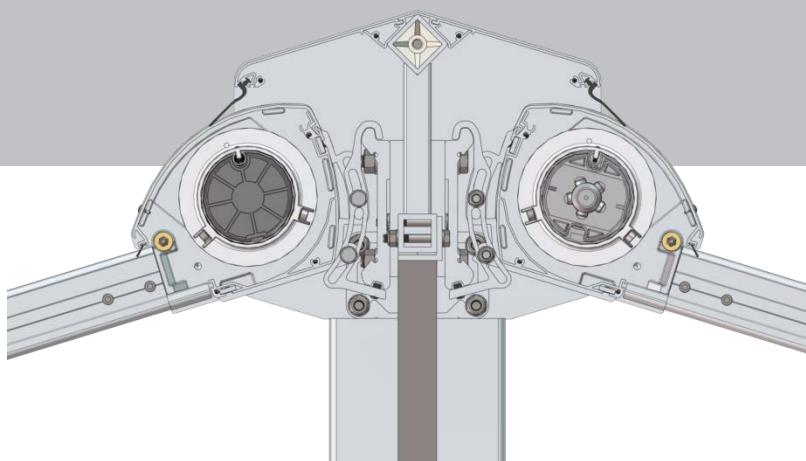


Manufacturing and installation instruction

# Twins<sup>®</sup> Piazzola<sup>®</sup>

Gastro awning





**\*\*ATTENTION\*\***

AVZ accepts no liability for any errors in this manual, or for any damage or losses resulting from the use thereof.

## General information Twins® Piazzola® Butterfly awning

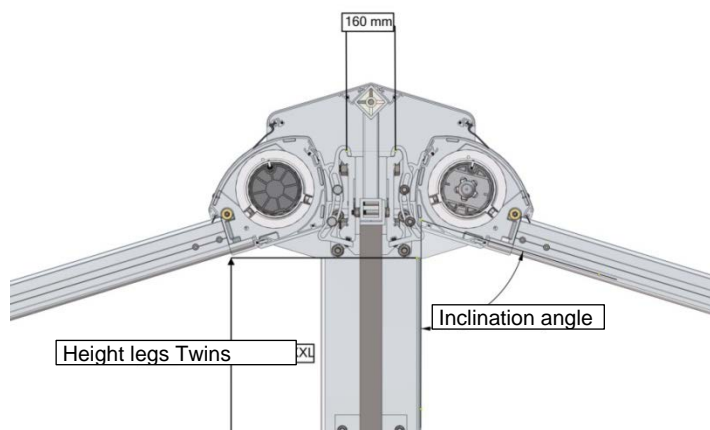
### Maximum width

600 cm (up to projection 500 cm)

**NOTE:** The aluminium support beam must always be shortened on both sides! Take the welded sections into account when determining the width.

### Total width Twins® Piazzola®

The total system width = projection both awning + 160 mm.



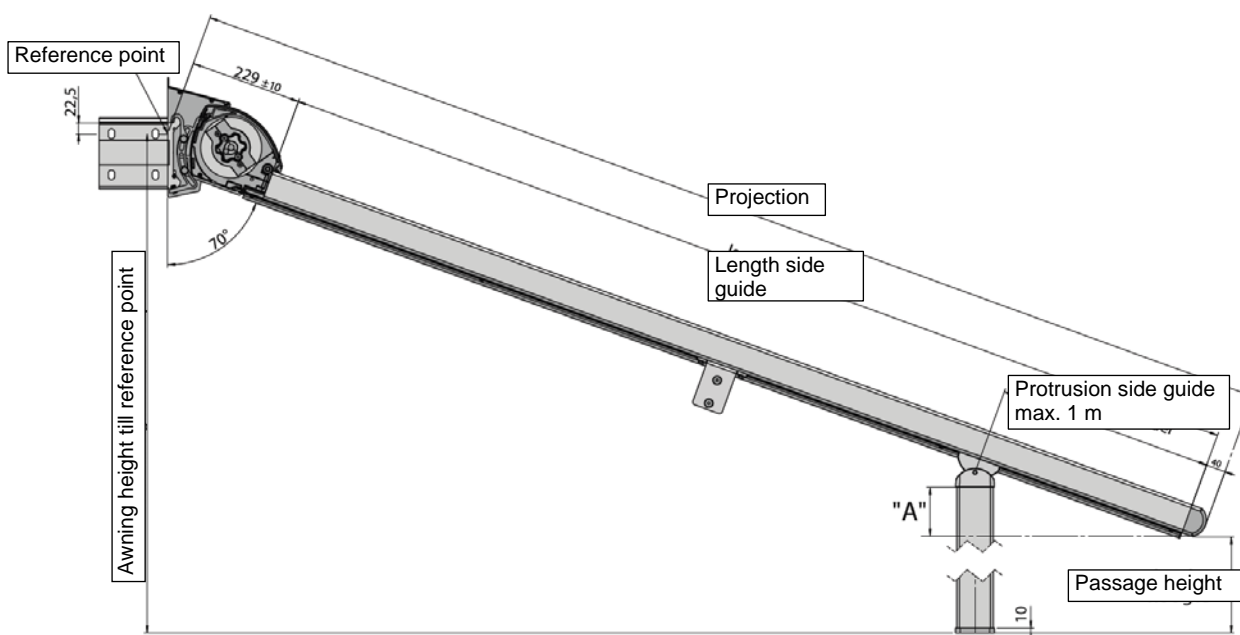
### Comments

- Maximum fabric area 30 m<sup>2</sup> per awning section (acrylic fabric, Tibelly®).
- In case of standard-size fabric, apply a free seam of 10 cm both left and right.
- As the front profile will start to bend at a free span of 4 m, we recommend to use a tensioning system.
- The fabric will sag slightly at an projection of 3,5 m or more. Use additional beams to support the fabric.
- When using the Twins Piazzola in the rain (short light shower), we advise beam(s) to support the fabric, and the use of a lockset. The Twins Piazzola should in that case be placed at a minimum angle of 17 degrees.
- Eyelets (± 50 mm from the front profile) can be placed in the fabric for better water discharge.
- The height of the legs Twins Piazzola cannot be determined by the cut sizes as these depend on the standing height, projection, protrusion of the side guide and the inclination angle.
- Fabric winding method: Bottomwise

### Foundation

- For system stability, it is necessary to pour concrete dies for the Twins Piazzola legs with a size of 85 cm (length) x 85 cm (width) x 20 cm (height).
- The legs of the Piazzola must be placed on a standard concrete pad (7700 317-068), which must be poured in to create a die with a size of 35 cm (length) x 35 cm (width) x 20 cm (height).

## General information Twins® Piazzola® Butterfly awning



### Cut sizes (based on the total width of the system)

| Cut sizes (based on the total width of the system) |   |                     |
|--|---|---------------------|
| Piazzola parts                                     | ASA motor control   | Somfy motor control |
| Fabric roller                                      | - 79 mm   | - 83 mm             |
| Bottom cover                                       | - 43 mm   |                     |
| Top cover  | - 44 mm   |                     |
| Top front profile                                  | - 198 mm  |                     |
| Lower front profile                                | - 197 mm  |                     |
| Side guide   | Projection – 270 mm   |                     |
| Water gutter                                       | Length side guide + 36 mm   |                     |
| Upright  | (when using 4217 015) Standing height + length “A” -10 mm<br>(when using 4217 145) Standing height + length “A” + length below ground level |                     |
| Support beam                                       | - 176 mm  |                     |
| Support beam (fabric support)                      | - 32 mm   |                     |
| Fabric   | - 177 mm  |                     |
| Tensioning system parts                            |   |                     |
| Tensioning wire                                    | Front profile – 160 mm  |                     |
| Cover profile                                      | Front profile – 274 mm  |                     |
| Twins Piazzola components                          |   |                     |
| Leg Twins Piazzola                                 | See notes on next page  |                     |
| Support beam                                       | -20 mm  |                     |
| Cover connector profile                            | -20 mm  |                     |
| Cover Twins Piazzola                               | -20 mm  |                     |
| Rubber sealing strip                               | -20 mm  |                     |

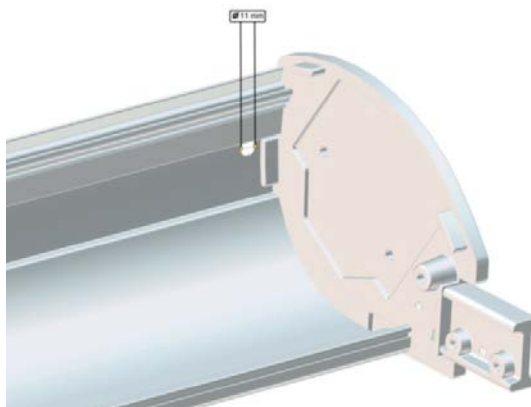
### Motor diagram

Motor 40 Nm apply on both sides.

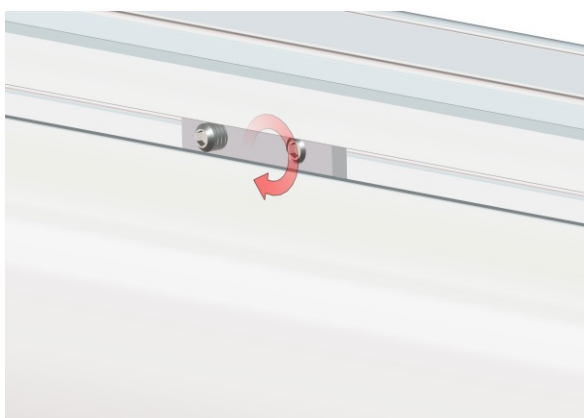
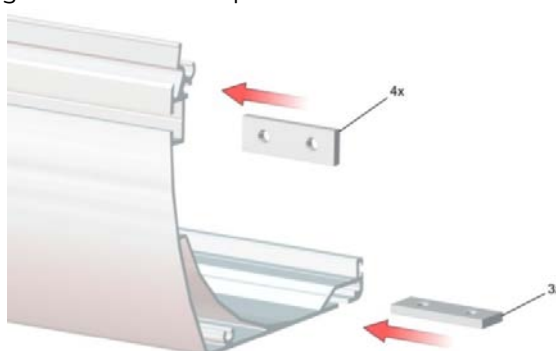
## Assembly instructions Twins® Piazzola® Butterfly awning

### Subassembly Piazzola cassette

1. Cut the length material according the cut size table.
2. On the control side, drill a hole of 11 mm in the bottom cover for the motor cable feed. Fit a tulle in this hole.



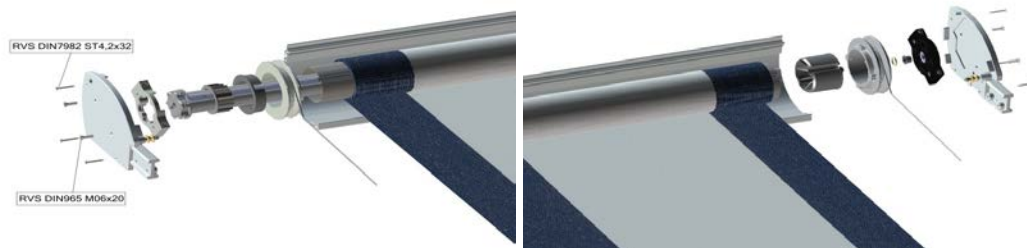
3. Around the midpoint of the length drill a hole of 6,5 mm on the drill line in the groove for later placement of the cover support. **Note:** No suspension bracket can be placed here.
4. Slide the mounting plate with adjustment socket screws in that same groove. Insert 1 socket screw through the hole of 6,5 mm and fasten the other one. On both the left and right hand side, slide 2 clamping plates in the groove where the suspension brackets can later be attached. Slide 4 clamping plates in the groove along the bottom of the profile.



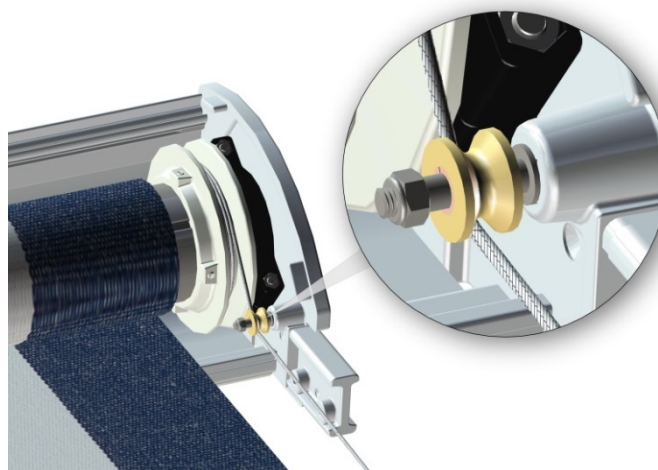
5. Pull the plastic insert strips into the bottom cover.
6. Slide the two splints into the fabric.

## Assembly instructions Twins® Piazzola® Butterfly awning

7. Wind up the fabric on the fabric roller.
8. Fit the cord pulleys.
9. Place the motor into the control side of the steel tube, and insert the bearing plug on the bearing side.
10. Make 4 windings of cord around the cord disk and ensure that the cord runs neatly. **TIP:** Apply double-sided tape in the cord disk before winding the cord. Now the first 4 windings are fixed in place and will remain so during transport.
11. Assemble the cover supports (bearing side and control side) as shown in the figure.



12. Use screws to fasten both cover support to the bottom cover.
13. Place the cord disks opposite the wheels on the cover supports and fix these into place.

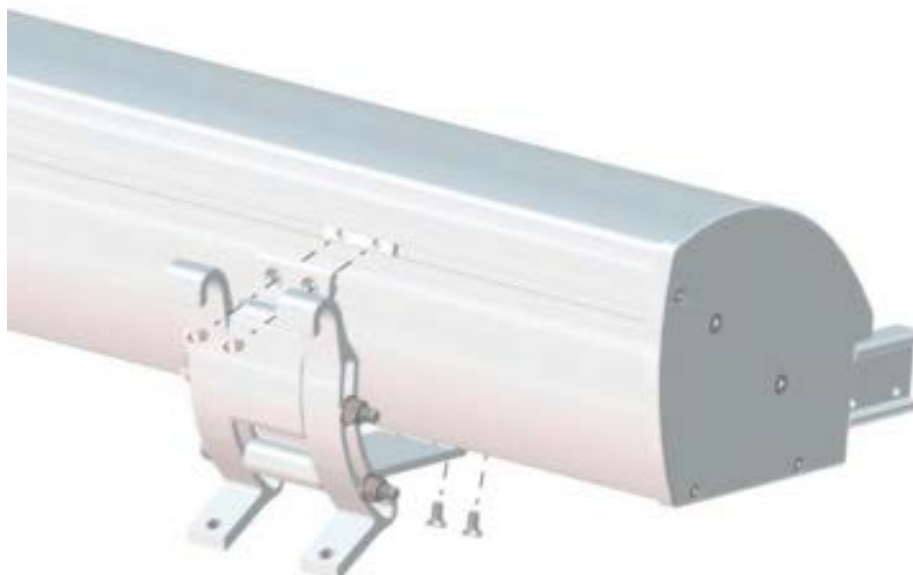


14. Hook the cover support into the bottom cover and place it alongside the socket screw that projects through the cover.



## Assembly instructions Twins® Piazzola® Butterfly awning

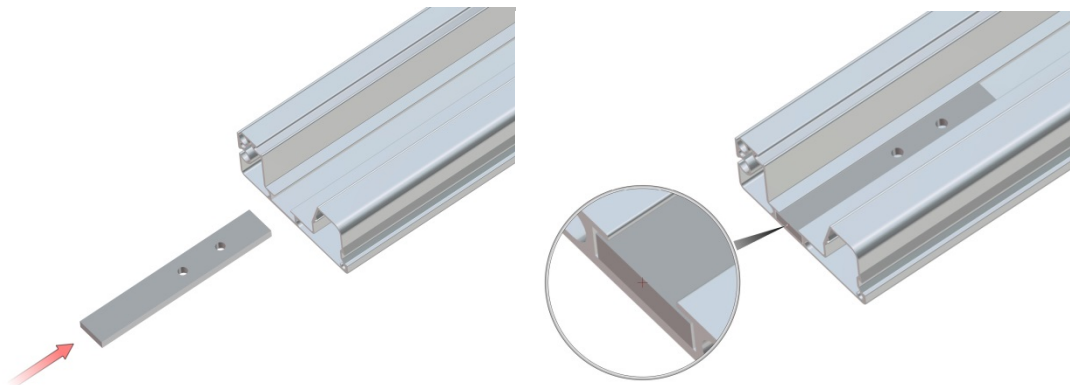
15. Hook the top cover into the bottom cover and use screws to fasten it to the ends of the cover supports.
16. Use the clamping plates to attach the suspension brackets to the bottom cover



## Assembly instructions Twins® Piazzola® Butterfly awning

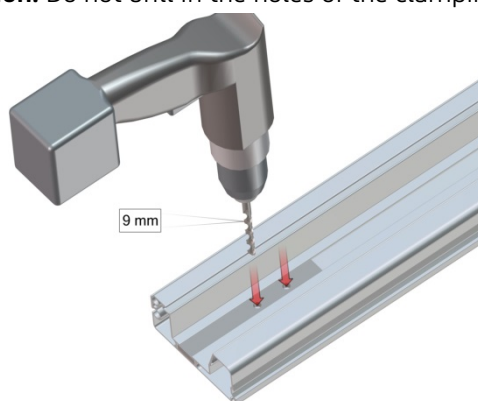
### Tensioning system assembly

1. Slide the clamping plate into the groove of the bottom 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.



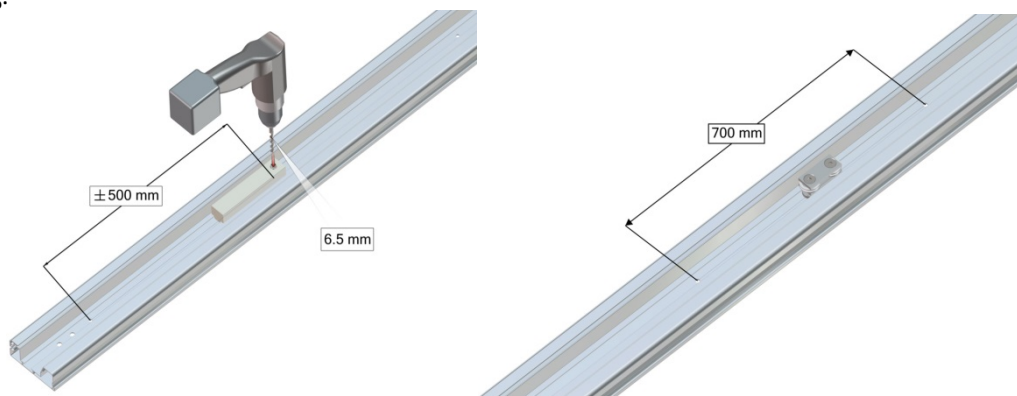
3. Draw the holes and drill holes of 9 mm. Do this on both sides of the front profile.

**Attention:** Do not drill in the holes of the clamping plate.



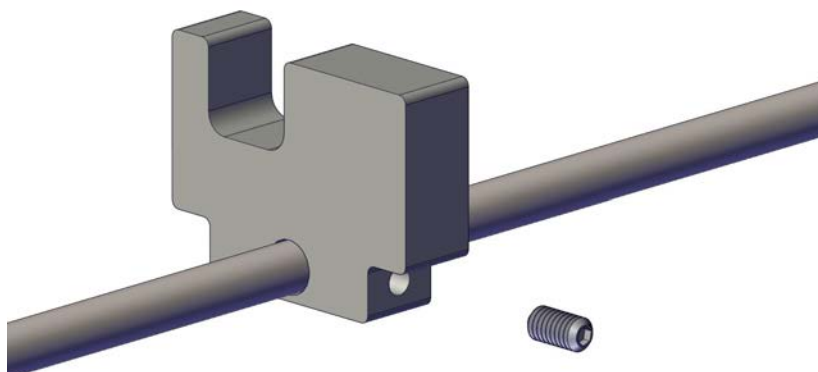
4. Using the drilling template, drill holes of 6,5 mm in the groove of the front profile. Maintain a distance of around 50 cm between the holes. Keep a distance of around 70 cm in the centre of the front profile and place the central pulley here.

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



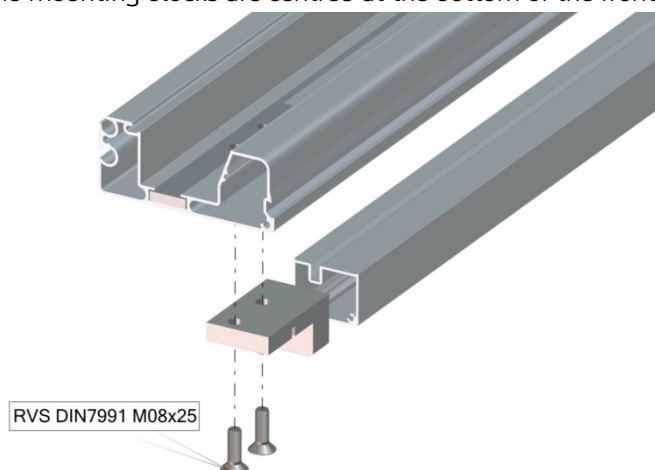
## Assembly instructions Twins® Piazzola® Butterfly awning

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

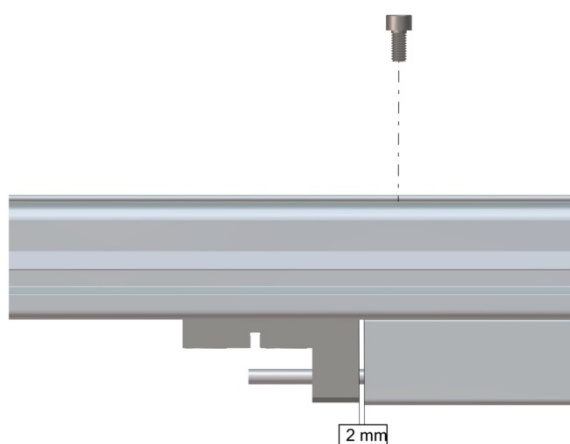


6. Feed the tension wire through the tension wire mounting blocks and the cover profile. Fasten the tension wire mounting blocks in the clamping plate using M08x25 bolts.

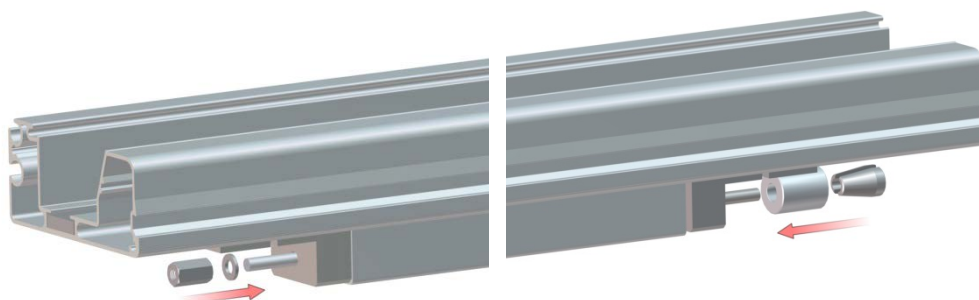
**Note:** Make sure that the mounting blocks are centred at the bottom of the front profile.



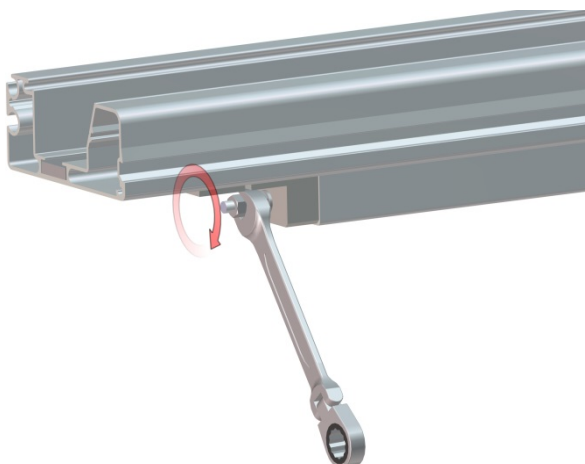
7. Maintain a distance of 2 mm between the mounting block and the cover profile. Fasten the cover profile through the holes of 6,5 mm.



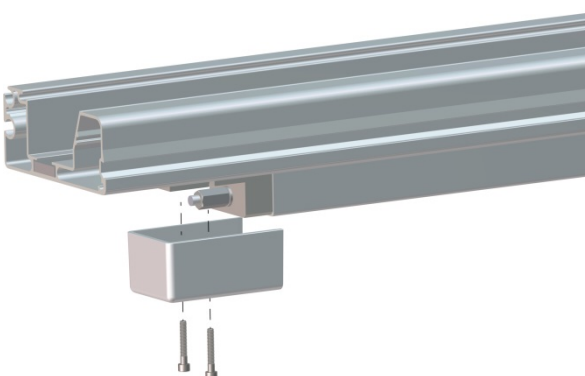
8. Fasten the hexagonal connecting nut with a washer on the threaded side of the tension wire. Use the anchoring sleeve with wedge set on the other side.



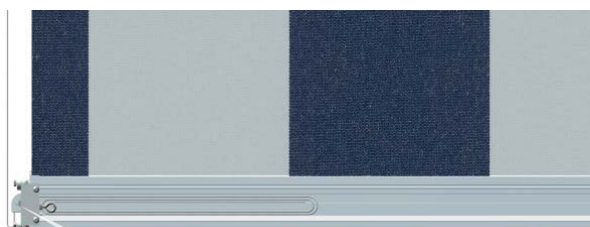
9. Tighten the hexagonal connecting nut (after complete assembly of the system) until the bottom profile is straight tensioned.



10. Place cover caps on both sides of the tension system and fasten these with M04x25 socket screws.



11. Attach the cord tensioners at 50 cm from the middle on the slanted side of the bottom profile. **Note:** Cord tensioners come in left and right versions.
12. Fasten the guide blocks to the bottom profile.
13. Draw the cord through the guide block and roll it up. Lay the cord in the front profile.

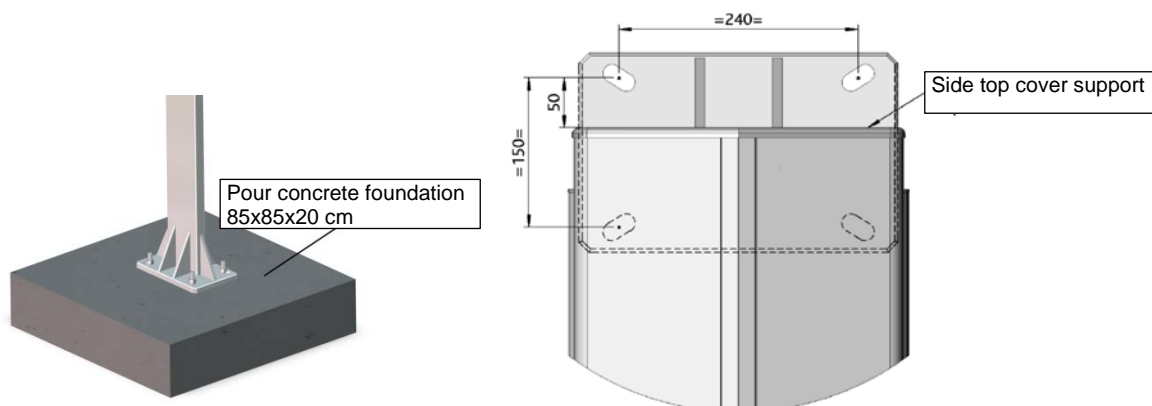


Draw the cord through the guide block and roll it up

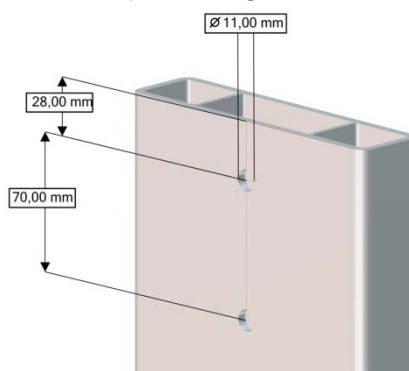
## Assembly instructions Twins® Piazzola® Butterfly awning

### Subassembly Twins Piazzola

1. Pour a concrete foundation. Minimum dimensions: Length 85 cm, width 85 cm and height 20 cm. Allow the concrete to cure properly.
2. Drill the holes in the foundation and fix the M16 threaded ends in place (slotted hole width is 18 mm).

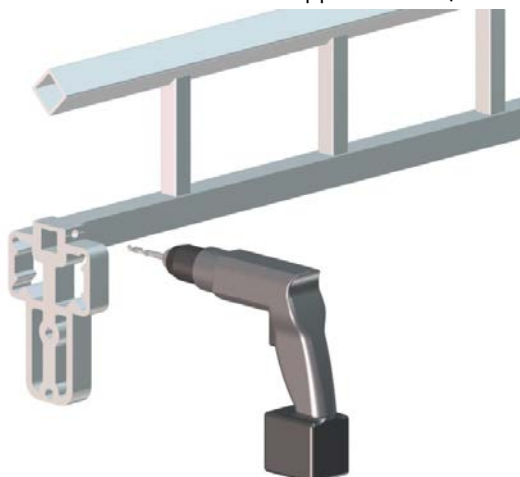


3. Cut the length material to the correct size (see the enclosed materials list).
4. You determine the height of the legs. At a projection of 5 m and a minimum angle of 17°, the upright length is 3,7 m.
5. Make the holes (Ø 11 mm) in the top of the leg as shown in the drawing below.



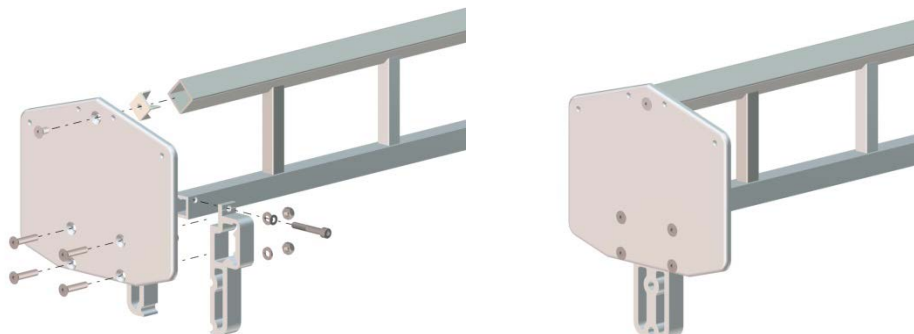
**Attention! If water enters the supports, drill a hole in the bottom of it. This to prevent damage from frost.**

6. Drill holes with a cross-section of 11 mm in the aluminium support beam (see drawing).



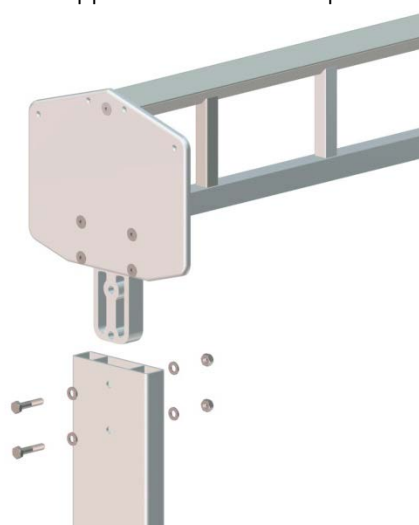
## Assembly instructions Twins® Piazzola® Butterfly awning

7. Attach the side plates to the support beam.

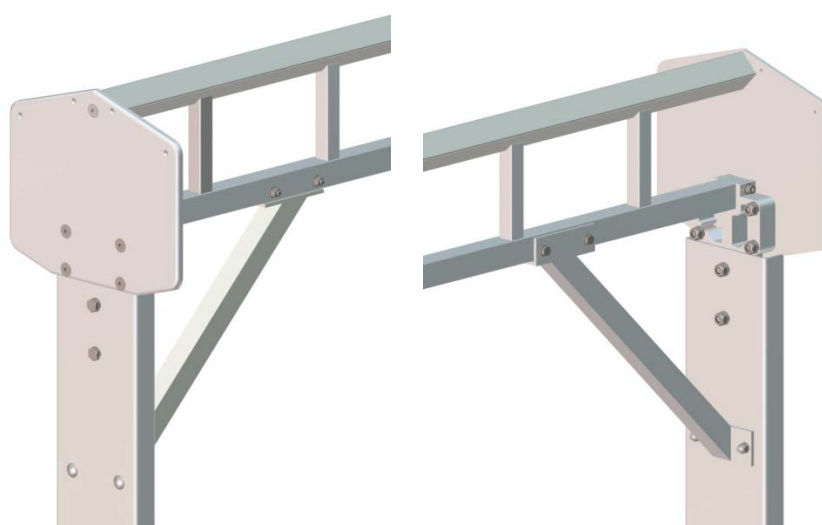


8. Attach the legs to the foundations and make sure they are level.

9. Insert the support beam with side plates in the legs and fasten them.



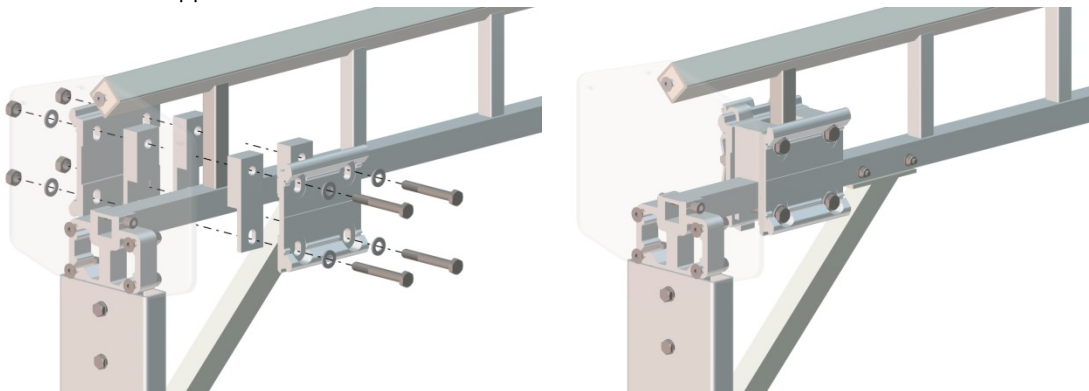
10. Place the strut between the leg and support beam. Draw the holes and drill holes of 9 mm.



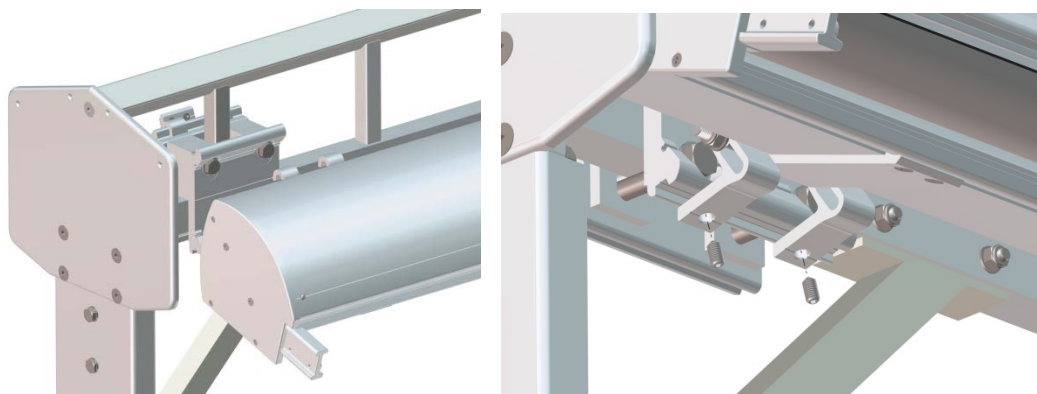
11. Fasten the strut with M8 bolts and check that the structure is level.

## Assembly instructions Twins® Piazzola® Butterfly awning

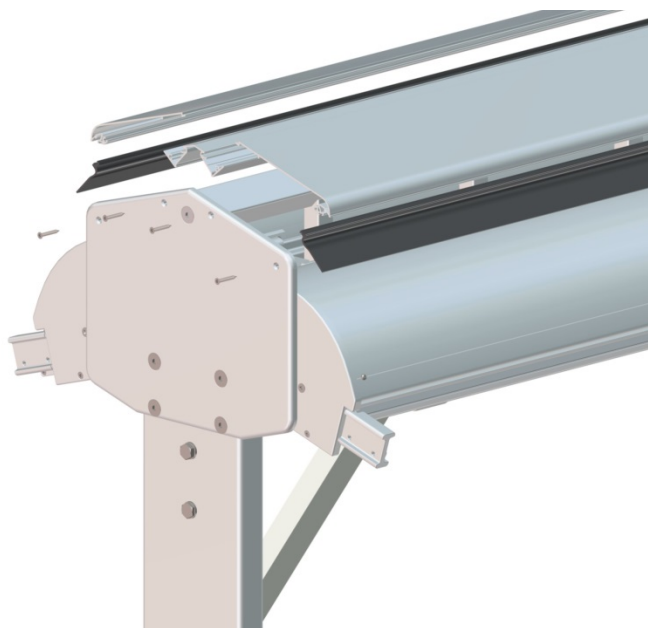
12. Place the mounting plates over the support beam using the suspension blocks. Divide equally over the 3 suspension systems and fasten them. Position the outer 2 near the uprights. **NOTE:** Take the beams of the support tube into account.



13. Hang the cassettes with the suspension brackets in the mounting plates on the Twins Piazzola®. Fasten the socket screws on the bottomside.



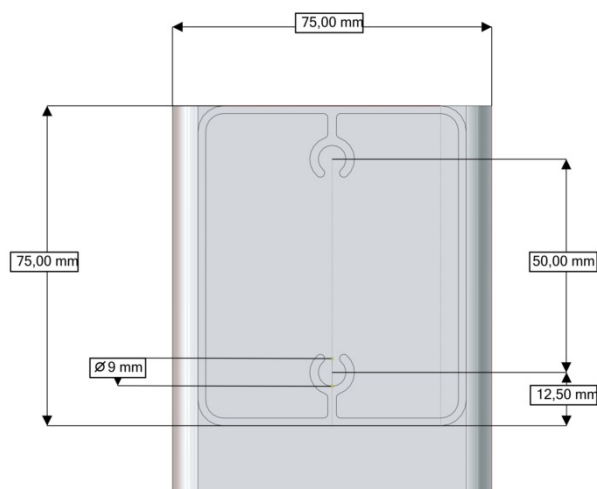
14. Fasten the cover profile connector to the top of the support beam with self-drilling screws on the drill line and with screws through the side panel.
15. Hook the top covers (with rubber seal) in the profile connector and screw these against the side panels.



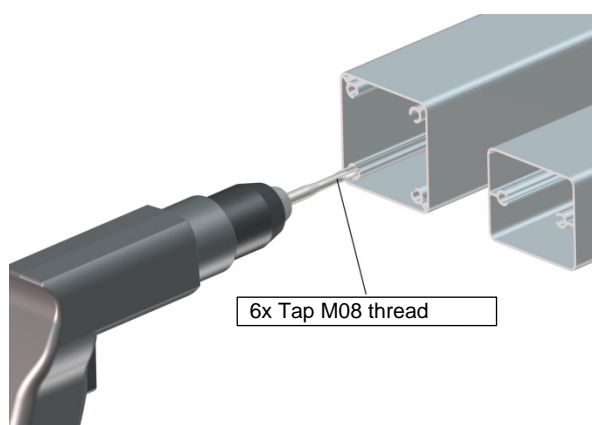
16. The side guides are supported by two legs with a base plate connected to a hinge.

## Assembly instructions Twins® Piazzola® Butterfly awning

17. Drill two holes into the leg as shown in the figure.

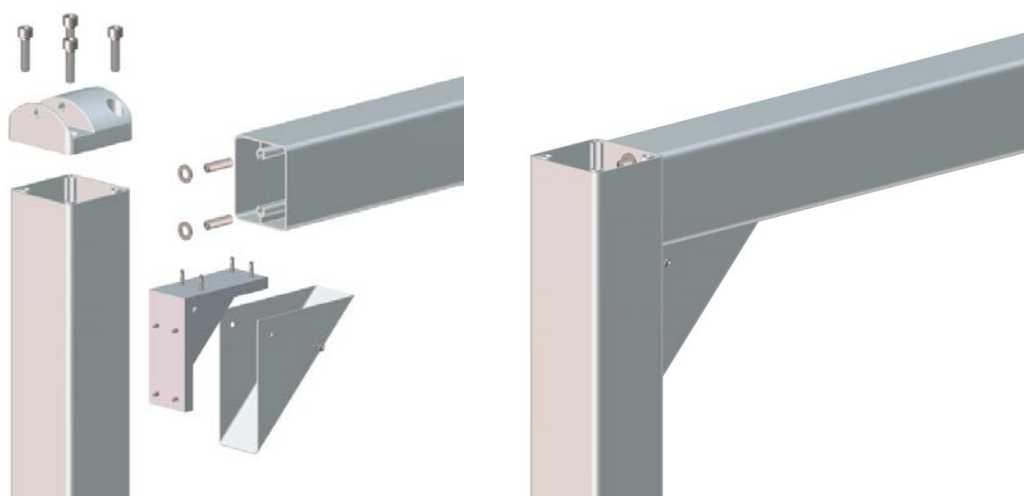


18. Use a machine tap M8 to tap a thread in the leg and beam. Provide sufficient lubrication. Minimum tap 25 mm.



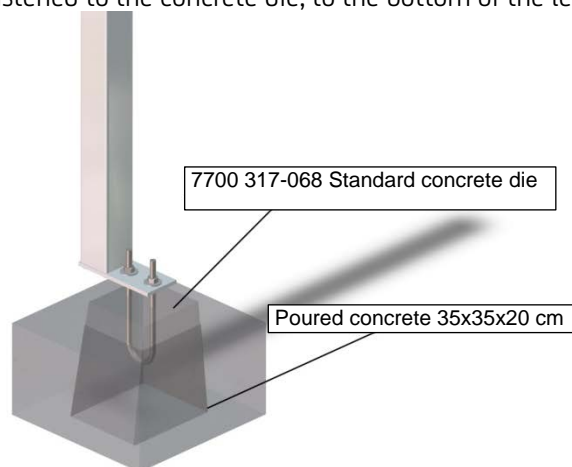
19. Screw the M8x50 adjustments socket screws into both sides of the beam. Allow these to protrude by  $\pm 15 \text{ mm}$ . Insert the adjustment socket screws through the holes in the leg and fasten them.

20. Screw the bottom hinge at the top of the leg and the base plate at the bottom.

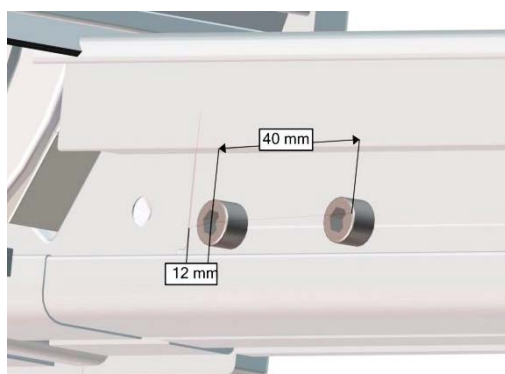


## Assembly instructions Twins® Piazzola® Butterfly awning

21. The legs of the Piazzola must be placed on a standard concrete die (7700 317-068), which must be poured in to create a die with a size of 35 cm (length) x 35 cm (width) x 20 cm (height). Attach the steel base plate, which is later fastened to the concrete die, to the bottom of the leg.



22. Use the Piazzola drilling template or the sizes below to drill holes of 7 mm in the left and right side guides for attachment to the cover supports.



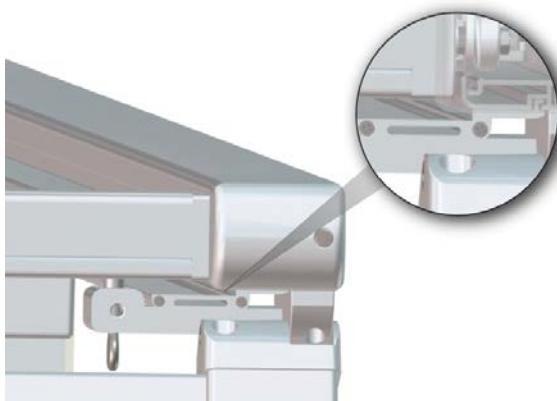
23. Slide the mounting plate of the fabric support into the side guide, place it in the required position, and use it to fasten the support.
24. Slide the mounting plate of the top hinge into the side guide. Fasten the top hinge at the required position of the side guide. Leave space for the nut on the outside.
25. Slide the guide plate into the top of the side guide. Use a rubber hammer to fasten.

**Note:** The lockset can now be assembled if used (see point 47).



## Assembly instructions Twins® Piazzola® Butterfly awning

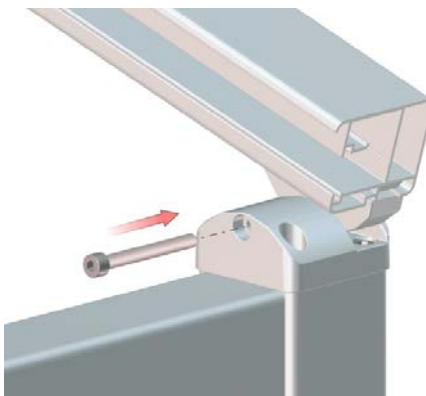
26. Take the water gutter profiles and drill holes of 5 mm at intervals of  $\pm 60$  cm along the drill line.
27. Screw a cover plate against the front of the water gutter.
28. Hook the water gutter profiles into the side guide, keeping the cover plate on the front flush with the front of the side guide,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



29. Extract the front profile by 30 cm.
30. Slide the side guide over the wheels of the guide blocks leg of the cover support.
31. Attach the side guide to the legs of the cover supports.



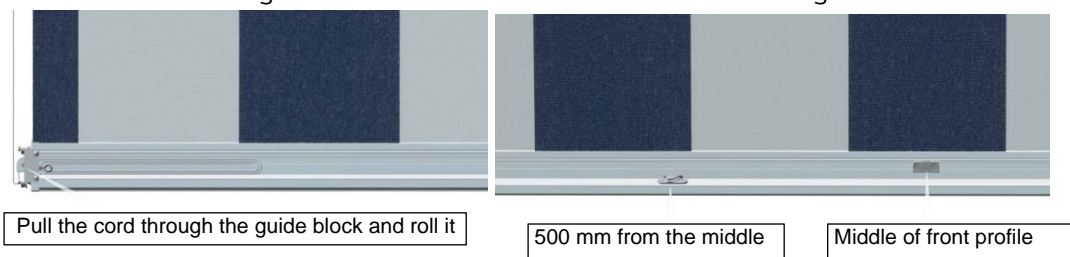
32. Place the two hinges at the desired positions above one another, and connect these.



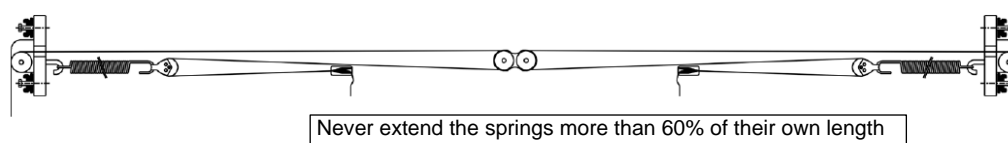
33. Measure the Twins Piazzola® diagonally and ensure that the system is perfectly perpendicular.
34. Tighten the nuts on the side of the suspension bracket.
35. Hook the springs on the left and right into the screw eyes of the guide blocks.
36. Place the pulley on the other side of the spring.

## Assembly instructions Twins® Piazzola® Butterfly awning

37. Slide the central pulley towards the middle of the bottom profile.
38. Pull out the cord leading through the guide block, lead it through the side guide and lay it over the wheel of the end bearing. Ensure that the cord is not crossed in the side guide.



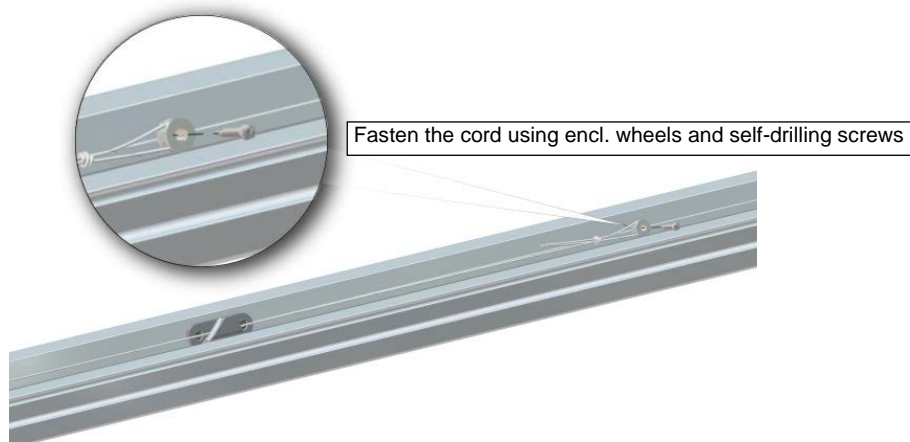
39. Lead the cord through the bottom front profile as shown in the figure below.



40. Check that the cord runs neatly over all the pulley wheels. Tension the spring by pulling the cord in the cord tensioners and position the cord around the wheel behind the cord tensioner.

**Note: Every spring may be drawn to a maximum of 60% of its own length.**

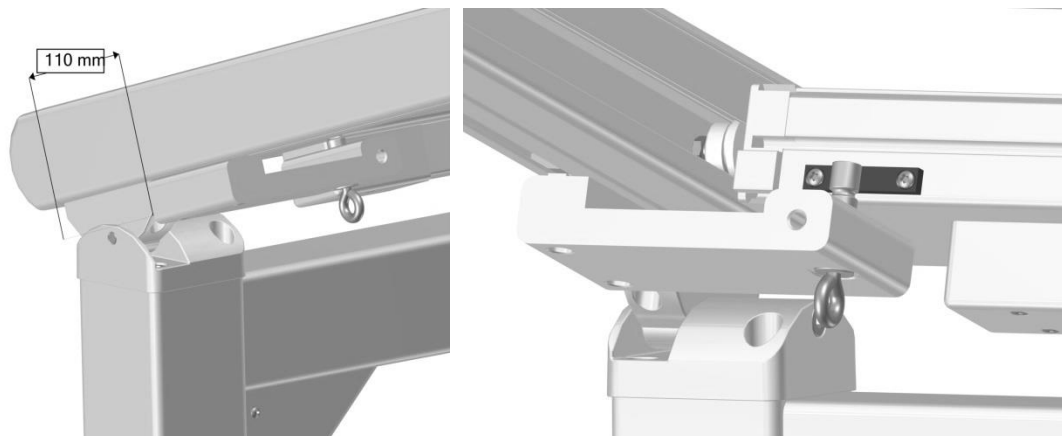
41. Fasten the cord using the enclosed wheels and self-drilling screws, as shown in the figure below.



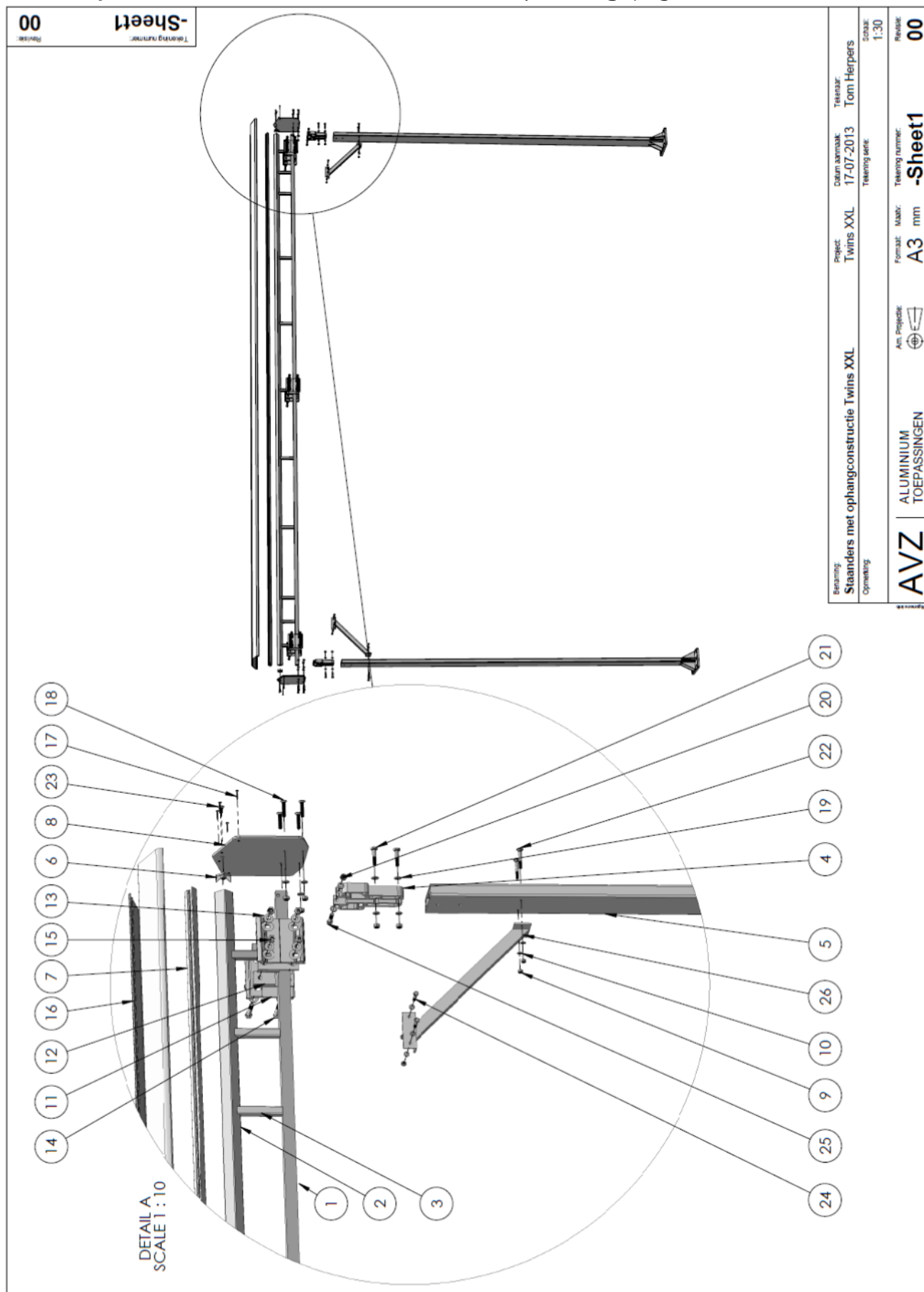
42. Let the awning run in and out a couple of times to check the correct functioning.
43. Straighten the top cover by turning the socket head screw at the back of the bottom cover.
44. Hook the cover into the top of the front profile and click to fasten.
45. Use the hexagonal nut to tension the front profile.

## Assembly instructions Twins® Piazzola® Butterfly awning

46. The lockset can be used with an ASA ETR-A or Somfy Orea motor. The locking block must be placed at least 110 mm from the end of the side guide. **Note:** No top hinge can be placed here. The plastic stopper is screwed to the front profile as shown below.



# Exploded view: Twins® Piazzola® Butterfly awning (page 1/2)



## Appendix: Twins® Piazzola® Butterfly awning (page 2/2)

| Piece | Nbr. | Item nbr.    | Description Twins Piazzola®     | Remark |
|-------|------|--------------|---------------------------------|--------|
| 1-3   | 1    | 4216 140-000 | Support beam Twins Piazzola     |        |
| 4     | 4    | 6295 820-000 | Support for support beam        |        |
| 5     | 2    | 4216 203-000 | Leg Twins Piazzola with base    |        |
| 6     | 2    | 4216 090-068 | Sealing cap for support beam    |        |
| 7     | 1    | 6295 810-910 | Alu roof connector profile      |        |
| 8     | 2    | 4216 122-000 | Side plates Twins Piazzola      |        |
| 9     | 8    | 4210 527-000 | RVS DIN985 + PVC ring M08       |        |
| 10    | 24   | 4210 529-000 | RVS DIN125A Washer M08          |        |
| 11    | 6    | 4211 772-000 | Mounting plate                  |        |
| 12    | 12   | 4217 300-000 | Mounting bracket mounting plate |        |
| 13    | 24   | 4210 147-000 | RVS 125A Washer M12             |        |
| 14    | 12   | 4216 108-000 | RVS DIN931 M12x90               |        |
| 15    | 12   | 4210 148-000 | RVS DIN934 Hexagon nut M12      |        |
| 16    | 2    | 6295 800-006 | Cover Twins Piazzola            |        |
| 17    | 8    | 4210 142-000 | RVS DIN7982 ST4,2x45            |        |
| 18    | 8    | 4216 107-000 | RVS DIN7991 M10x50              |        |
| 19    | 20   | 4210 482-000 | RVS DIN125A Washer M08          |        |
| 20    | 16   | 4210 155-000 | RVS DIN985 + Synth. ring M08    |        |
| 21    | 4    | 4216 106-000 | RVS DIN931 M10x50               |        |
| 22    | 4    | 4210 530-000 | RVS DIN604 M08x60               |        |
| 23    | 2    | 4210 480-000 | RVS DIN7991 M10x20              |        |
| 24    | 4    | 4210 914-000 | RVS DIN931 M8x55                |        |
| 25    | 2    | 4216 105-000 | RVS DIN912 M8x70                |        |
| 26    | 2    | 4216 215-000 | Strut                           |        |