Attach the side guide to the legs of the top cover supports..



40. Place the 2 hinges at the desired positions above one another and connect these..

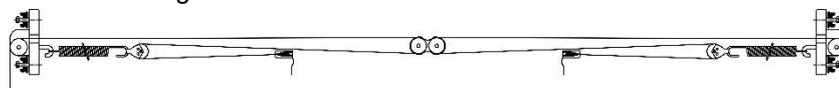


41. Measure the Piazzola diagonally and ensure that the system is perfectly perpendicular. When using concrete pads, place the posts at exactly the same height. When using the foot plate, fasten in to the under layer.
42. Tighten the nuts on the side of the wall bracket.

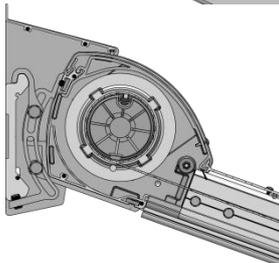
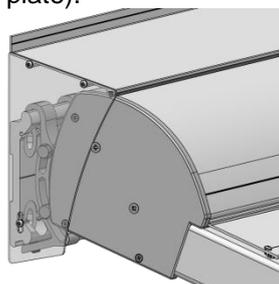


43. Hook the springs on the left and right into the screw eyes of the guide blocks.
44. Place the pulley on the other side of the spring.

45. Slide the central pulley towards the middle of the bottom front profile.
46. Lead the cord through the side guide and lay it over the top of the wheel in the bearing block. Ensure that the cord is not crossed in the side guide.

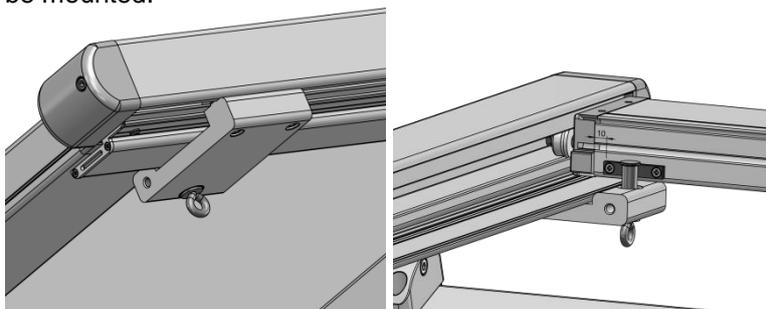


47. Lead the cord as shown in the figure. *Never extend the springs more than 60% of their own length.*
48. Tension the springs slightly.
49. Check that the cord runs well over all the wheels of the pulley.
50. Further tension the spring by pulling the cord in the cord tensioners.
51. Allow the fabric to run out to its full length.
52. Determine at which point of the side guide the springs are least tensioned. This is the point where the awning will sag.
53. Then mark the position of the front profile in relation to the side guide.
54. Stop the front profile at the marked point while drawing in.
55. Tension the springs in such a way that the fabric is (sufficiently) tight. For this, pull the cord in the cord tensioners.
56. Let the awning run in and out a couple of times to check correct functioning.
57. Attach the top cover and top cover supports to one another.
58. Pull the plastic inlay strip into the gully of the wall cover and fasten the cover plates using screws.
59. Place the wall cover on the top cover and position the cover plates flush against the wall.
60. Determine the position of the holes and drill them in the wall cover and wall.
61. Attach the wall cover to the wall and the cover plates to the mounting plate (bottom slot cover plate).

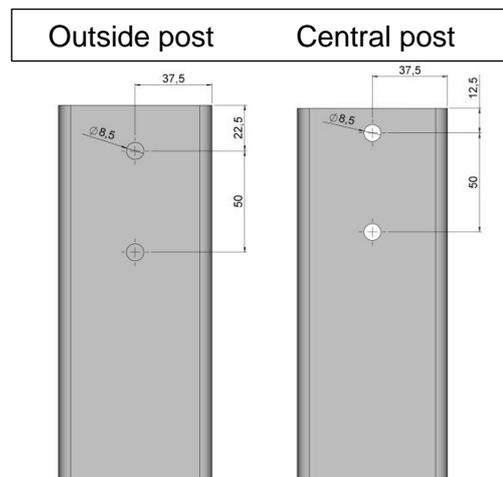
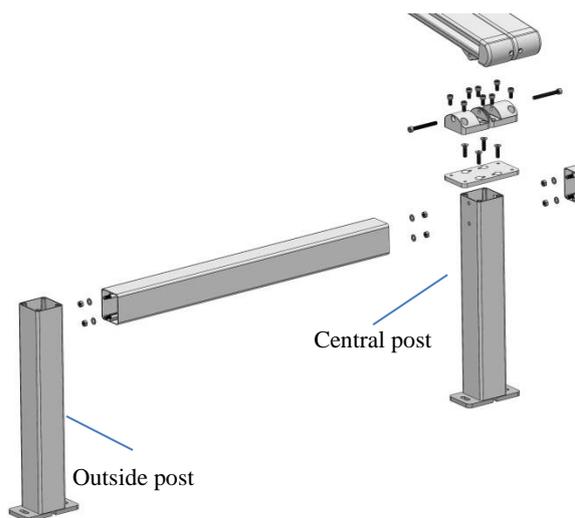


62. Hook the cover extension into the top cover.

- 63. Drill holes in the cover extension and the side guides.
- 64. Attach them to one another using screws.
- 65. The lock set can only be used with an ASA ETR-A or a Somfy Orea motor. Place the lock set at least 110 mm from the end of the side guide. At this place no top hinge can be mounted. The plastic stopper has to be screwed on the front profile, as shown at the drawing. **Note:** At this place no top hinge can be mounted.



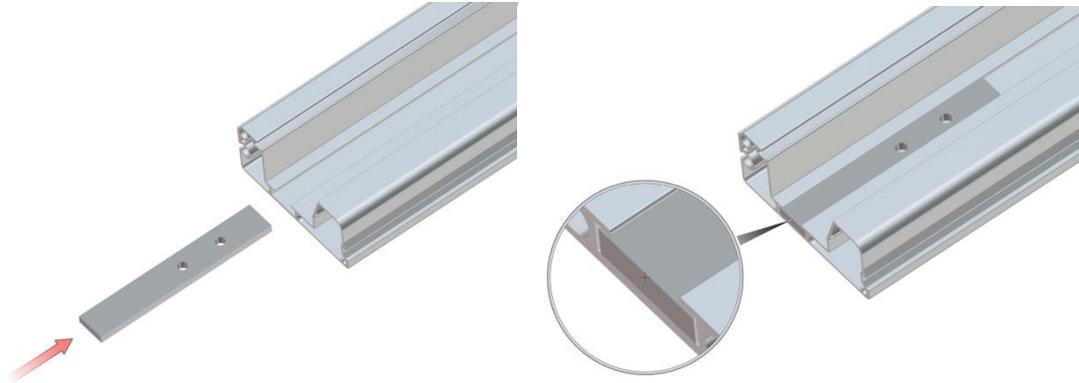
### Optional: Couple side guides



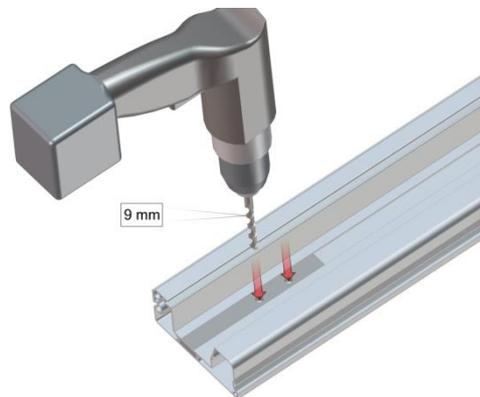
**NOTE :** Shorten the central post 10 mm shorter than the outside post.

## Tension system assembly

1. Slide the clamping plate into the groove of the lower front profile with the holes facing the centre of the profile.
2. Make sure that the sides of the clamping plate and the front profile are flush.

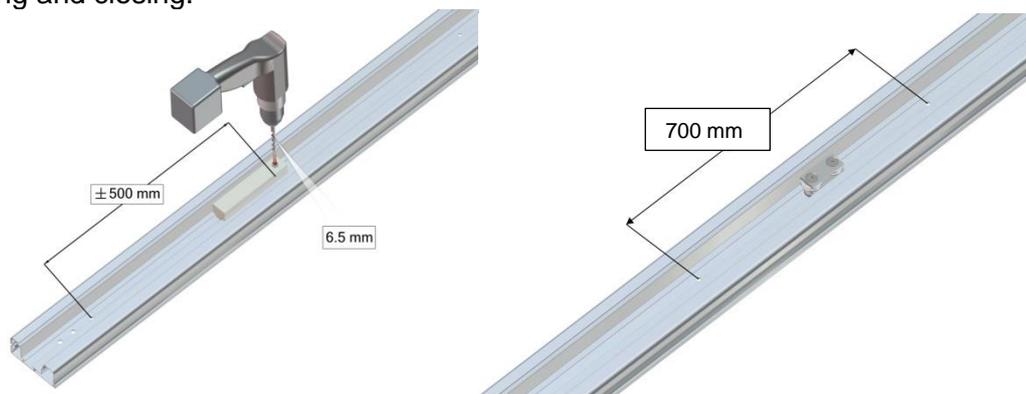


3. Draw the holes and drill holes of 9 mm. Do this on both sides of the front profile.

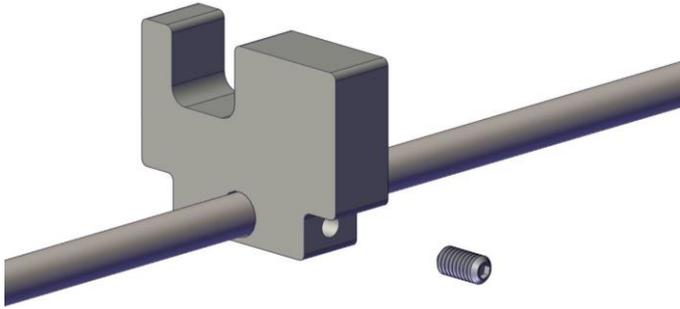


4. Using the drilling template, drill holes of 6.5 mm in the groove of the front profile. Maintain a distance of around 50 cm between the holes. Keep a distance of around 70 cm in the centre of the front profile and place the central pulley here.

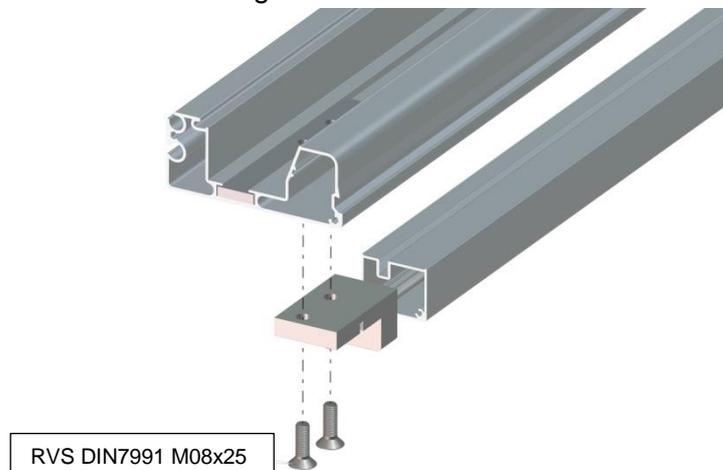
**Note:** The distance of 70 cm gives the central pulley enough room to move during opening and closing.



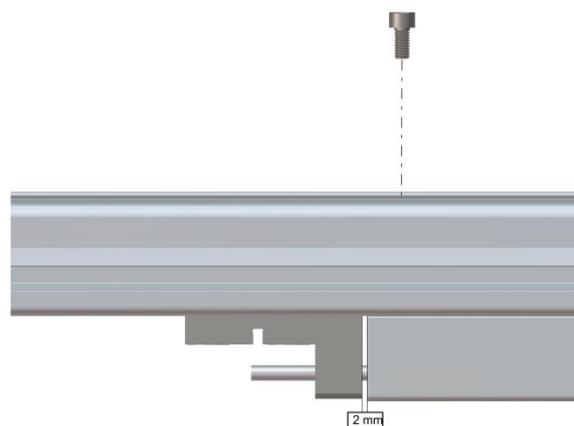
- Slide the block to the centre of the tailored tensioning wire and screw it into place with the hexagon screw.



- Feed the tension wire through the tension wire mounting blocks and the cover profile. Fasten the tension wire mounting blocks in the clamping plate using M08x25 bolts. Note: Make sure that the mounting blocks are centred at the bottom of the front profile.



- Maintain a distance of 2 mm between the mounting block and the cover profile. Fasten the cover profile through the holes of 6.5 mm.



8. Fasten the hexagonal connecting nut with a washer on the threaded side of the tension wire. Use the anchoring sleeve with pins on the other side.



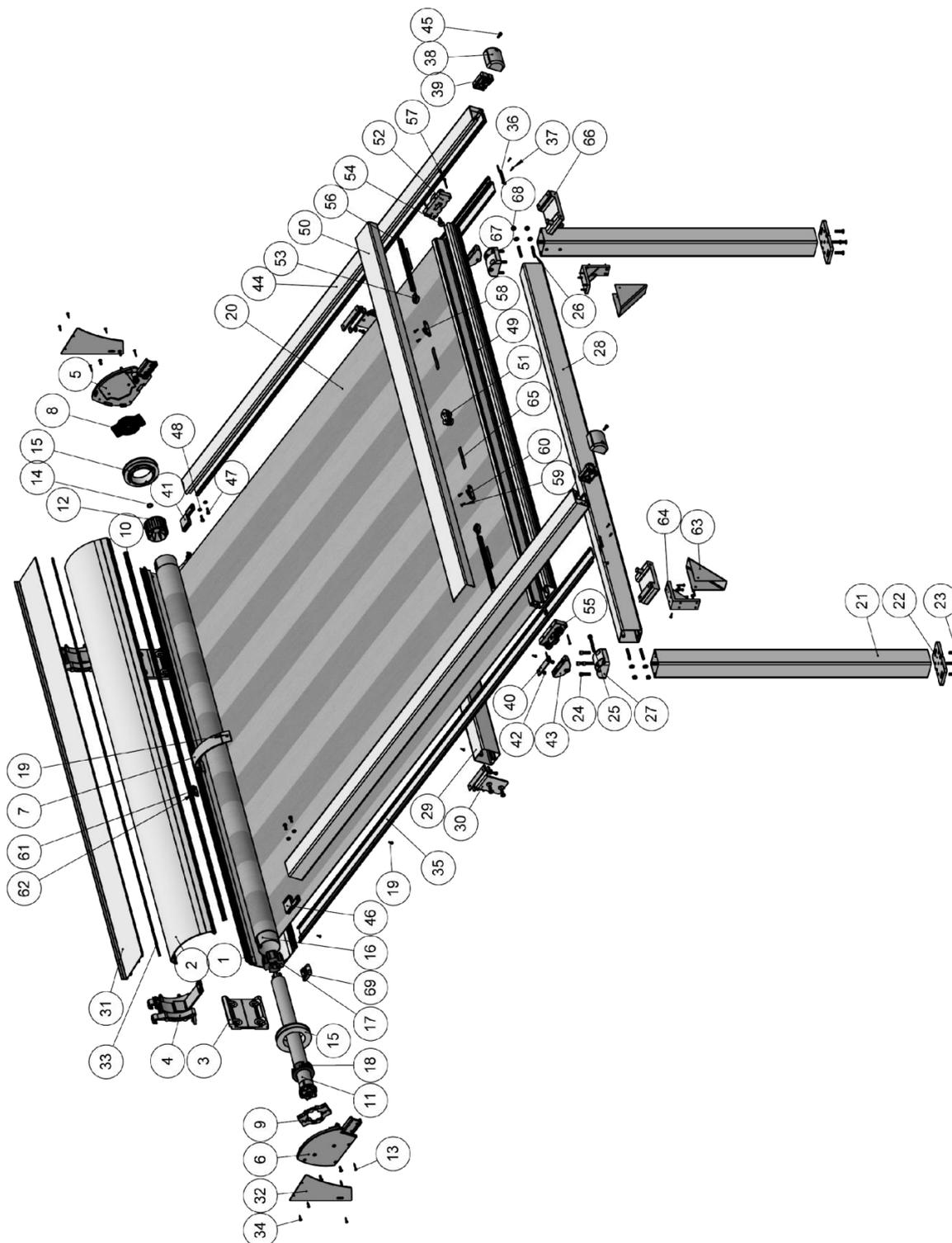
9. Tighten the hexagonal connecting nut until the bottom profile is tensioned straight.



10. Place cover caps on both sides of the tension system and fasten them with M4x25 socket screws.



# Exploded view pergola awning Piazzola® (page1/2)



## Exploded view pergola awning Piazzola® (page 2/2)

Piece	Nbr.	Item nbr.	Description
69	2	4217 175	Cylinder hexagon screw M8x70 stainless
68	4	4000 386	Hexagon bolt M6x20 stainless
67	2	4210 534	Hexagon socket set screw M6x10 stainless
66	2	4217 185	Cylinder hexagon screw M6x16 stainless
65	4	4410 238	Cylinder hexagon screw M6x20 stainless
64	4	4000 225	Hexagon bolt M8x35 stainless
63	8	4410 400	Cylinder hexagon screw M8x30 stainless
62	8	4210 063	Socket head bolt M8x30 countersunk Philips Head
61	11	4217 190	Drilling screw 4,2x13 DIN 7504 stainless A2
60	2	4211 772	Mounting plate 140 mm
59	4	4452 097	Self-drilling pancil. screw with Philips Head ST4,2x22
58	4	4210 152	Countersunk plate screw with Philips Head ST4,2x45 stainless
57	4	4410 402	Flat washer without shimmer DIN 125-1 A M6 stainless
56	4	4452 083	Plate screw with countersunk Philips Head 3,5x16 mm
55	6	4210 141	Pancil. Plate screw with Philips Head ST4,2x22
54	2	4000 226	Hexagon nut M8 stainless
53	1	4210 497	Synth. Washer 20x12x2 mm
52	6	4210 142	Countersunk plate screw with Philips Head ST4,2x32 stainless
51	2	4217 270	Lock set
50	4	4452 238	Neoprene strip 10x2 mm self-adhesive
49	2	4217 171	Reinforcement corner set Piazzola
48	2	4217 170	Cover reinforcement corner Piazzola
47	1	4217 100	Mounting plate stainless Piazzola
46	1	4215 164	Cord tensioner, left
45	1	4215 166	Cord tensioner, right
44	2	4215 180	Spring 18,5 mm, length 300 mm, stainless
43	1	4217 050	Guide block Piazzola left and right
42	2	4215 172	Screw eye with nut M6
41	2	4215 158	Stainless pulley for cord 2,5 mm with synth. runner
40	1	4215 133	Guide block conservatory awning right
39	1	4215 210	Central pulley for cord 2,5 mm
38	1	6295 562	Alu upper front profile
37	1	6295 572	Alu lower front profile
36	1	4217 060	Guide plate Piazzola
35	1	6252 160	Side guide Piazzola
34	2	4217 000	Hinge Piazzola upside
33	1	4217 065	Guide plate Piazzola right
32	2	4217 070	Clamping plate Piazzola stainless
31	1	6252 160	Side guide Piazzola
30	1	4217 260	Bearing block set Piazzola
29	2	4217 010	End bearing Piazzola
28	2	4217 045	Cover plate gutter Piazzola
27	2	6252 210	Gutter side guide Piazzola
26	1	4211 130	Synth. sealing strip
25	2	4217 075	Cover plate gutter profile
24	1	6252 230	Wall cover Piazzola

Piece	Nbr.	Item nbr.	Description
23	2	4217 152	Support set intermediate longeron Piazzola
22	1	6252 180	Longeron Piazzola
21	1	6252 180	Longeron Piazzola
20	2	4217 005	Lower hinge Piazzola
19	2	4217 015	Base plate Piazzola
18	2	6252 170	Post Piazzola
17	1		Fabric
16	1	4001 140	Adaptor AVZ-model for tube 78 black
15	1	4000 909	Somfy friction ring serial 50/60 tube 78 synth.
14	1	6253 190	Steel tube 78
13	2	4215 121	Alu cord pulley
12	1	4460 020	Synth. adapter bush
11	1	4470 082	Synth. bearing bung
10	1		ASA/Somfy motor
9	1	4215 190	Bristle for top cover
8	1	4215 110	Alu motor support
7	1	4215 114	Synth. bearing block complete
6	1	6252 200	Cover support Piazzola
5	1	4217 027	Top cover support Piazzola left complete
4	1	4217 032	Top cover support Piazzola right complete
3	2	4217 120	Wall bracket Piazzola
2	1	6252 190	Top cover Piazzola
1	1	6252 150	Bottom cover