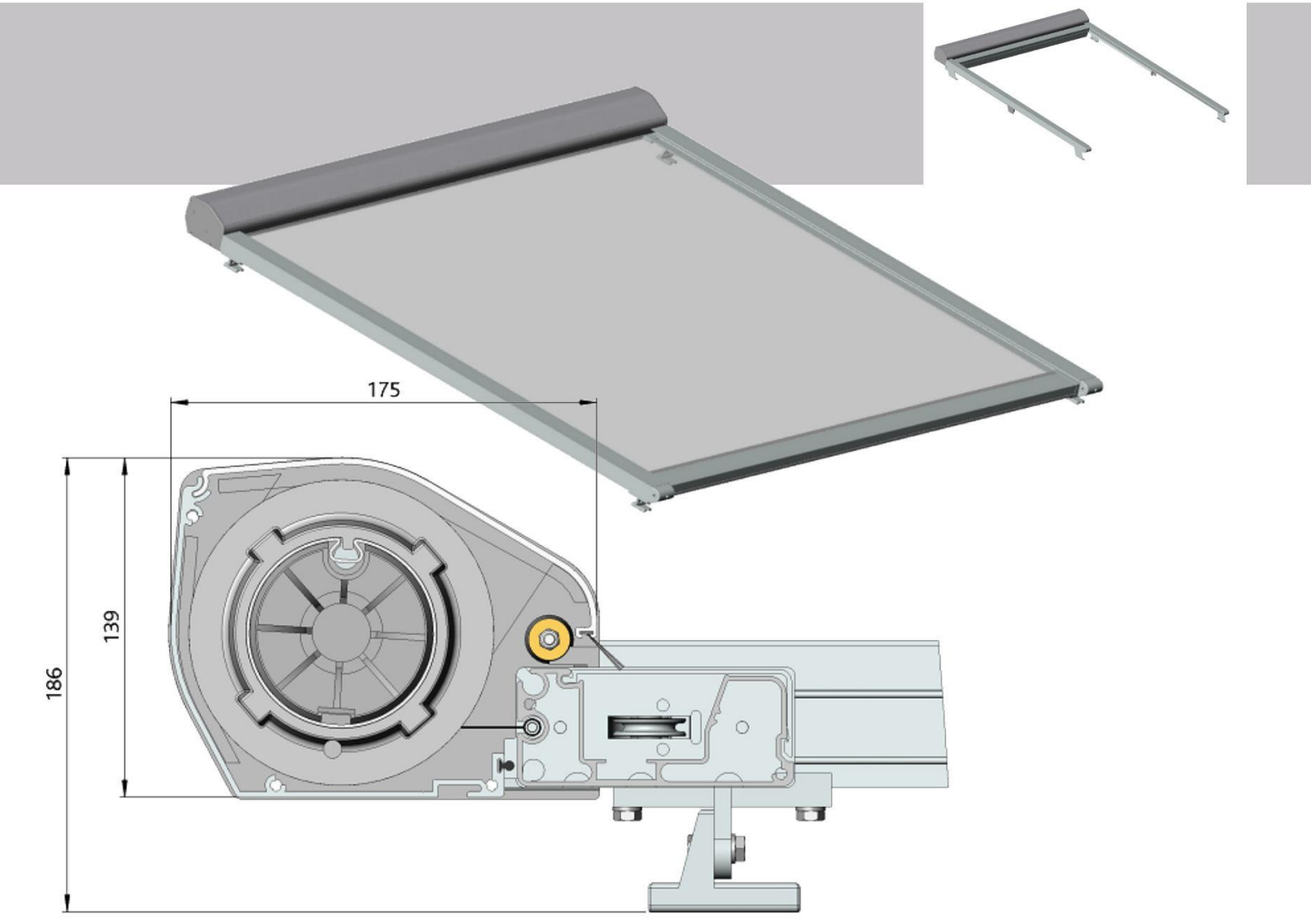
Manufacturing and installation instruction

Summerlight®

Conservatory awning



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

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

General Information Summerlight® Conservatory awning

Maximum and minimum width*

Width	Projection		
	150 - 300 cm	301 - 375 cm	376 - 500 cm
from 200 to 250 cm	X	X	
from 251 to 325 cm	X	X	X
from 326 to 400 cm	X	X	X
from 401 to 450 cm	X	X	X

** This has been tested with acrylic fabric in panels.*

The Summerlight® can be coupled to a maximum width of twice 4,5 m.

NOTE:
- The maximum fabric is 16 m² per single awning. This has been tested with acrylic fabric in panels.
- At a free span of >4 metres the front profile will slightly sag. This has no effect on the system's functionality, but may look somewhat untidy. In a situation where the front profile will be taut along a straight line it could be sensible to opt for a coupled system with two shorter front profiles.

Fabric winding method
The fabric of the Summerlight® is wound bottom wise.

Cut sizes

	Operated by ASA motor	Operated by Somfy motor
Top cover	21	21
Rear cover	20	20
Fabric roller	62	62
Upper front profile	171	171
Lower front profile	170	170
Side guide	175	175
Fabric	150	150

Motor diagram

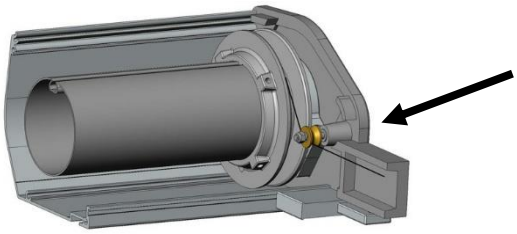
Width	Projection		
	150 - 300 cm	301 - 375 cm	376 - 500 cm
from 200 to 250 cm	25 Nm	35 Nm	
from 251 to 325 cm	25 Nm	35 Nm	40 Nm
from 326 to 400 cm	35 Nm	35 Nm	40 Nm
from 401 to 450 cm	40 Nm	40 Nm	40 Nm

Motor diagram (two awnings coupled)

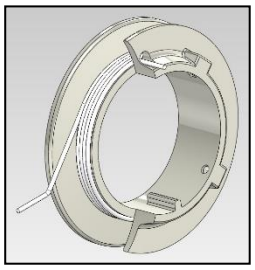
Width	Projection 150 - 300 cm	301 - 375 cm	376 - 500 cm
from 451 to 650 cm	50 Nm	80 Nm	
from 651 to 900 cm	80 Nm	80 Nm	80 Nm

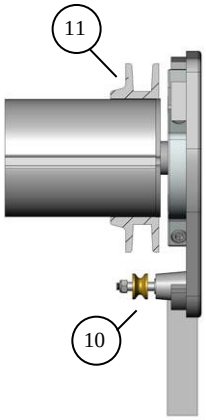
Assembly of Summerlight® Conservatory awning

1. Shorten the longerons to the correct lengths.
2. On the operating side make an opening in the bottom cover for the motor cable.
3. Screw the bottom part of the motor support and the bearing block on the side covers. NOTE: Install the bearing block with the broad collar against the side plates. Do not yet secure the motor support completely because the motor cable has to be fed through.
4. Screw the side plates to the bottom cover.
5. Wind the fabric onto the fabric roller bottom wise.
6. Slide the cord pulleys onto the roller but do not yet secure them.
7. Wind the cord at least three times round the pulleys from the top. The required length per side guide is determined as follows: 2x the projection + 1.5x the width + 1 m.



8. On the non-operating side install the bearing plug in the fabric roller. Then slide spacer ring 4210 497-000 and the precision bearing across it. Install adapter bush 4460 020-080 to make the precision bearing fit exactly. On the operating side slide the motor into the fabric roller. Always spray the end bearings with 'Kwiklube' lube spray.
9. Install the roller in the housing and secure it with the top parts of the bearing block and motor support.
10. Install the cord pulleys (11) opposite the runners (10) on the top cover supports and secure them.
11. To make sure that the cord will nicely roll up on the cord pulley. Place always 4 turns next to each other on the pulley (see drawing). To make sure that the cord will stay on the pulley during transport, use double-sided tape on the inside of the the cord pulley and place afterwards the cord on the tape.

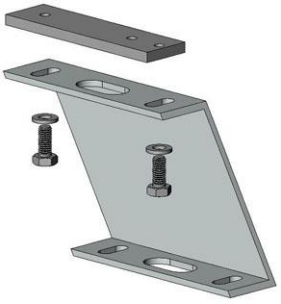




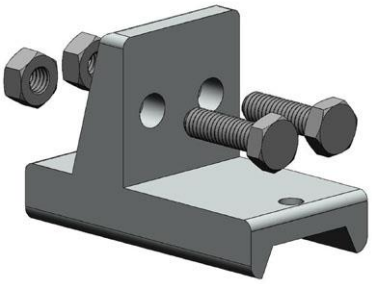
12. Take the lower pulling frame and mount the cord tensioners on the bevelled side, approx. 15 to 20 cm from the middle. NOTE: Use the self-tapping sunk-head screws; the heads should never protrude!!
13. Slide the middle pulley into the lower front profile.
14. Slide the pulling frame across the fabric.
15. Screw an eye and nut on both guide blocks.
16. Screw the guide blocks onto the lower pulling frame.
    NOTE: First remove a guide pulley runner to secure the 2nd screw.

Assembly of Summerlight® Conservatory awning

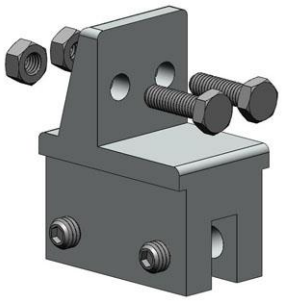
Side guide supports
AVZ sells various types of side guide supports. Please select the type that matches the roof construction of the conservatory or veranda, i.e.:
- For flat-topped rooflines: mount 4215 226/228-... or 4215 146-...
- For raised-edge rooflines: mount 4215 148-...



4215 226/228-...



4215 146-…

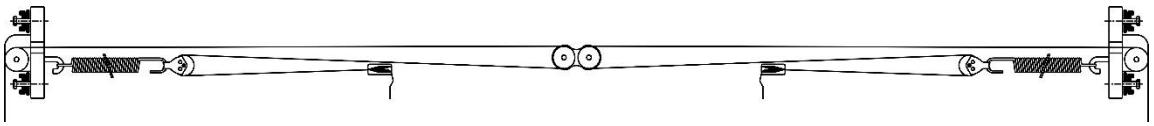


4215 148-…

Installing the springs
The springs are attached to the guide pulleys by means of screw eyes. At the other end of the spring a pulley is attached. The middle pulley is slid into the space in the lower front profile and slid up to the middle of the lower front profile.

Use screws 4452 080-000 to install the cord tensioners on the left and right of the lower front profile. See the drawing below for the routing of the cord through the pull section.

NOTE: Check to see that the cord runs across all pulleys! Only then give the spring the required pre-tensioning.



Tensioning the fabric
Extend the awning to its maximum and note when the spring has the least tension. Mark the point where the awning front profile is then positioned. When pulling up the awning, stop it at that point and tension the spring so that the fabric is sufficiently taut.

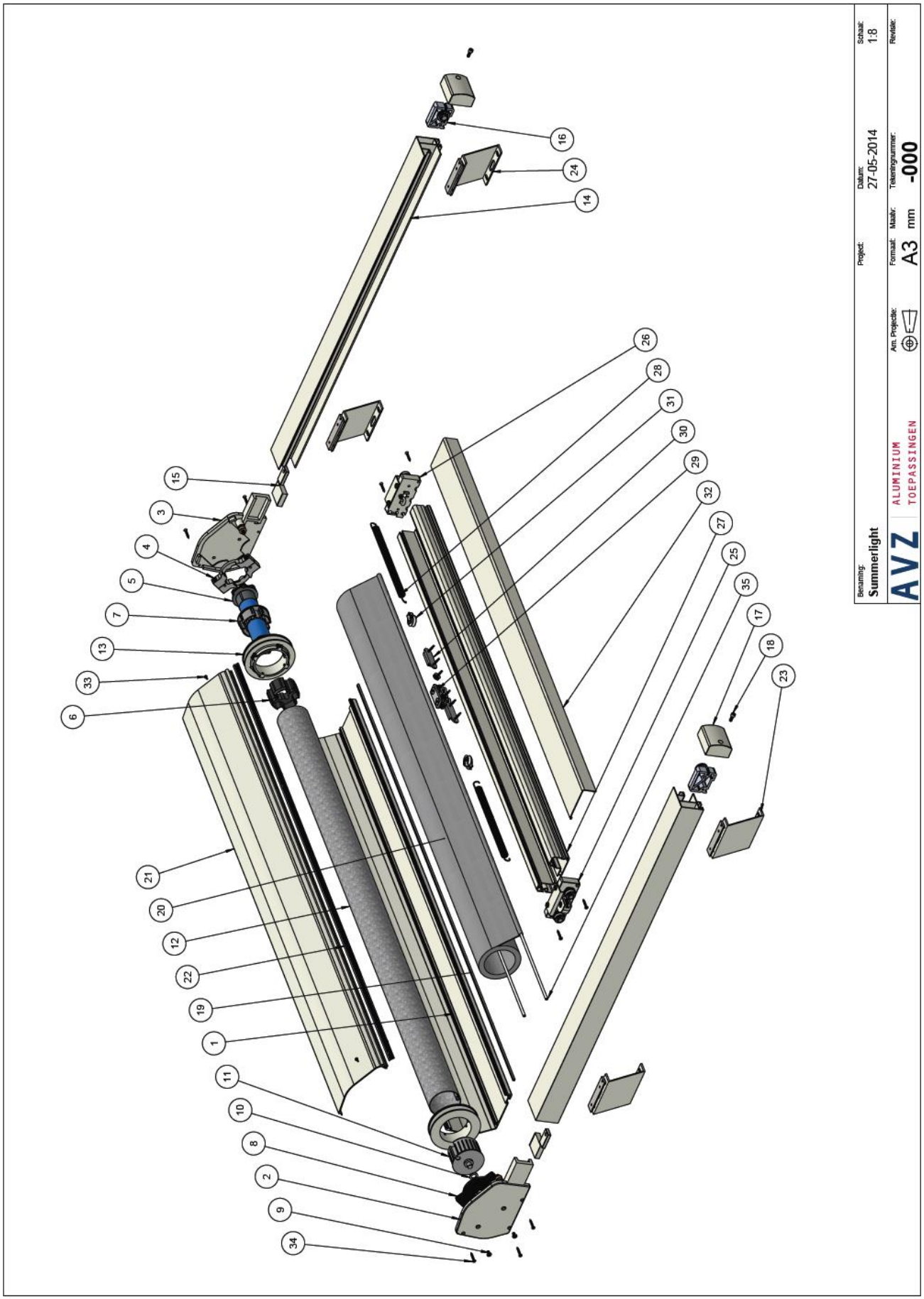
NOTE: Do not stretch the springs beyond 60% of their own length.
Spring 35 cm: maximum projection 350 cm.
Spring 57 cm: from 350 cm to max. 500 cm projection.

Fabric support
For awnings with a projection of more than 400 cm we recommend to install a special facility that prevents the fabric from hitting the top of the conservatory in high winds. This facility consists of a roller 50 that is installed halfway up the side guides by means of supports underneath the side guides. The roller can be sealed with synthetic caps.

NOTE: This construction requires the use of the following side guide supports:
- 4215 226/228-… supports with connecting roller.

Overhang
Measured from the last support on the veranda roof a maximum overhang of 1 m can be realized. In that case an extra support has to be installed for each side guide. The mutual distance between the supports has to be well-spaced.

Drawing of Summerlight® Conservatory awning (page 1/2)



Drawing of Summerlight® Conservatory awning (page 2/2)

Piece	Nbr.	Item nbr.	Description
35	2	4000 213	PVC insert 6x3mm
34	10	4210 142	Plate screw 4,2x32 countersunk Philip head Din 7982
33	2	4452 097	Self-drilling cross screw 3,5x9,5 AiSi 410
32	1	6295 562	Alu upper front profile Summerlight
31	2	4215 158	Stainl.steel pulley for cord 2,5 mm with synth. runner
30	1	4215 195	Clamp cleat set
29	1	4215 211	Middle pulley single plug
28	2	4215 183	Spring 18,5 mm steel, length 300 mm
27	1	6295 572	Alu lower front profile Summerlight
26	1	4215 310	Slide block Summerlight, right
25	1	4215 312	Slide block Summerlight, left
24	2	4215 228	Side guide support Hg 80 mm, right
23	2	4215 226	Side guide support Hg 80 mm, left
22	1	4215 190	Bristle for top cover
21	2	6295 662	Alu upper front profile Summerlight with record for gutter
20	1	#	Fabric
19	1	4211 130	Synthetic sealing strip
18	2	4217 185	Hexagon Cylinder screw M6x16 stainless
17	2	4215 145	Synthetic cover bearing block conservatory awning
16	1	4217 260	Bearing bloc set Summerlight, Piazzola, Cubola
15	2	4215 124	Alu guide plate
14	2	6295 553	Alu side guide Summerlight
13	2	4215 122	Synthetic Cord pulley
12	1	6253 190	Steel roller 78 flat Nut flat fabric slot
11	1	4470 082	Synthetic bearing bung 78
10	1	4210 497	Synthetic washer 12,1x 20 x 2
9	2	4000 151	Countersunk screw Philips head M6x12 stainless
8	1	4215 114	Synthetic bearing block complete
7	1	4001 140	Adapter model AVZ for roller 78
6	1	4000 909	Somfy Friction ring Serial 50/60 roller 78
5	1	4000 840	Somfy motor LT50
4	1	4215 110	Alu Motor support
3	1	4215 102	Top cover support Summerlight, right
2	1	4215 100	Top cover support Summerlight, left
1	1	6295 610	Rear/bottom cover conservatory awning