Honoured with:

Cassette awning

Kubata

Kubata LED

Cubic shapes are a popular style element for contemporary facades. The **Kubata** cassette awning blends ideally into these. With its clear design it complements modern architecture perfectly. But the high-quality technology is also impressive: LED spotlights integrated into the cassette, the weinor LongLife arm, convenient control and large choice of fabrics and colours – leaving nothing to be desired.

Cubic, clean lines:
Modern, clear design with no visible fixings

Removable cover caps:
Easy access for cabling the controls

weinor Opti-Flow-System® and support profile:
Optimum fabric positioning

Simple installation
with wall bracket and carrier bar

Kubata LED:
Integrated into the cassette

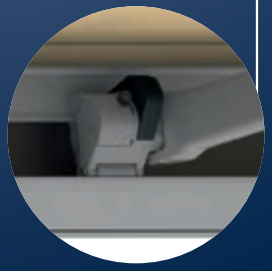
Kubata Highlights

Reliable drainage:
Rainwater is drained off in a controlled way

weinor LongLife arm:
Durable and quiet

Easy mounting front profile end cap:
No visible fixings and integrated water drainage outlet

Wind lock safety device:
Well sheltered even in winds



2 versions:

Cassette with back plate

Casssette without back plate

Kubata Benefits

Cubic, clean lines – modern contemporary design

The Kubata's Opti-Flow-System® from weinor is fitted with a support profile across the whole width of the awning that ensures optimum fabric positioning.

Kubata LED – cassette with integrated LED lighting

The LED spotlights integrated into the cassette produce atmospheric lighting on the patio:

- 30,000 LED light hours with lowest energy consumption (85% electricity saving compared to halogen technology)
- Dimmable when used with BiConnect or Somfy io-homecontrol® radio control

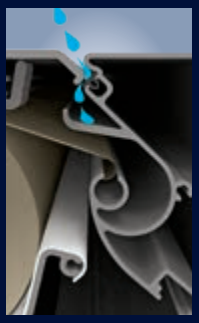


Figure 1

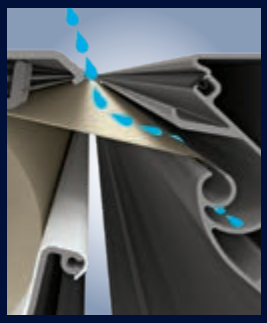


Figure 2

Reliable drainage – rainwater is drained off in a controlled way

Figure 1: Penetrating rainwater is discharged laterally. This protects the cloth from moisture.
Figure 2: If the cloth is retracted in the wet state, the residual water runs off laterally over the channel.

Removable cover caps – easier access for the receiver/cable connections

The cover caps on both sides can be removed using the clip technology. As a result, it is very easy to disconnect the drive and controls and it is easier to carry out maintenance work.

Wind lock safety device – well-sheltered even in winds

Proven technology prevents the awning from lifting up when wind gusts from below:

- Tilting folding arm with wind lock safety device
- Proven, maintenance-free technology
- Forged and extruded aluminium components

Kubata Technology

Kubata versions	Kubata	Kubata LED
Technology		
Max. width	700/650 cm	700/650 cm
Max. projection	300/400 cm	300/400 cm
Cassette size (W x H) incl. standard bracket	210 mm x 205 mm	210 mm x 205 mm
Gear drive	○ (with a max. width of 600 cm/ max. projection of 350 cm)	—
Motor drive	● as standard	● as standard
Angle of pitch on awning	5° to 40°	5° to 40°
Installation alternatives	can be installed on walls, ceilings and rafters	
LED lighting (separate spotlights)	—	● integrated in bottom profile
OptiNut roller tube	● as standard	● as standard
LongLife arm	● as standard	● as standard
Accessories		
Tempura Quadra heating system	○	○
BiSens Agido-3V product protection sensor	○	○
Controls		
Radio control	○	○
No remote	●	●
Weather sensors		
Sun/wind sensor	○	○
Sun/wind sensor solar powered	○	○
Sun/wind/rain sensor	○	○
Quality		
Tested up to	wind resistance class 1 according to DIN 13561 (wind strength 5 on the Beaufort scale)	

● Standard ○ Option — Not available

Weight table

Width in cm	Projection in cm					
	150	200	250	300	350	400
	Weight in kg					
200	46					
250	54	56				
300	61	63	66			
350	68	70	74	79		
400	76	78	81	86	90	
450	83	85	88	94	98	106
500	90	92	96	101	105	114
550	99	101	105	110	113	122
600	106	109	113	118	124	130
650	114	116	120	125	131	137
700	124	127	130	139	–	–

Note:
Residual water on the inside, e.g. after a rain shower, can come out of the profiles during extension, even with a time delay.

weinor professional tips: Scan the QR code

or view or download them online at:
www.weinorpartner.com/weinor-professional-tips/kubata now.

Kubata LED

LED lighting – 30,000 hours of lighting with lowest energy consumption

Select LED components for top weinor quality:

- Atmospheric light thanks to special glass lenses
- Visually integrated into the cassette*
- Lighting remains on even when awning is retracted
- Highly energy-efficient
- Operating life of 30,000 hours
- Dimmable when used with BiConnect or Somfy io-homecontrol® radio control
- Easy to service: replace individual LED lights just by dismounting the bottom profile

* Cassette bottom section with integrated LED lights is not assembled.

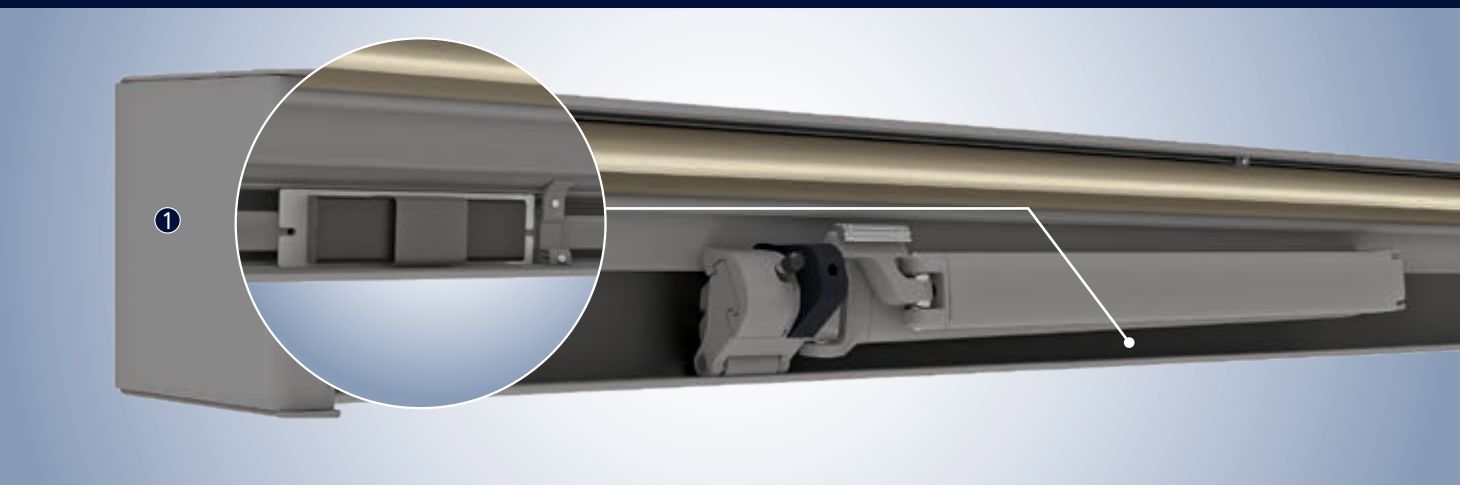
Integrated LED lighting

Width in cm	Diagonal in 10 cm steps						
	up to 100	110-150	160-200	210-250	260-300	310-350	360-400
	Number of LED spotlights						
up to 200	3	3					
201-250	3 - 4	3 - 4	4				
251-300	4	4	4	4 - 5			
301-350	6 - 7	6 - 7	6 - 7	5 - 7	5 - 7		
351-400	7 - 8	7 - 8	7 - 8	6 - 8	6 - 8	6 - 8	
401-450	8 - 9	8 - 9	8 - 9	8 - 9	8 - 9	7 - 9	7 - 9
451-500	9	9	9	9	9	9	8 - 10
501-550	9 - 10	9 - 10	9 - 10	9 - 10	9 - 10	9 - 10	9 - 10
551-600	10 - 11	10 - 11	10 - 11	10 - 11	10 - 11	10 - 11	10 - 11
601-650	11 - 12	11 - 12	11 - 12	11 - 12	11 - 12	11 - 12	11 - 12
651-700	12	12	12	12	12		

The LED spotlights are distributed automatically depending on the width/projection/type of bracket.
This table shows the LED distribution with standard arm or bracket positions combined with the 85 mm wall bracket.

Kubata Controls

Easily accessible location for receivers/controls



Receiver, power supply pack and further electrical components (e.g. BiConnect receiver in the cassette)
The cover cap ❶ can be opened for servicing purposes. The drive can be disconnected from the receiver and controlled independently from this.

weinor BiConnect radio technology

Product	Electronics	BiConnect control	Remote receiver	Transmitter
Kubata	Kubata drive	• BiRec receiver	BiRec MA-K	• BiEasy 1M/5M/15M Go! hand transmitter • 1MW-3V wall transmitter
Kubata LED	Kubata drive and LED lighting	• BiRec combi-receiver for main drive and LED (with integrated power supply pack) • Dimmable LED	BiRec MLED	• BiEasy 5M/15M Go! hand transmitter
Accessories (optional)	Tempura Quadra heating	• Dimmable, additional receiver required • Accommodation of receiver in the design bar provided for this purpose or the Tempura Quadra box	BiRec HD	• BiEasy 5M/15M Go! hand transmitter

Requires: awnings with BiConnect remote control and sensors require a BiEasy 1M, 5M or 15M Go!

Somfy io-homecontrol® radio technology

Product	Electronics	Somfy io-homecontrol control	Remote receiver	Transmitter
Kubata	Kubata drive	• io-homecontrol integrated in remote-controlled motor	Somfy io remote-controlled motor	• Situo 1 io Pure II/Situo 5 io Pure II/Situo 5 Variation A/M io Pure II hand transmitter • Smoove 1 io Pure Shine wall transmitter
Kubata LED	Kubata drive and LED lighting	• io-homecontrol integrated in remote-controlled motor • Additional Somfy receiver for the LED spot-lights (with downstream power supply pack) integrated into cassette • LED dimmable	Somfy io remote-controlled motor and Lighting Receiver Variation io (dimmable)	• Situo 5 io Pure II/Situo 5 Variation A/M io Pure II hand transmitter
Accessories (optional)	Tempura Quadra heating	• Dimmable, additional receiver required • Accommodation of receiver in the design bar provided for this purpose or the Tempura Quadra box	Heating Receiver Variation io 1.5 kW STAS3/STAK3 (dimmable)	• Situo 5 io Pure II/Situo 5 Variation A/M io Pure II hand transmitter • Smoove 1 io Pure Shine wall transmitter

Somfy RTS radio technology

Product	Electronics	Somfy RTS control	Remote receiver	Transmitter
Kubata	Kubata drive	• RTS control integrated in remote-controlled motor	Somfy RTS remote-controlled motor	• Situo 1 RTS Pure II/Situo 1 Soliris RTS Pure II/Situo 5 RTS Pure II/Situo 5 Soliris RTS Pure II hand transmitter • Smoove 1 RTS Pure Shine wall transmitter
Kubata LED	Kubata drive and LED lighting	• RTS control integrated in remote-controlled motor • Additional Somfy receiver for the LED spot-lights (with downstream power supply pack) integrated into cassette • LED not dimmable	Somfy RTS remote-controlled motor and RTS lighting receiver	• Situo 5 RTS Pure II/Situo 5 Soliris RTS Pure II hand transmitter

Note:
Please see the "Accessories" technical brochure for further details regarding the drive and control.

Some options are subject to a surcharge. For prices, please refer to the weinor awnings price list.

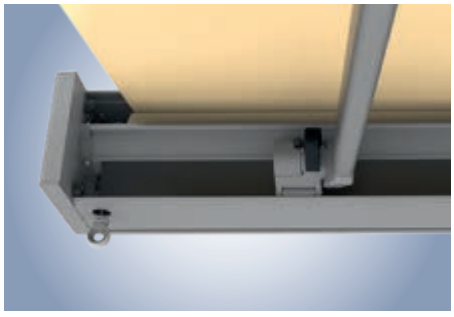
Hard wired with Somfy control

Product	Electronics	Firmly wired Somfy control	Controls
Kubata	Kubata drive	• Somfy control for awning drive	e.g. Soliris Smoove Uno
Kubata LED	Kubata drive and LED lighting	• Somfy control for awning drive • Switch on site for the LED spotlights • LED power supply pack integrated into the cassette • LED not dimmable	e.g. Soliris Smoove Uno and suitable light switch (on site)
Accessories (optional)	Tempura Quadra heating	• Not dimmable	Suitable switch (on site)

Hard wired (switch/control on site)

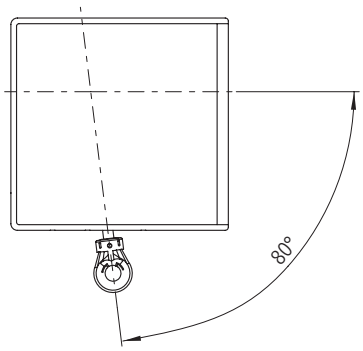
Product	Electronics	Hard wired control	Controls
Kubata	Kubata drive	• Awning switch for the awning drive	e.g. Double rocker switches (on site)
Kubata LED	Kubata drive and LED lighting	• Awning switch for the awning drive • Switch on site for the LED spotlights • LED power supply pack integrated into the cassette • LED not dimmable	e.g. Double rocker switch and suitable light switch (on site)
Accessories (optional)	Tempura Quadra heating	• Not dimmable	Suitable switch (on site)

Gear drive (optional)



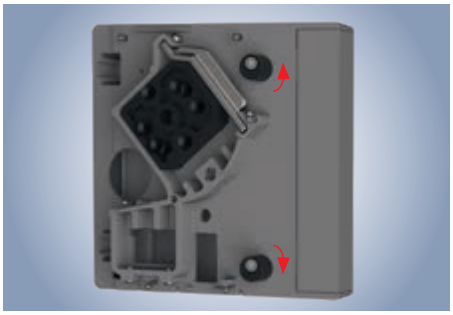
The Kubata can of course be extended and retracted using a gear handle too (with a max. width of 600 cm/max. projection of 350 cm). This option is recommended whenever it is hard to connect to an electrical power source on the site or if the awning is not frequently used.

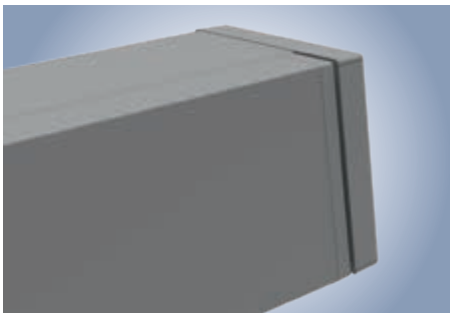
- The Kubata has a universal bevel gear system
- Tested according to DIN EN 14203
- Freewheel device when extended



Standard gear outlet

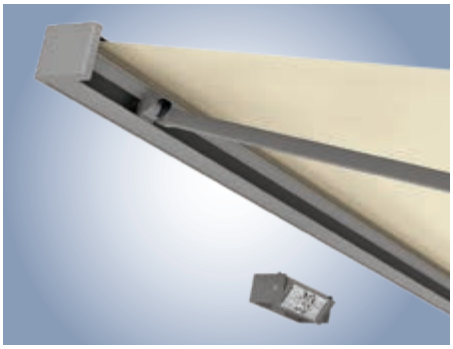
Regulating the front profile





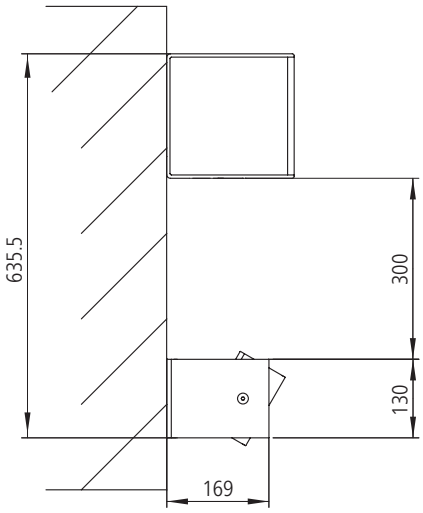
Two stop eccentric tappets are installed on each side of the Kubata.
They are used to regulate or adjust the closing position.
This gives the awning cassette a visually harmonious overall look.

Tempura Quadra heating system (option)

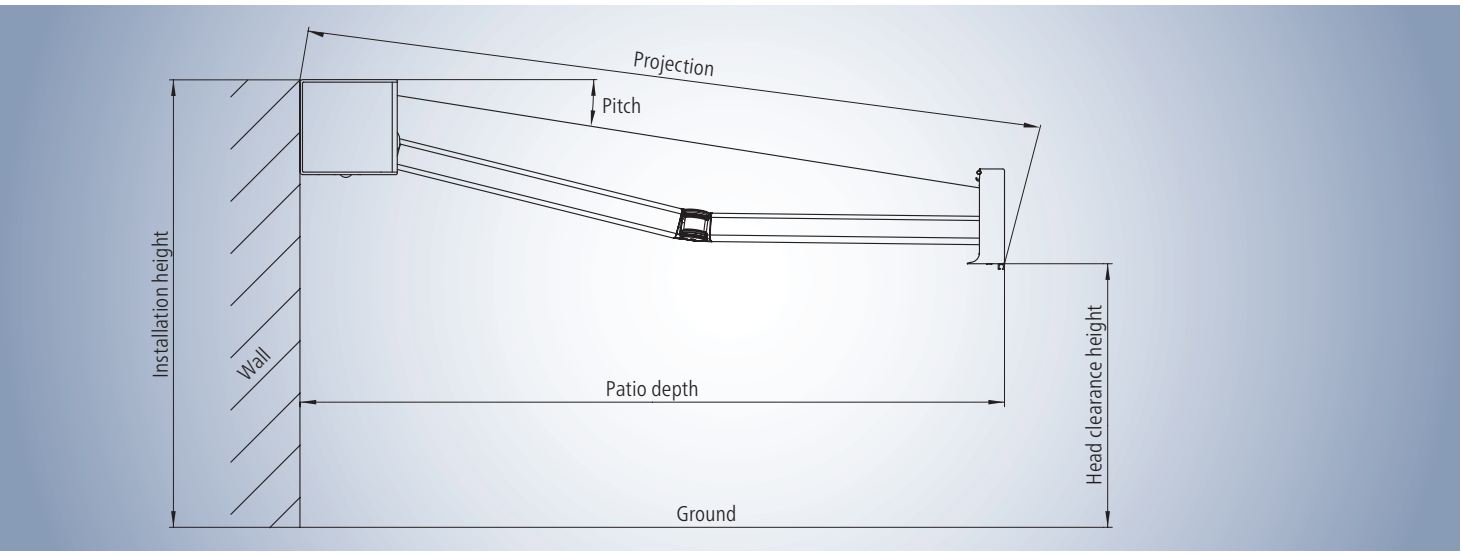


The perfect combination: Kubata with Tempura Quadra heating system and BiConnect

Please note:
The Tempura Quadra angle of pitch is restricted to 15° as standard (this restriction is to avoid the wall being heated up too much by the Tempura). The grub screw, which restricts the angle of pitch, can be removed if the Kubata is pitched up to 10° at the most. Then it is possible to adjust the Tempura Quadra's angle of pitch up to 30°.



Kubata Planning



Site measurements – determining the projection and head clearance height

- Find the projection by looking in the "Projection" table for the terrace depth.
- Using the projection from the table and the required angle of inclination, consult the "head clearance height" table for the head clearance height. This head clearance height refers to an installation height of 300 cm.
- Add/subtract the difference between 300 cm and the actual installation height to/from the head clearance height in the table.

Determining the projection

Pitch angle	Patio depth in cm					
	150	200	250	300	350	400
5°	170	220	270	320	370	400
15°	170	220	270	330	380	–
25°	180	240	290	350	400	–

Projection in cm (rounded figures)

This table can be used to find the awning projection for any given horizontal patio depth. Please note
that the awning projection is possible in 10 cm increments so this has to be rounded up or down.

Determining the head clearance height

Pitch angle	Projection in cm					
	150	200	250	300	350	400
5°	272	268	263	259	254	250
15°	246	233	220	207	194	181
25°	222	200	179	158	137	116

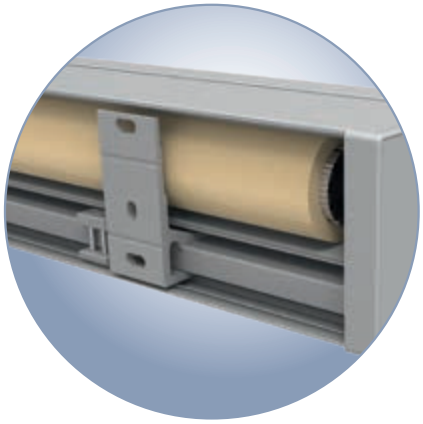
Head clearance height in cm (rounded figures)

This table is used to find the head clearance heights for various projections when the angle of pitch is 5°, 15° or 25°.
This table is based on the example of an installation height of 300 cm (edge of awning).

Wall bracket

Sizes and bracket recommendations

Wall mounting on pressure-resistant surface
Minimum number of required wall brackets so that the function of the awning is ensured, regardless of the mounting surface. Selection of the brackets using the weinor bracket overview and using the maximum extraction forces of the fixings used!



Width in cm	Diagonal in 10 cm steps													
	up to 150	160-200	210-250	260-300					310-350					360-400
				260	270	280	290	300	310	320	330	340	350	
up to 200	2													
201-250	2	2												
251-300	2	2	2											
301-350	2	2	2	2	2	2	2	2						
351-400	2	2	2	2	2	2	2	2	2	2	2	2	2	
401-450	2	2	2	2	2	2	2	2	2	2	2	2	2	2
451-500	3	3	3	3	3	3	3	2+1	2+1	2+1	2+1	2+1	2+1	2+1
501-550	3	3	3	3	3	3	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1
551-600	3	3	3	3	3	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1
601-650	3	3	3	3	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1
651-700	3	3	3	2+1	2+1	2+1	2+1	2+1						

Overlapping possible, observe size limits!

Observe size limits; unit must have X more width than projection:
– in the case of 1 x wall bracket 85 mm or 1 x wall bracket 260 mm per arm: X = 40 cm
– in the case of 2 x wall bracket 85 mm or 1 x wall bracket 295 mm per arm: X = 62 cm
– in the case of 2 x wall bracket 260 per arm: X = 95 cm

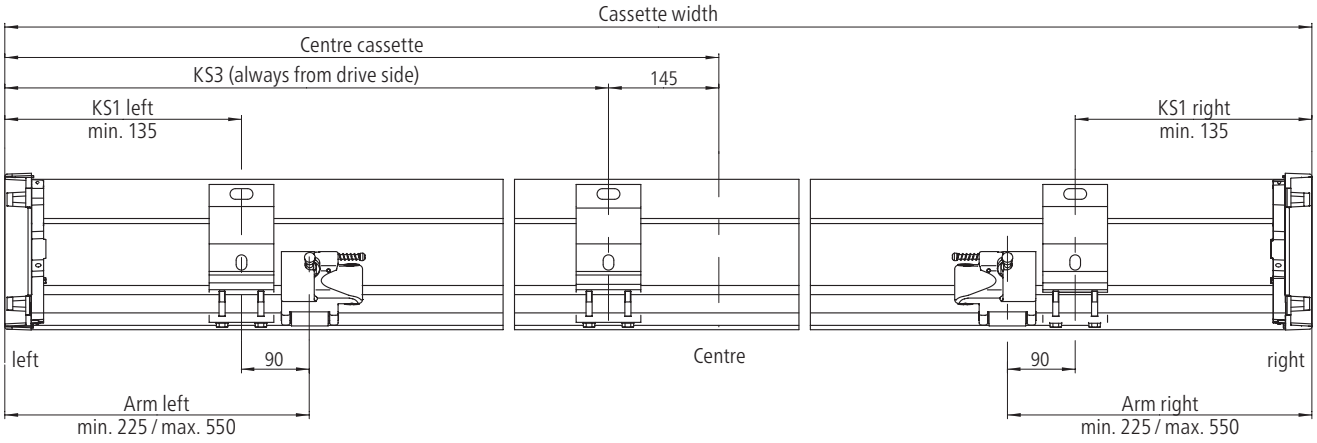
2 — 2 x wall bracket 85 mm
3 — 3 x wall bracket 85 mm (1 x as a central bracket)
2 — 2 x wall bracket 295 mm alternatively: 4 x wallbracket 85 mm
2 — 2 x wall bracket 260 mm
2+1 — 2 x wall bracket 295 mm + 1 x wall bracket 85 mm alternatively: 5 x wall bracket 85 mm (1 x as a central bracket)

Two brackets per arm required:
see gradations in table!

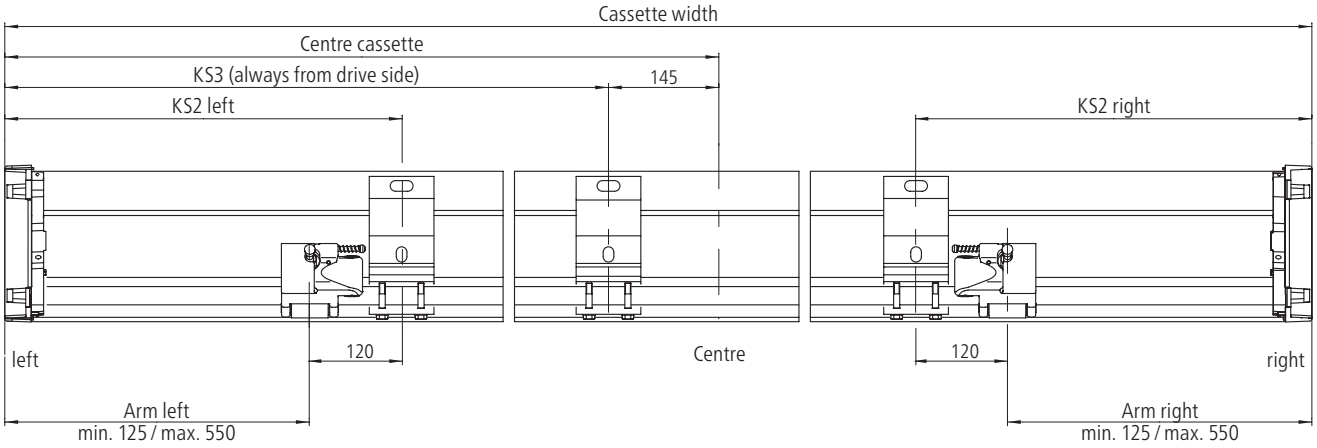
Use of central bracket necessary as of:
width > 450 cm

Position of wall brackets and Kubata cassette

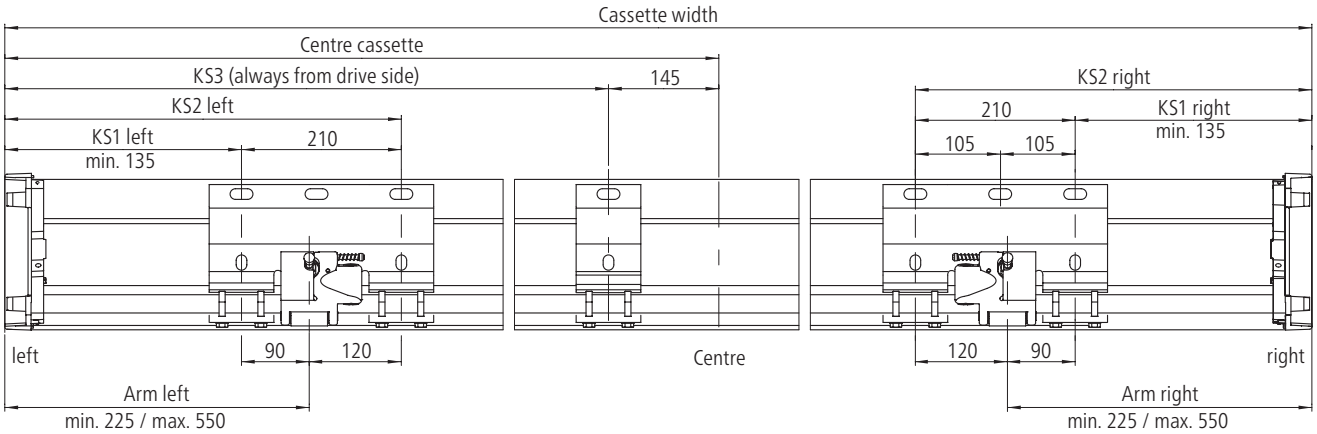
Wall bracket 85 mm outside (KS1)



Wall bracket 85 mm inside (KS2)



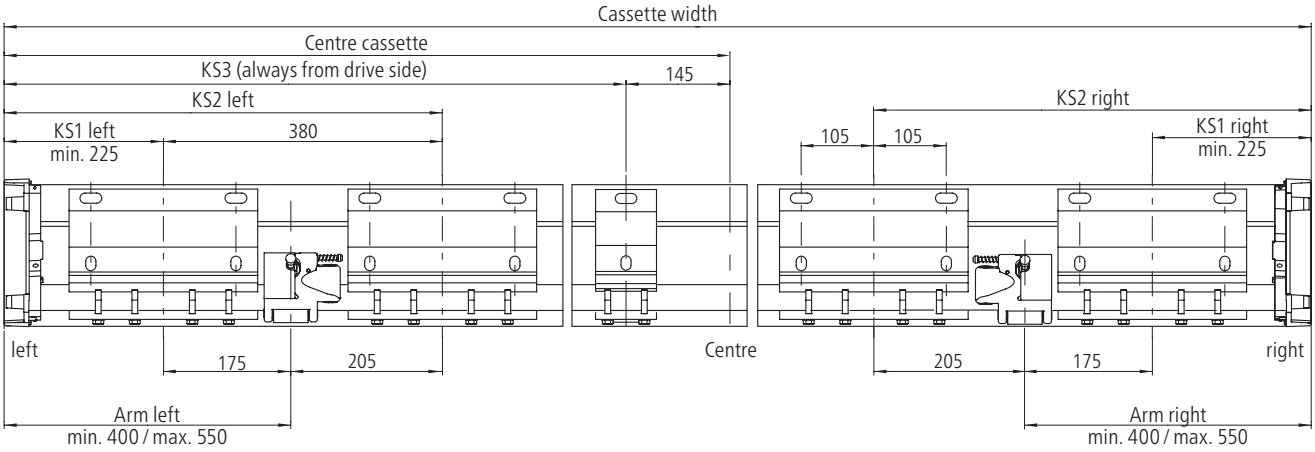
Wall bracket 295 mm



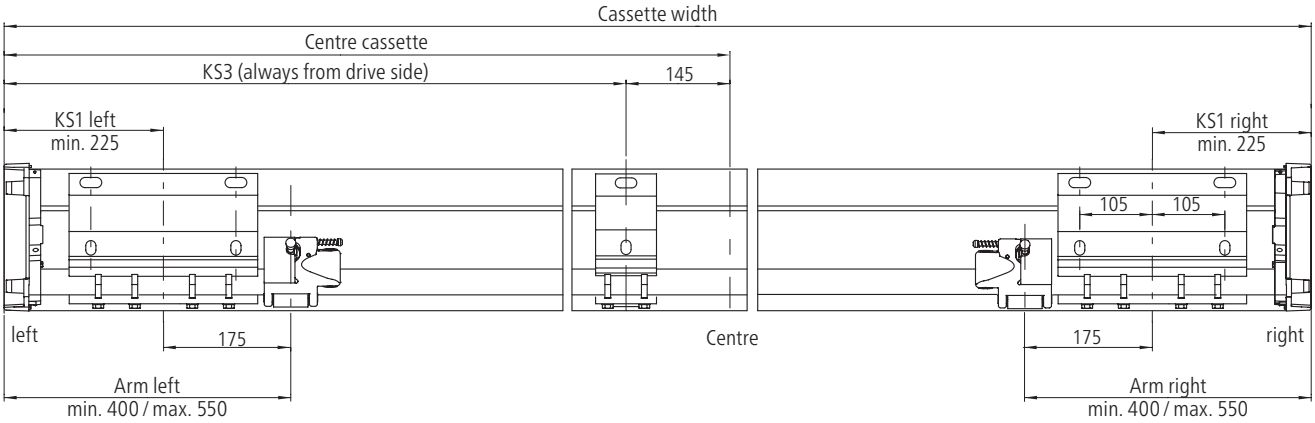
Notes:
KS1 = outside bracket
KS2 = inside bracket
KS3 = centre bracket

Position of wall brackets and Kubata cassette

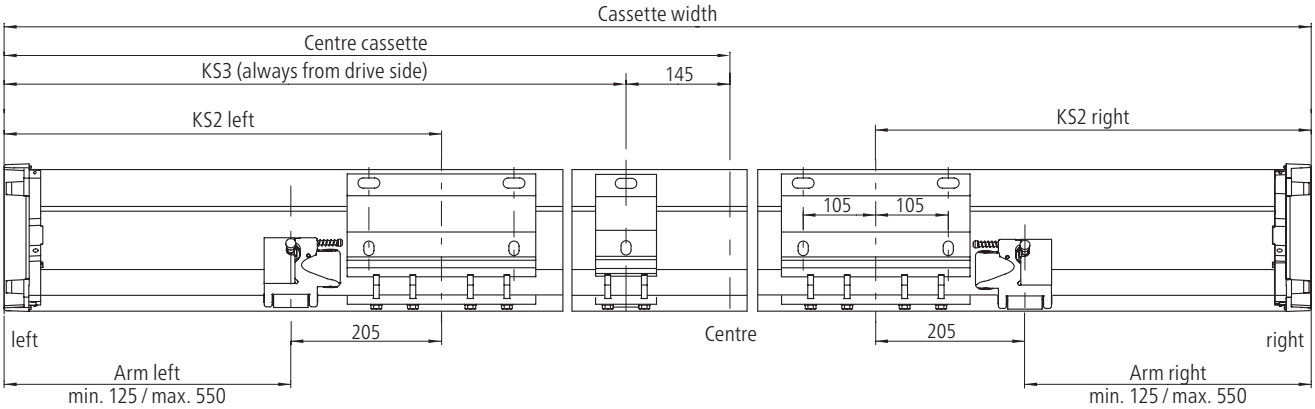
Wall bracket 260 mm on both sides (KS1 and KS2)



Wall bracket 260 mm outside (KS1)



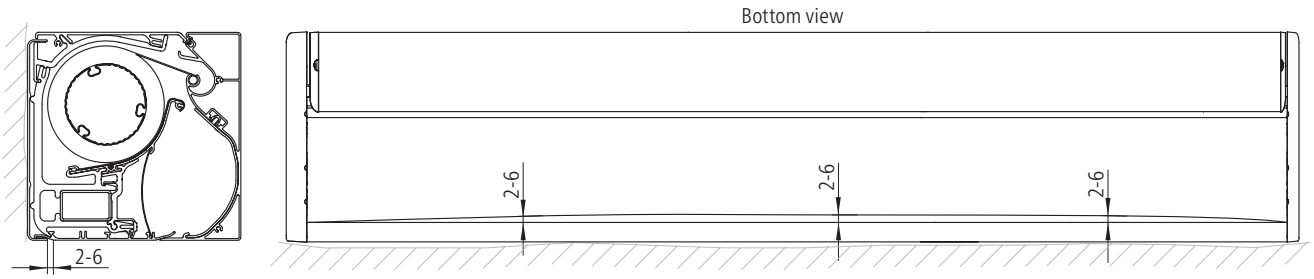
Wall bracket 260 mm inside (KS2)



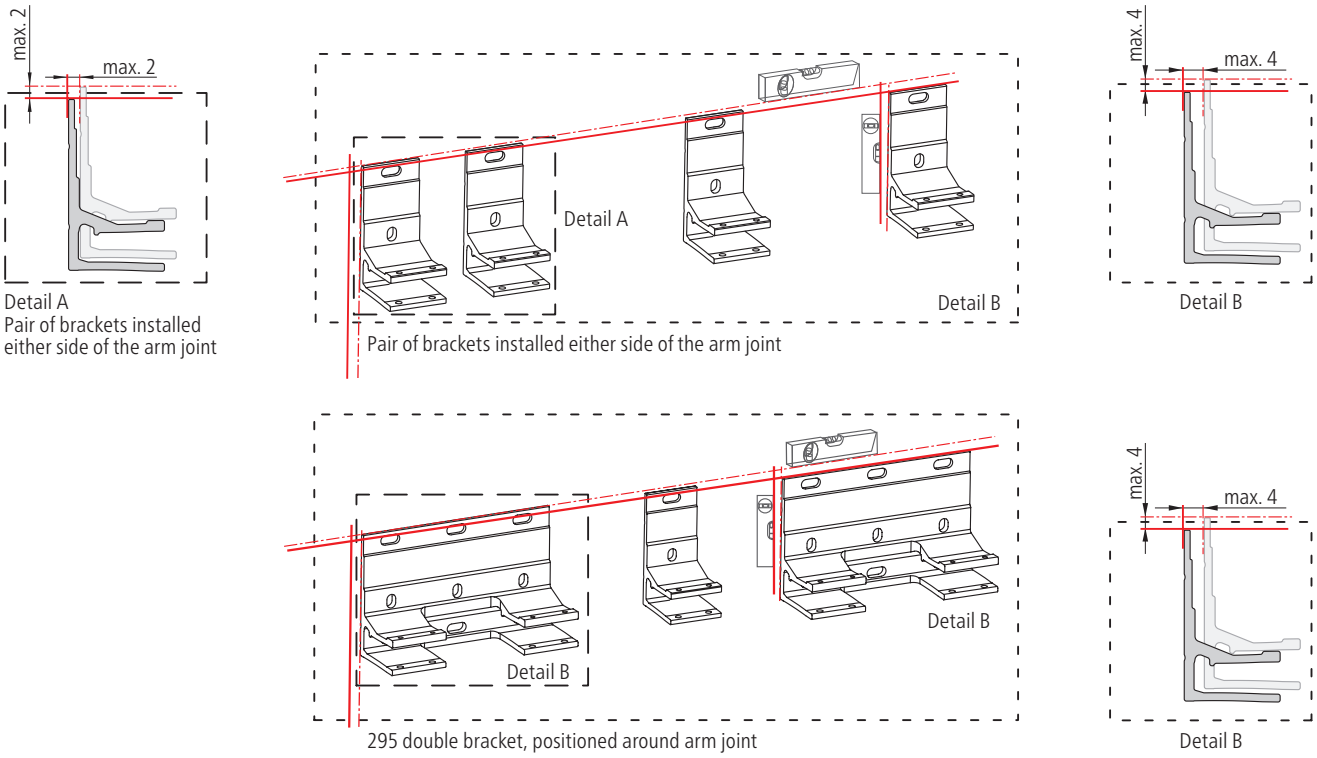
Notes:
KS1 = outside bracket
KS2 = inside bracket
KS3 = centre bracket

With the LED option only one 260 mm wall bracket per arm is possible.

Installation allowances

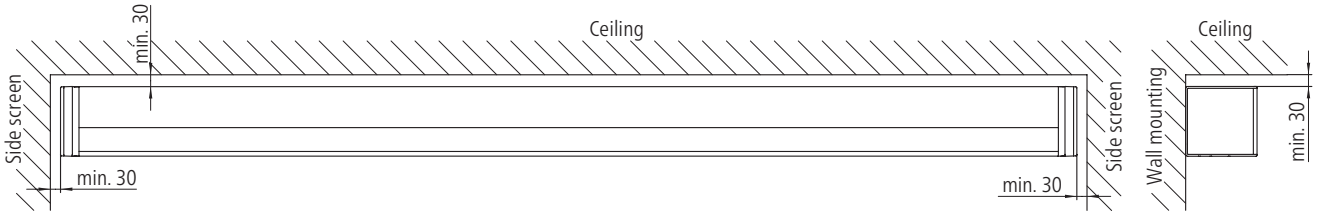


House walls are never totally straight. Which is why there is an automatic compensation function between the bottom profile and back plate with the Kubata. Up to 4 mm can be compensated for
as a result. This guarantees that the awning cassette is straight and the front profile closes perfectly as a result. A maximum 4 mm shift can be produced on the movable transition between the bottom profile and back plate using this function. It is necessary to align the cassette ideally.



Detail A: The tolerance of the brackets around the arm joint is a maximum of 2 mm.
Detail B: The outer brackets tolerance is a maximum of 4 mm.

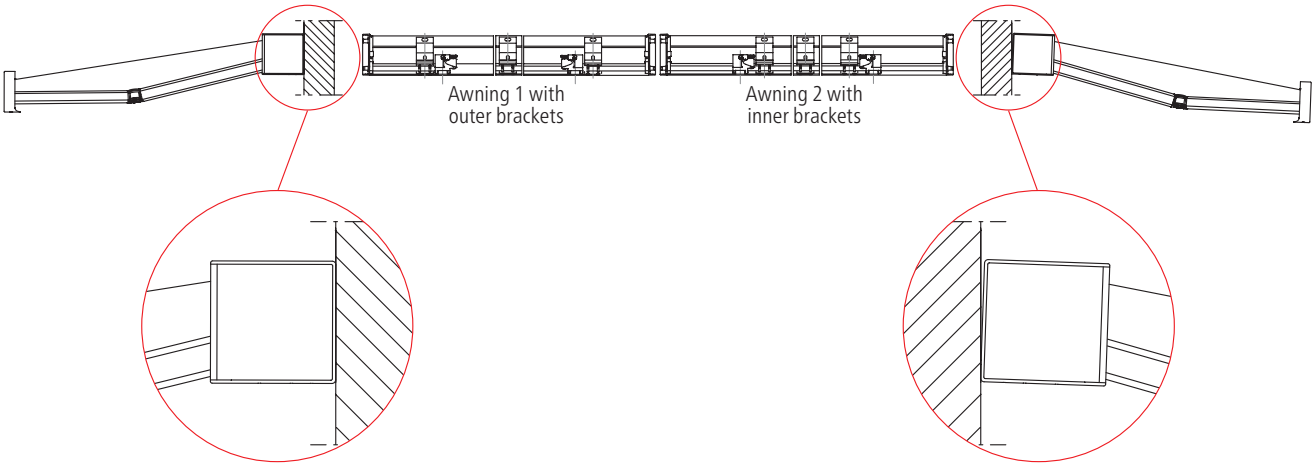
Minimum spacing distances for installation in the niche (wall mounting)



Installation in a row

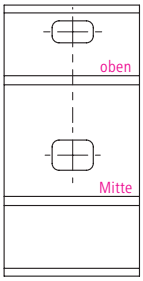
When installing the Kubata in a row, it should be ensured that the brackets of both awnings are installed either internally or externally. In this way, the housing closes flush onto the wall.

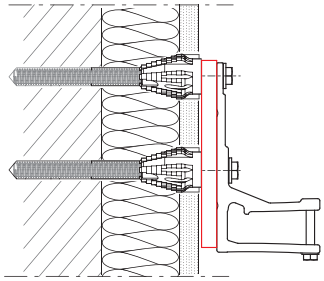
If an awning with inner brackets and one with outer brackets is installed, a slight offset of the housing can occur when retracted, depending on the arm position and the surface.



Mounting on pressure-resistant/non-pressure-resistant surface

Punched hole A (used when mounting with 100 x 180 x 15 mm base plates)
Punched hole A is the standard version and is used for pressure-resistant surfaces. In combination with the 100 x 180 x 15 mm optional base plates for reinforcement, this version can also be used for non-pressure-resistant surfaces (insulated facades, EIFS).





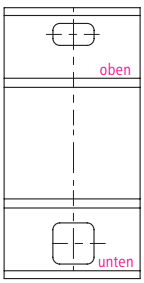
Wall bracket with base plate

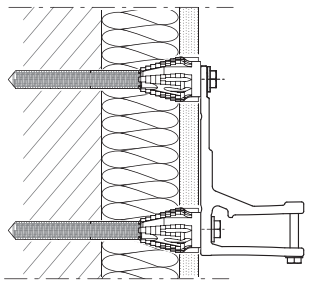
Wall bracket 85 mm

Ceiling bracket

Rafter bracket

Punched hole B (used when mounting without 100 x 180 x 15 mm base plates)
Punched hole B is required on a non-pressure-resistant surface without 100 x 180 x 15 mm base plate.
It is not suitable for mounting ceiling brackets, ceiling angles, rafter brackets and mounting plates.



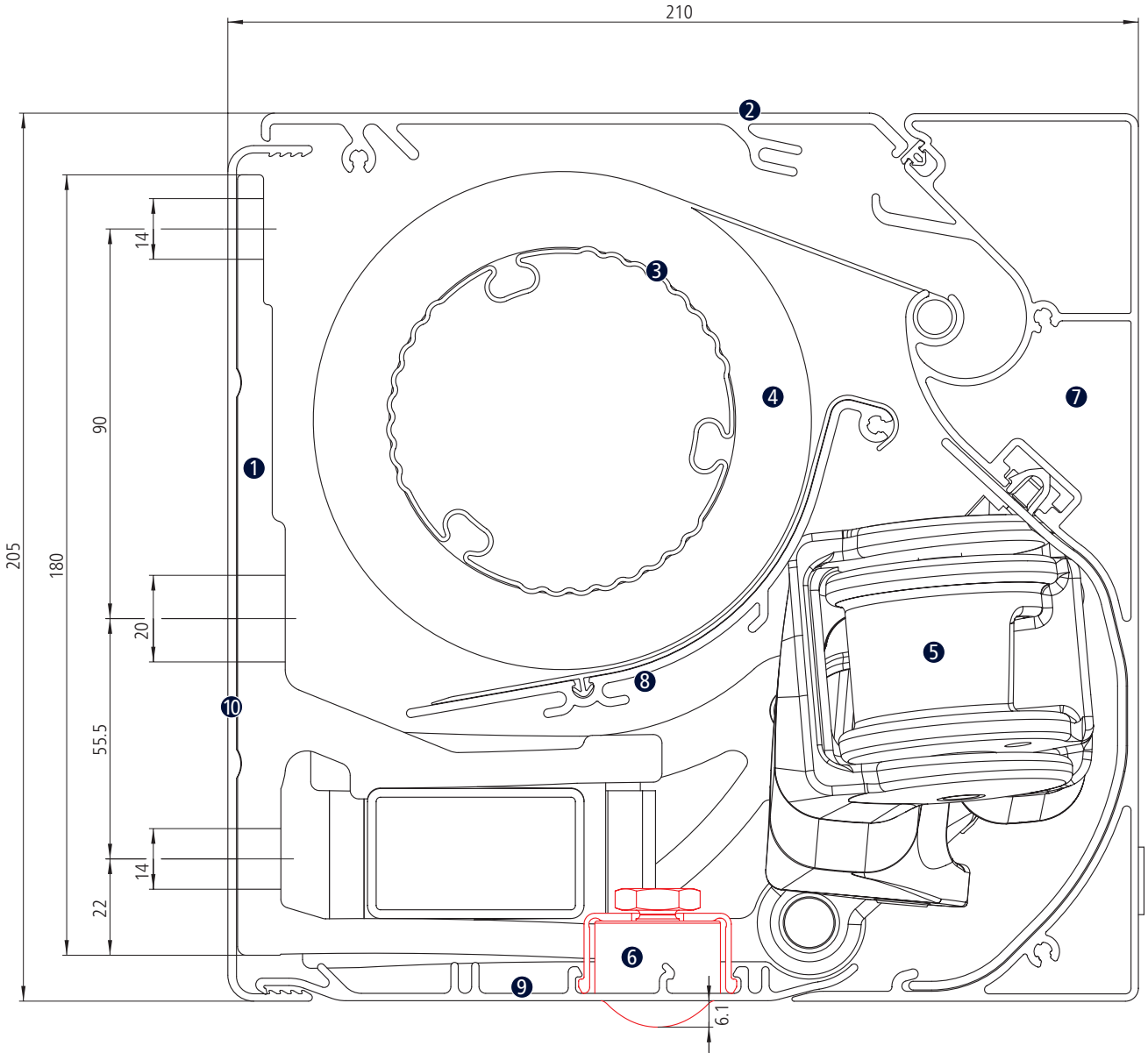


Wall bracket without base plate

Wall bracket 85 mm

Cross-section

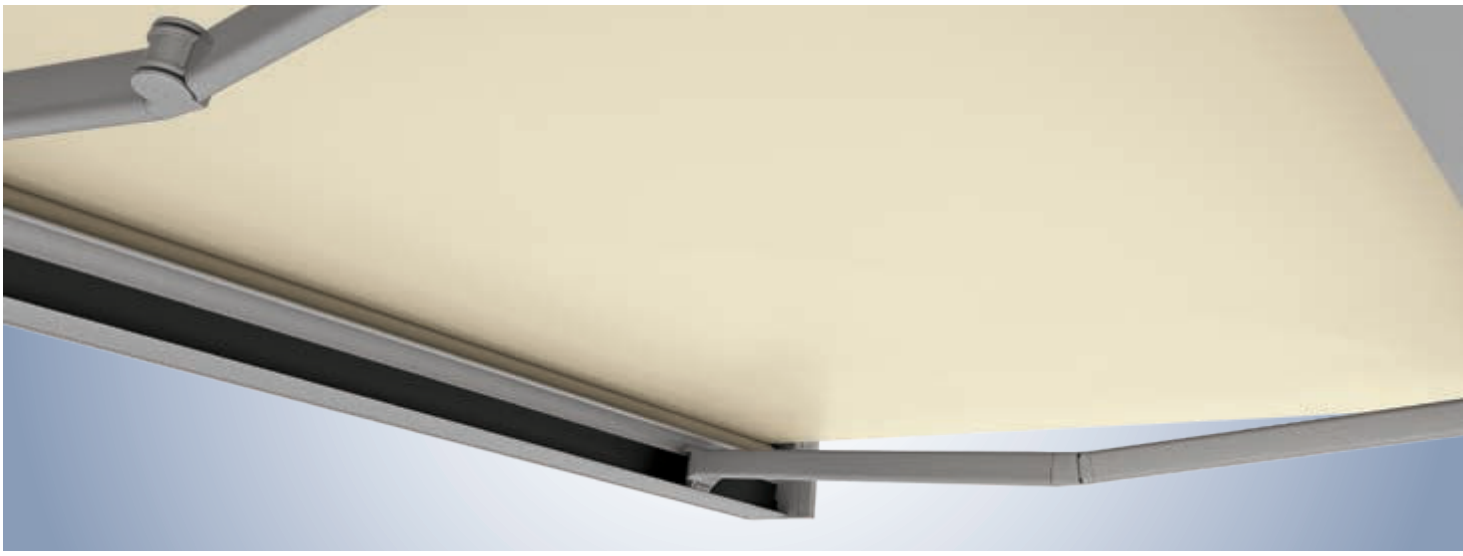
Kubata LED



1. Wall bracket
2. Roof profile
3. Fabric roller bearing
4. Fabric rolls
5. Spring-tensioned arm
6. LED spotlight
7. Front profile
8. Support profile
9. Bottom profile
10. Back profile

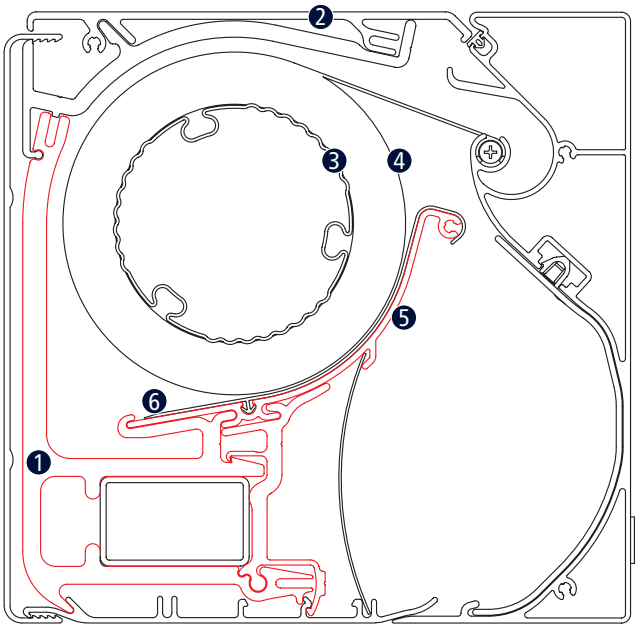
Figures are in mm

Kubata Support Profile

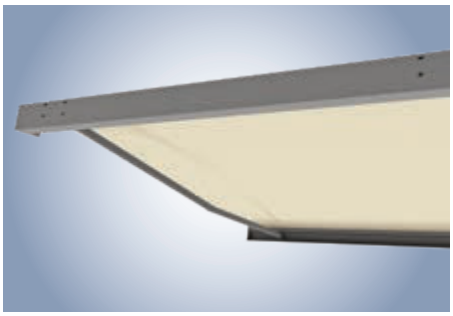


Kubata: support profile across the whole width of the awning

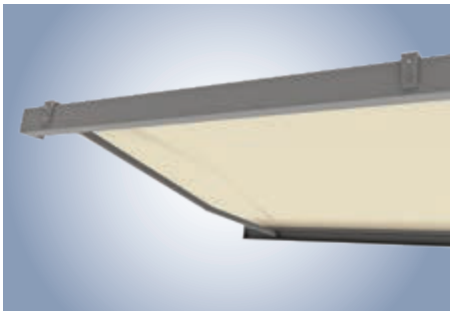
The weinor Opti-Flow-System® and support profile across the whole width of the awning ensure optimum fabric positioning.



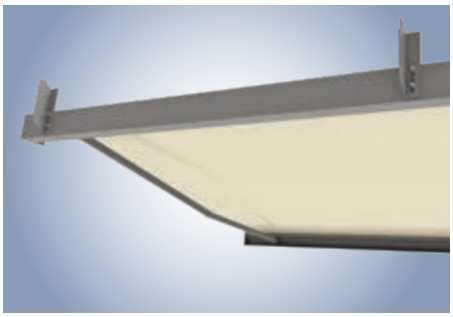
1. Housing bracket
2. Cassette
3. Fabric roller bearing
4. Fabric rolls
5. Support profile
6. Glide profile



Kubata centre bracket: wall mounting (rear view)



Kubata centre bracket: roof mounting (rear view)

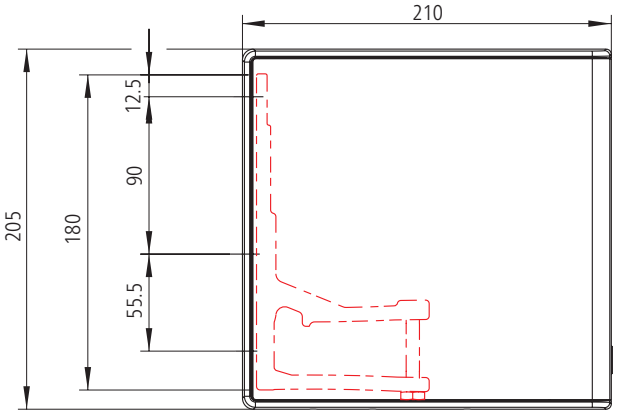


Kubata centre bracket: rafter mounting with rafter bracket (rear view)

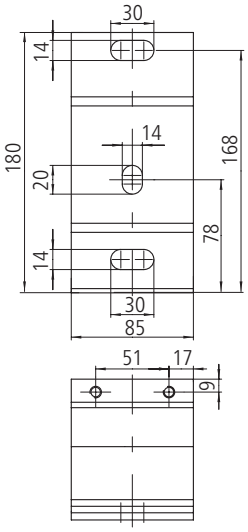
Kubata Installation

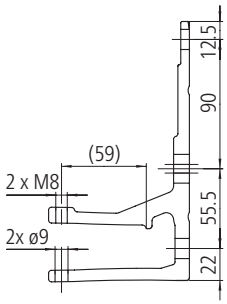
Wall mounting – brackets

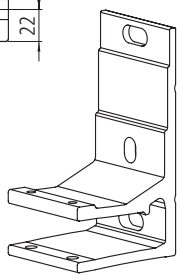
Wall bracket



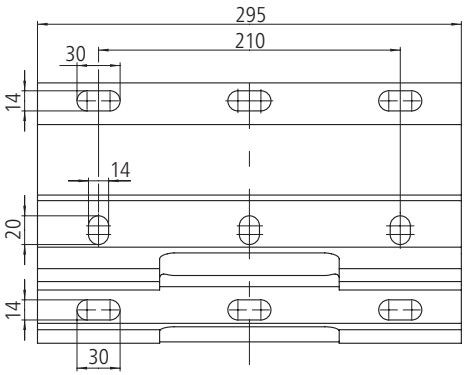
85 mm wall bracket

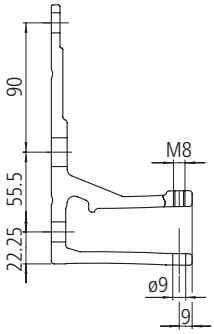


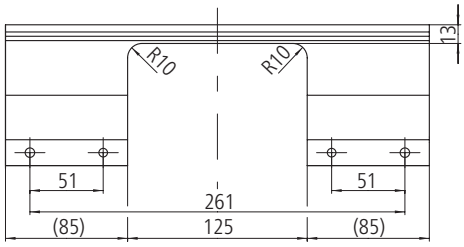


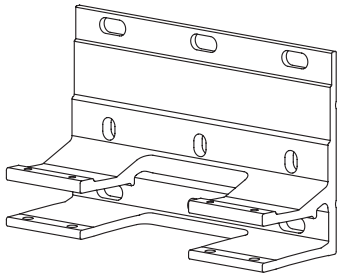


295 mm wall bracket (arm enclosure)



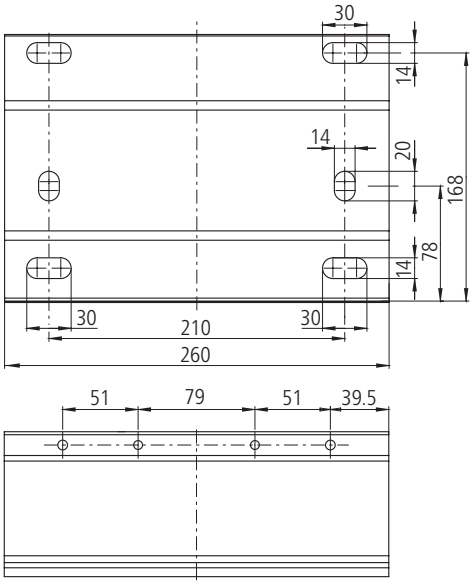


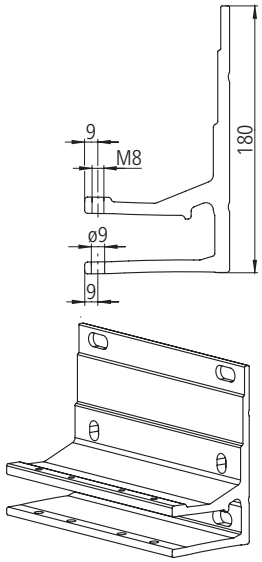




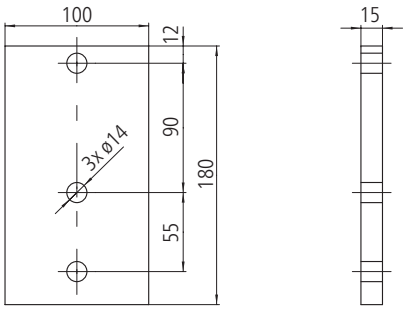
Wall mounting – brackets

260 mm wall bracket

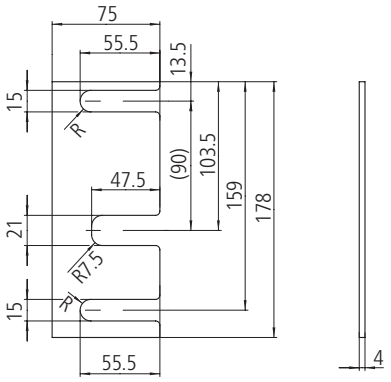


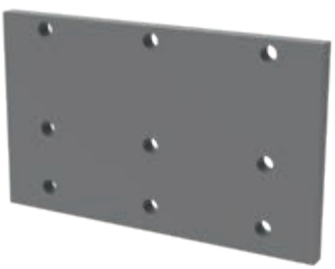


Baseplate (100 x 180 x 15 mm)

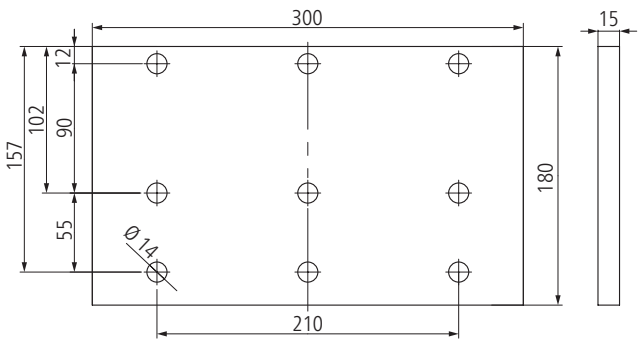


Baseplate (75 x 178 x 4 mm)





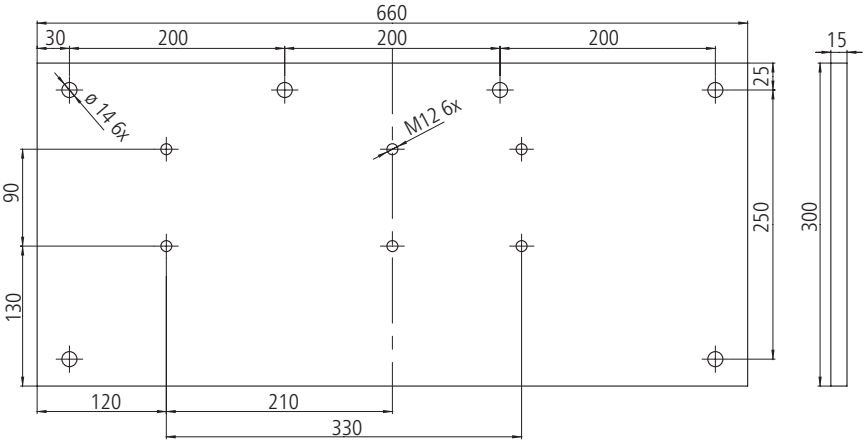
Baseplate (300 x 180 x 15 mm)



Wall mounting – mounting plates

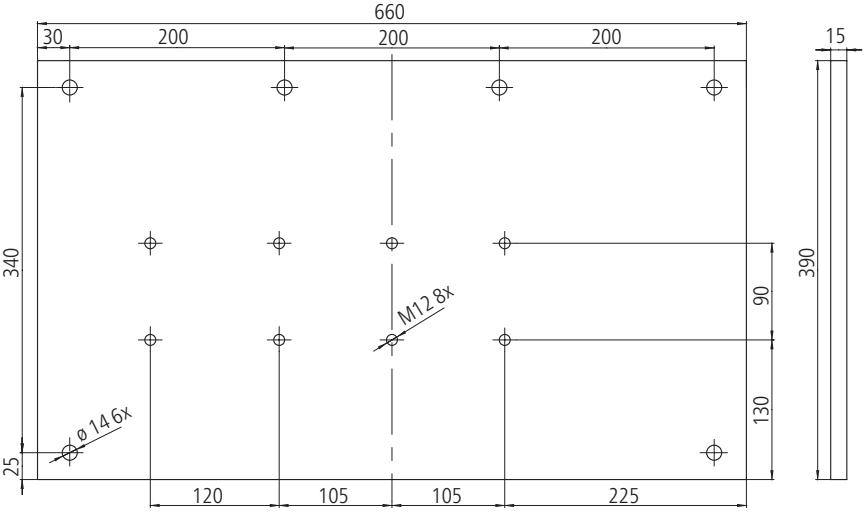
Mounting plate 660 x 300 x 15 mm*

Position of the mounting plates using the Kubata 500 x 300 cm** as an example.

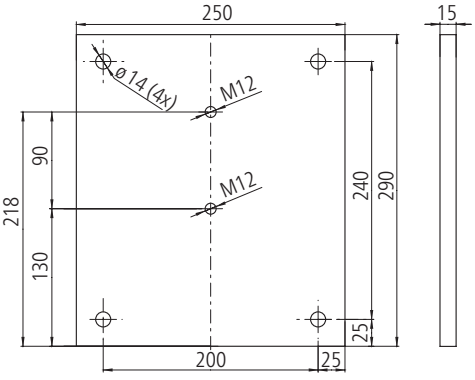


Mounting plate 660 x 390 x 15 mm*

Position of the mounting plates using the Kubata 500 x 300 cm** as an example.



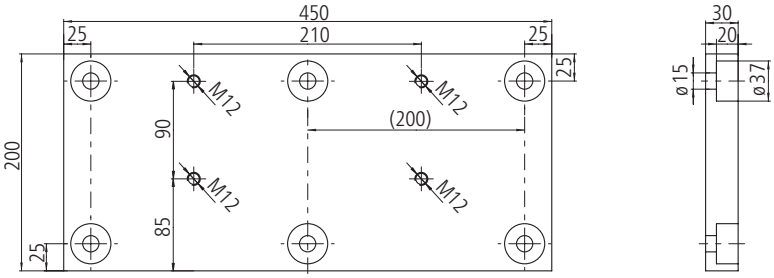
Mounting plate 250 x 290 x 15 mm



* Mounting plate also possible with 2 wall brackets 85 mm.
**Depending on the width of the awning, the positioning of the mounting plates may vary.

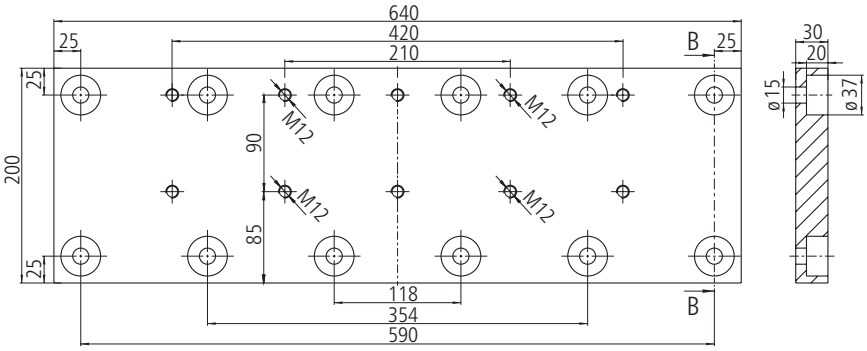
Wall mounting – mounting plates

Mounting plate 450 x 200 x 30 mm*



Position of the mounting plates using the Kubata 500 x 300 cm** as an example.

Mounting plate 640 x 200 x 30 mm*

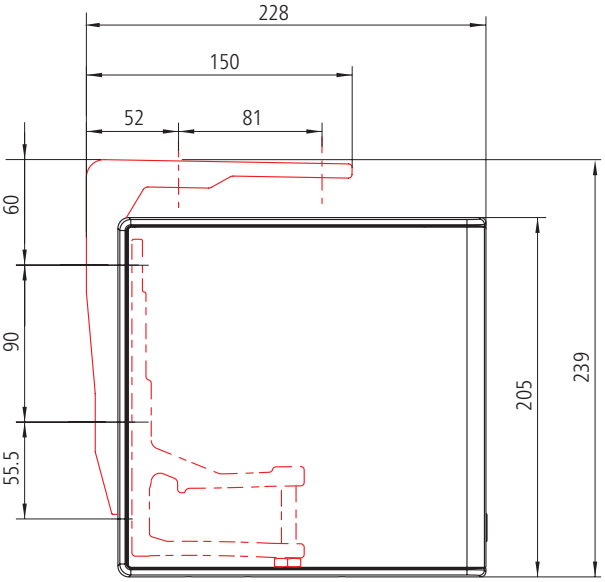


Position of the mounting plates using the Kubata 500 x 300 cm** as an example.

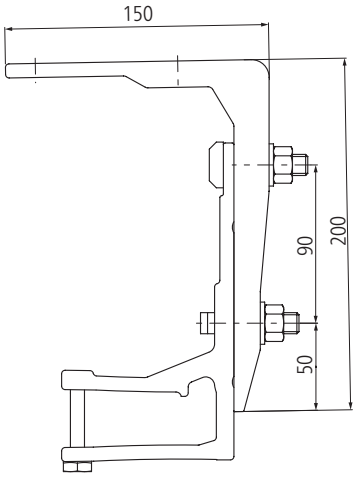
* Mounting plate also possible with 2 wall brackets 85 mm.
**Depending on the width of the awning, the positioning of the mounting plates may vary.

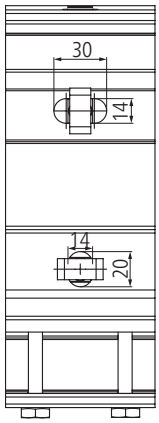
Ceiling mounting

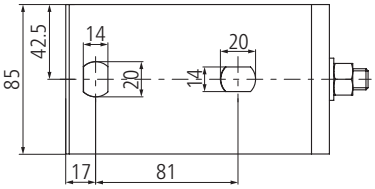
Ceiling bracket



Ceiling bracket

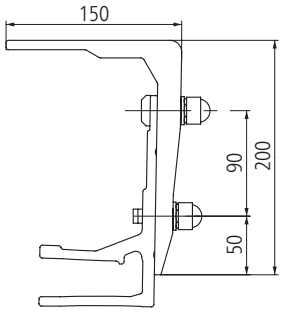


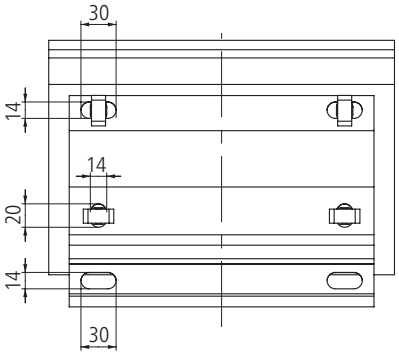


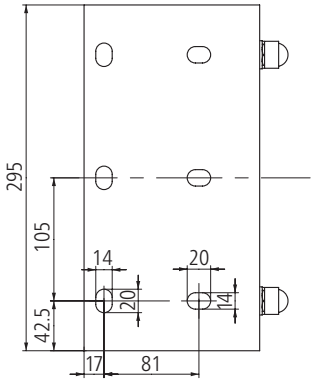


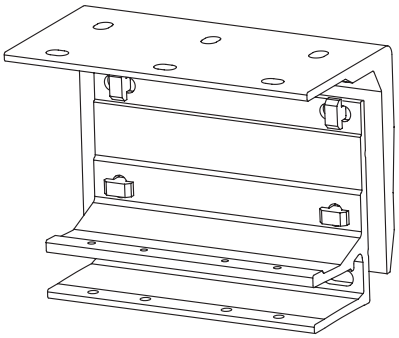
Ceiling mounting

Ceiling bracket 295 mm with
wall bracket 260 mm

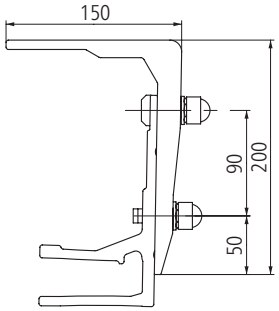


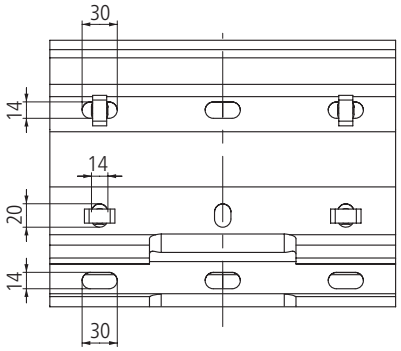


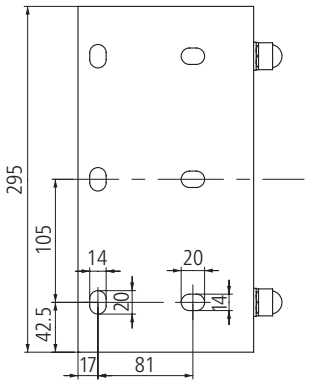


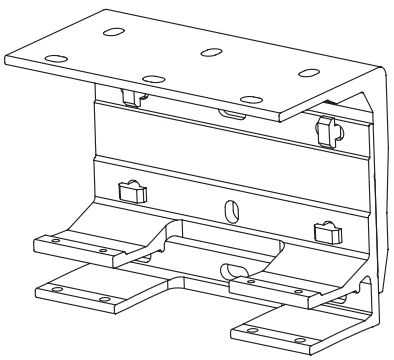


Ceiling bracket 295 mm with
wall bracket 295 mm

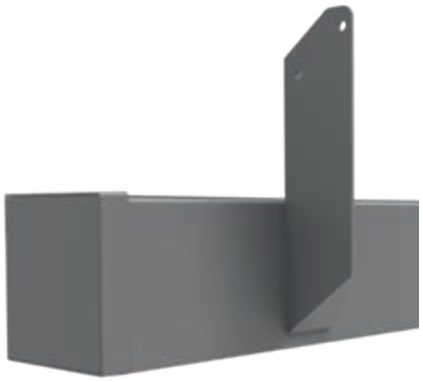




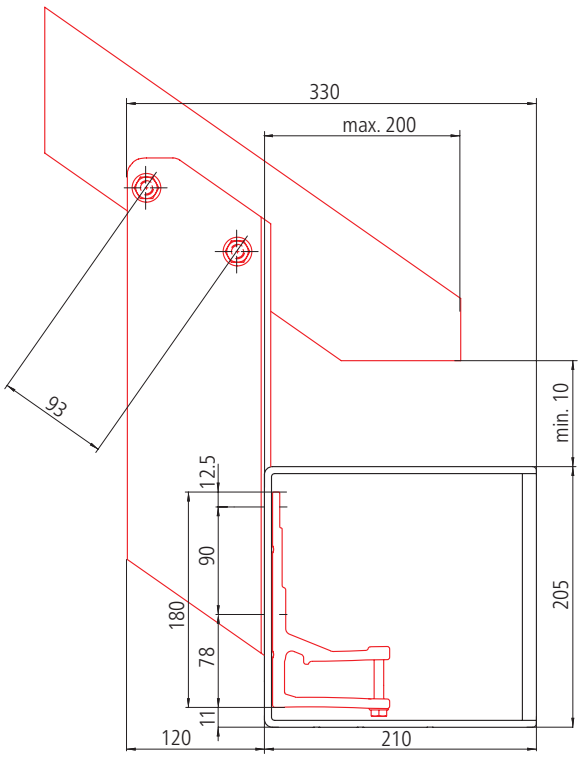


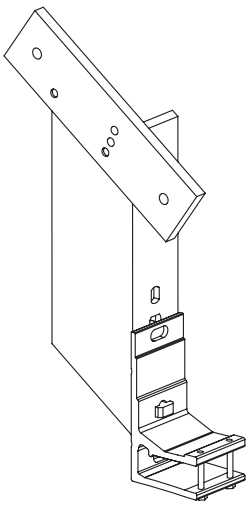


Rafter mounting



Rafter bracket



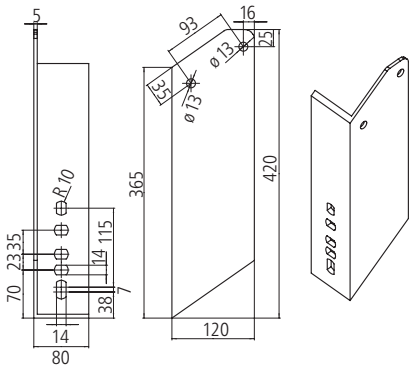


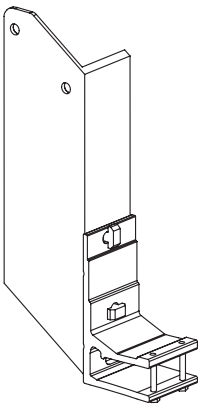
Rafter bracket with mounting plate

weinor recommends using a mounting plate for rafter brackets

Rafter bracket and wall bracket, without mounting plate

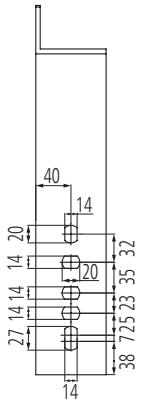
Rafter bracket (right)

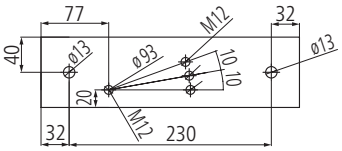




Rafter bracket without mounting plate

Mounting plate for
294 x 80 x 15 mm rafter bracket





Extraction forces

The extraction force is the force with which the awning weight and the wind load pull on each upper and/or front fixing. The tables indicate this force in N per upper fixing. It varies depending on the awning size and the wall bracket / mounting plate used.

Selecting the wall bracket and anchoring system:

1. Consult relevant table for extraction force per fixing for selected awning size.

2. Select a wall bracket / mounting plate for which there is fixing material which can resist the indicated extraction force. Remember to take into account the spacing, the area which will be damaged if the fixing breaks out, the type of fixing material used and the mounting base.

Use the separate bracket overview for an exact planning of the awning attachment.

Extraction force in N per upper fixing for wall mounting

Brackets **without** mounting plates

Wall mounting with up to 200 mm facing (non-pressure-resistant surface)

Please observe the width to projection dimension limits for number of brackets per arm, as the width to projection ratio decreases when two brackets are used per arm.

1 x wall bracket 85 mm per arm or
2 x wall bracket 85 mm per arm
Number of fixings:
4 or 8

1 x wall bracket 260 mm per arm
or
2 x wall bracket 260 mm per arm
Number of fixings:
8 or 16

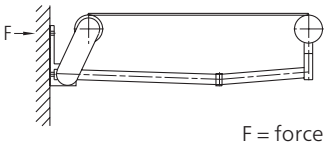
1 x wall bracket 295 mm per arm
Number of fixings: 12

Please note:
from a width of 451 cm additional 1 x wall bracket 85 mm as centre bracket is required.
This means an additional 2 fixings will be required always.

Taking the width to projection dimension limits into account, two brackets can also be used per arm instead of one bracket per arm.
Here, the indicated extraction force halves!
Does not apply to red-bordered cells and 295 mm wall bracket!

In the event of installation on a pressure-resistant surface, the indicated extraction force decreases (see bracket overview)

Width in cm	Projection in cm					
	150	200	250	300	350	400
200	1564					
	782					
	521					
250	1854	2710				
	927	1355				
	618	903				
300	2145	3134	4330			
	1073	1567	2165			
	715	1045	1443			
350	2436	3559	4909	6549		
	1218	1779	2455	3274		
	812	1186	1636	2183		
400	2727	3984	5489	7305	4603	
	1364	1992	2745	3653	2302	
	909	1328	1830	2435	3069	
450	3018	4408	6069	8062	5081	7089
	1509	2204	3035	4031	2540	3545
	1006	1469	2023	2687	3387	4726
500	3309	4833	6649	4409	6199	7762
	1654	2416	3324	2205	3099	3881
	1103	1611	2216	2939	4132	5175
550	3600	5257	7229	4787	6742	8435
	1800	2629	3614	2394	3371	4217
	1200	1752	2410	3192	4495	5623
600	3890	5682	7809	5743	7286	9107
	1945	2841	3904	2871	3643	4554
	1297	1894	2603	3828	4857	6072
650	4181	6107	8388	6170	7829	9780
	2091	3053	4194	3085	3915	4890
	1394	2036	2796	4114	5219	6520
700	4472	6531	9928	6598		
	2236	3266	4964	3299		
	1491	2177	3309	4399		



F = force

Extraction forces

Extraction force in N per upper fixing for wall mounting
Brackets **with** mounting plates
Wall mounting with up to 200 mm facing (non-pressure-resistant surface)
Please observe the width to projection dimension limits for number of brackets per arm, as the width to projection ratio decreases when two brackets are used per arm.

1 x mounting plate 250 x 290 x 15 mm
incl. 1 x wall bracket 85 mm per arm
Number of fixings: 8

1 x mounting plate 450 x 200 x 30 mm
incl. 1 x wall bracket 85 mm per arm
or
1 x mounting plate 450 x 200 x 30 mm
incl. 2 x wall bracket 85 mm per arm
Number of fixings: 12

1 x mounting plate 640 x 200 x 30 mm
incl. 1 x wall bracket 85 mm per arm
or
1 x mounting plate 640 x 200 x 30 mm
incl. 2 x wall bracket 85 mm per arm
Number of fixings: 24

1 x mounting plate 660 x 300 x 15 mm
incl. 1 x wall bracket 85 mm per arm
or
1 x mounting plate 660 x 300 x 15 mm
incl. 2 x wall bracket 85 mm per arm
Number of fixings: 12

1 x mounting plate 660 x 390 x 15 mm
incl. 1 x wall bracket 85 mm per arm
or
1 x mounting plate 660 x 390 x 15 mm
incl. 2 x wall bracket 85 mm per arm
Number of fixings: 12

Please note:
from a width of 451 cm additional
– for mounting plates with a thickness of **15 mm**
1 x wall bracket 85 mm incl.
1 x shim plate 100 x 180 x 15 mm
as central bracket required.
– for mounting plates with a thickness of **30 mm**
1 x wall bracket 85 mm incl.
2 x shim plate 100 x 180 x 15 mm
as central bracket required.
This means an additional 2 fixings will be required always.

Taking the width to projection dimension limits into account, two brackets can also be used per arm instead of one bracket per arm.
Does not apply to 250 x 290 x 15 mm mounting plate! This has no impact on the extraction force!
In the case of red-bordered cells, the bracket sub-assemblies are equipped with two brackets per arm.

Width in cm	Projection in cm					
	150	200	250	300	350	400
200	148					
	320					
	160					
	142					
	105					
250	176	257				
	380	553				
	190	276				
	169	246				
	124	181				
300	204	297	409			
	439	639	880			
	220	320	440			
	195	285	393			
	144	209	289			
350	231	337	464	618		
	499	726	998	1329		
	249	363	499	664		
	222	323	446	594		
	163	238	328	436		
400	259	377	519	690		
	558	812	1116	1482	1865	
	279	406	558	741	932	
	248	362	498	662	834	
	183	266	366	487	613	
450	286	417	574	761		
	618	899	1234	1636	2058	2869
	309	449	617	818	1029	1434
	275	401	551	731	920	1284
	202	295	405	537	677	944
500	314	457	628			
	677	985	1352	1789	2512	3141
	339	493	676	894	1256	1571
	301	439	603	799	1123	1405
	222	323	444	588	826	1033
550	341	498	683			
	737	1072	1469	1942	2732	3413
	368	536	735	971	1366	1707
	328	478	656	868	1221	1527
	241	351	482	638	898	1123
600	369	538	738			
	796	1158	1587	2331	2952	3685
	398	579	794	1165	1476	1843
	354	516	709	1041	1320	1649
	260	380	521	766	971	1212
650	397	578	793			
	856	1245	1705	2504	3172	3957
	428	622	853	1252	1586	1979
	381	555	761	1119	1418	1771
	280	408	560	823	1043	1302
700	424	618	938			
	915	1331	2019	2678		
	458	666	1009	1339		
	407	593	901	1196		
	299	436	662	880		

In the event of installation on a pressure-resistant surface, the indicated extraction force decreases (see bracket overview)

Extraction forces

Extraction force in N per front fixing for ceiling mounting

Please observe the width to projection dimension limits for number of brackets per arm, as the width to projection ratio decreases when two brackets are used per arm.

1 x ceiling bracket 85 mm incl.
1 x wall bracket 85 mm per arm
or
2 x ceiling bracket 85 mm incl.
2 x wall bracket 85 mm per arm
Number of fixings:
4 or 8

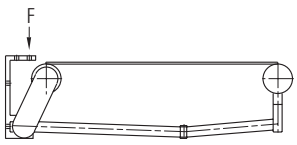
1 x ceiling bracket 295 mm incl.
1 x wall bracket 260 mm per arm
or
2 x ceiling bracket 295 mm incl.
2 x wall bracket 260 mm per arm
Number of fixings:
12 or 24

1 x ceiling bracket 295 mm incl.
1 x wall bracket 295 mm per arm
Number of fixings: 12

Please note:
from a width of 451 cm additional
1 x ceiling bracket 85 mm incl.
1 x wall bracket 85 mm required.
This means an additional 2 fixings will be required always.

Taking the width to projection dimension limits into account, two brackets can also be used per arm instead of one bracket per arm.
Here, the indicated extraction force halves!
Does not apply to red-bordered cells and combination of wall bracket 295 mm with ceiling bracket 295 mm!

Width in cm	Projection in cm					
	150	200	250	300	350	400
200	1175					
	399					
	399					
250	1388	1996				
	470	673				
	470	672				
300	1601	2303	3155			
	541	775	1059			
	541	775	1059			
350	1814	2611	3573	4745		
	612	878	1199	1589		
	612	877	1198	1589		
400	2027	2918	3991	5289	3331	
	683	980	1338	1770	1118	
	683	980	1337	1770	2224	
450	2240	3226	4409	5832	3673	5099
	754	1083	1477	1952	1232	1707
	754	1082	1477	1951	2453	3403
500	2375	3454	4745	3167	4433	5553
	814	1174	1604	1068	1490	1864
	813	1173	1604	2120	2964	3711
550	2582	3755	5156	3437	4820	6032
	884	1275	1743	1159	1620	2024
	883	1275	1742	2301	3222	4031
600	2789	4057	5568	4103	5206	6511
	954	1377	1881	1381	1749	2184
	954	1377	1881	2745	3480	4351
650	2996	4358	5980	4407	5593	6990
	1024	1479	2020	1483	1878	2344
	1024	1478	2019	2948	3738	4670
700	3203	4659	7042	4711		
	1094	1580	2375	1584		
	1094	1580	2374	3151		



F = force

Shear forces

Shear forces in N per fixing for rafter mounting

Please observe the width to projection dimension limits for number of brackets per arm, as the width to projection ratio decreases when two brackets are used per arm.

Rafter brackets are available as both left and right handed

1x rafter bracket incl.
1 x wall bracket 85 mm per arm
or
2 x rafter bracket incl.
2 x wall bracket 85 mm per arm
Applies to two brackets per arm on a rafter.
or
2 x rafter bracket incl.
2 x wall bracket 85 mm per arm
Applies to two brackets per arm, each with separate rafters.

1 x rafter bracket with
1 x mounting plate incl.
1 x wall bracket 85 mm per arm
or
2 x rafter bracket with
2 x mounting plate incl.
2 x wall bracket 85 mm per arm
Applies to two brackets per arm on a rafter.
or
2 x rafter bracket with
2 x mounting plate incl.
2 x wall bracket 85 mm per arm
Applies to two brackets per arm, each with separate rafters.

Please note:
from a width of 451 cm additional
1 x rafter bracket incl.
1 x wall bracket 85 mm
as central bracket required.

Taking the width to projection dimension limits into account, two brackets can also be used per arm instead of one bracket per arm.
Here, the indicated extraction force halves!
Applies only in the case of two brackets per arm on separate rafters respectively!
If two brackets per arm are mounted on one rafter, the shear force does not decrease!
weinor recommends the use of rafter brackets with mounting plate!
In the case of rafter mounting, the fixings are included in the order.

Width in cm	Projection in cm					
	150	200	250	300	350	400
200	1635					
	746					
250	1932	2762				
	876	1215				
300	2230	3188	4348			
	1007	1398	1870			
350	2527	3615	4924	6515		
	1138	1581	2114	2762		
400	2824	4042	5501	7262	8992	
	1269	1765	2358	3076	4496	
					3712	
					1856	
450	3122	4468	6077	8009	9922	13803
	1400	1948	2602	3389	4961	6901
					4094	5666
					2047	2833
500	3342	4815	6572	8604	12059	15082
	1454	2052	2765	4302	6029	7541
				3550	4948	6173
				1775	2474	3086
550	3633	5236	7143	9340	13114	16387
	1579	2229	3003	4670	6557	8193
				3852	5379	6705
				1926	2689	3352
600	3924	5656	7713	11187	14169	17691
	1704	2406	3241	5593	7084	8845
				4603	5810	7237
				2301	2905	3618
650	4216	6077	8283	12018	15224	18996
	1829	2584	3479	6009	7612	9498
				4944	6241	7769
				2472	3120	3884
700	4507	6497	9776	12850		
	1954	2761	4090	6425		
				5284		
				2642