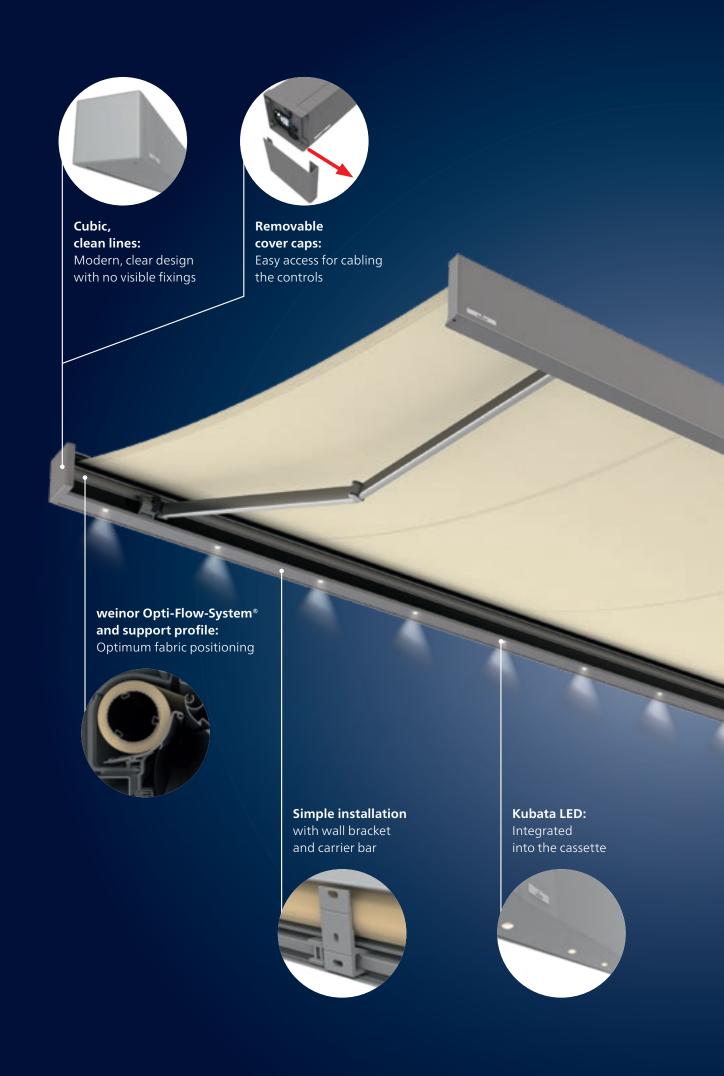


Cassette awning

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.



Kubata Highlights





Reliable drainage: Rainwater is drained off in a controlled way

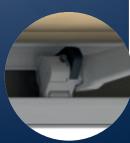


weinor LongLife arm: Durable and quiet



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





2 versions:







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

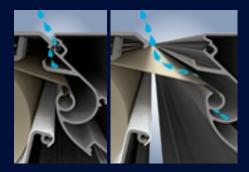


Figure 1 Figure 2



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	0	0
BiSens Agido-3V product protection sensor	0	0
Controls		
Radio control	0	0
No remote	•	•
Weather sensors		
Sun/wind sensor	0	0
Sun/wind sensor solar powered	0	0
Sun/wind/rain sensor	0	0
Quality		
Tested up to	wind resistance class 1 according to DIN 135	61 (wind strength 5 on the Beaufort scale)

■ Standard ○ Option — Not available

Weight table

Width	Projec	Projection in cm									
in cm	150	200	250	300	350	400					
	Weigl	nt 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



Integrated LED lighting

Width	Diagonal in 10 cm steps										
in cm	up to 100	110-150	160-200	210-250	260-300	310-350	360-400				
	Number of	LED spotligl	nts								
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.

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

Kubata Controls



Receiver, power supply pack and further electrical components (e.g. BiConnect receiver in the cassette)
The cover cap ① 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 transmitter1MW-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!

Kubata Controls

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 spotlights (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 spotlights (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)

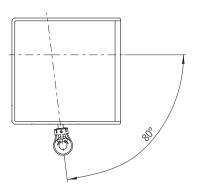
Product	Electronics	Hard wired control	Controls
Kubata	Kubata drive	Awning switch for the awning drive	e.g. Double rocker switches (on site)
Kubata LED	Kubata drive and LED lighting	 Awning switch for the awning drive Switch on site for the LED spotlights LED power supply pack integrated into the cassette 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



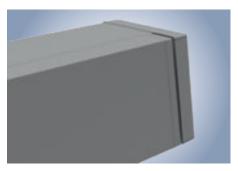
Standard gear outlet

Kubata Controls

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.



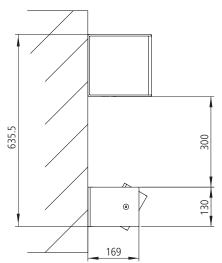
Tempura Quadra heating system (option)



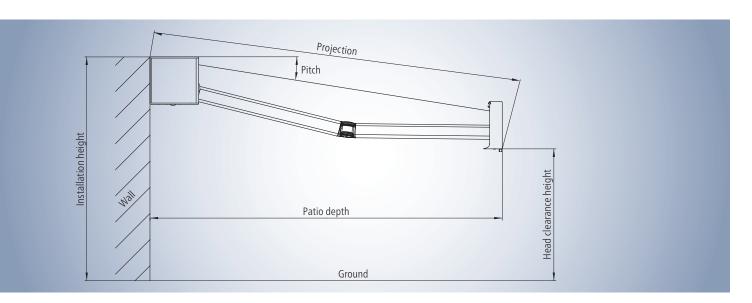
The perfect combination: Kubata with Tempura Quadra heating system and BiConnect

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 i	n 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).

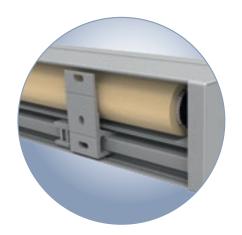
Kubata Planning

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	Diagonal in	10 cm steps												
in cm	up to 150 160-200 210-					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 2x wall bracket 260 per arm: X = 95 cm

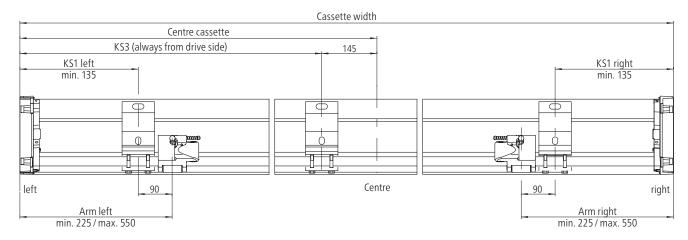
2 2x wall bracket 85 mm
3 x wall bracket 85 mm
(1x as a central bracket)
2 2x wall bracket 295 mm
alternatively: 4x wallbracket
85 mm
2 2x wall bracket 260 mm
2+1 2x wall bracket 295 mm +
1x wall bracket 85 mm
alternatively: 5x wall bracket
85 mm
(1x as a central bracket)

Two brackets per arm required: see gradations in table!

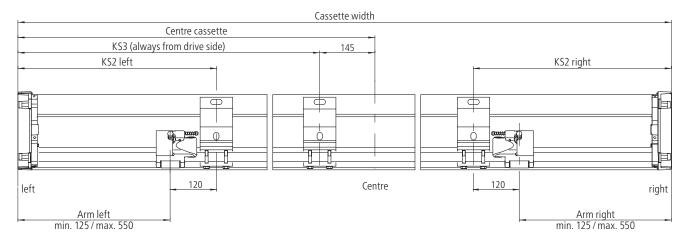
Use of central bracket necessary as of: width > 450 cm

Position of wall brackets and Kubata cassette

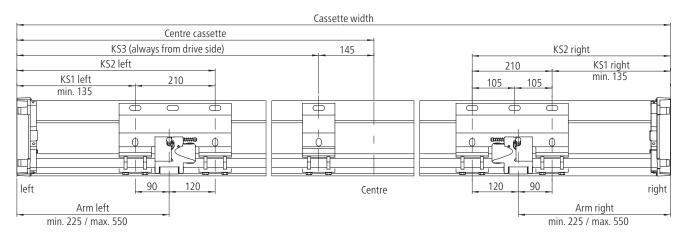
Wall bracket 85 mm outside (KS1)



Wall bracket 85 mm inside (KS2)



Wall bracket 295 mm



Notes:

KS1 = outside bracket

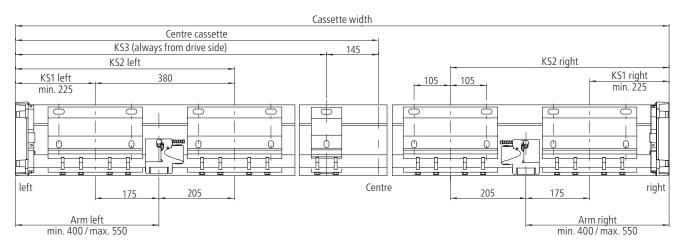
KS2 = inside bracket

KS3 = centre bracket

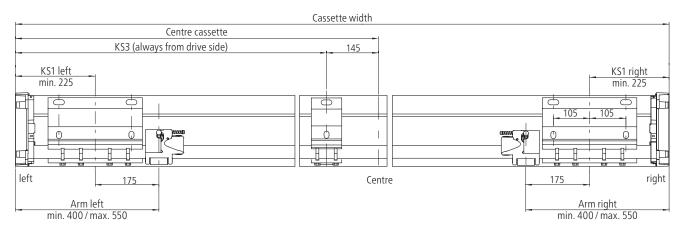
Kubata Planning

Position of wall brackets and Kubata cassette

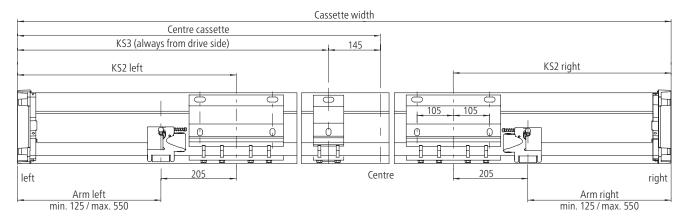
Wall bracket 260 mm on both sides (KS1 and KS2)



Wall bracket 260 mm outside (KS1)



Wall bracket 260 mm inside (KS2)



Notes:

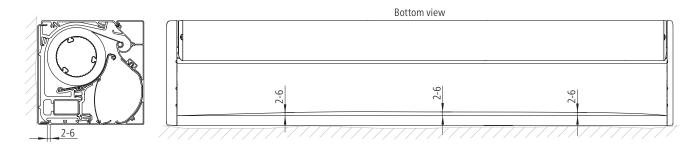
KS1 = outside bracket

KS2 = inside bracket

KS3 = centre bracket

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

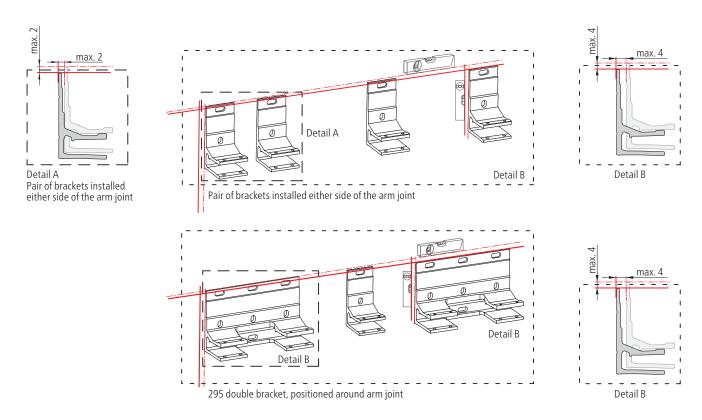
Installation allowances



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

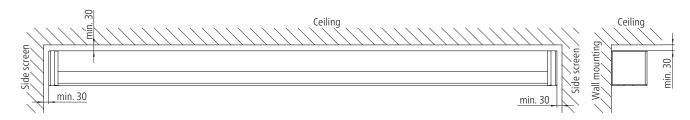
straight and the front profile closes perfectly as a result. A maximum 4 mm shift can be produced on the movable transition between the bottom profile and back plate using this function. It is necessary to align the cassette ideally.



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)

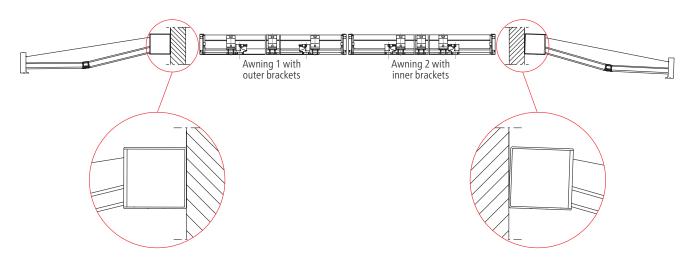


Kubata Planning

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.

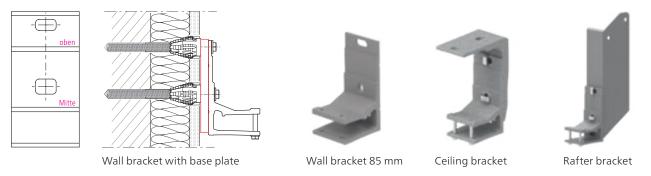
If an awning with inner brackets and one with outer brackets is installed, a slight offset of the housing can occur when retracted, depending on the arm position and the surface.



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

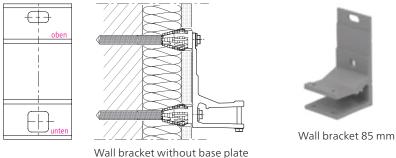
Punched hole A (used when mounting with 100 x 180 x 15 mm base plates)

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).



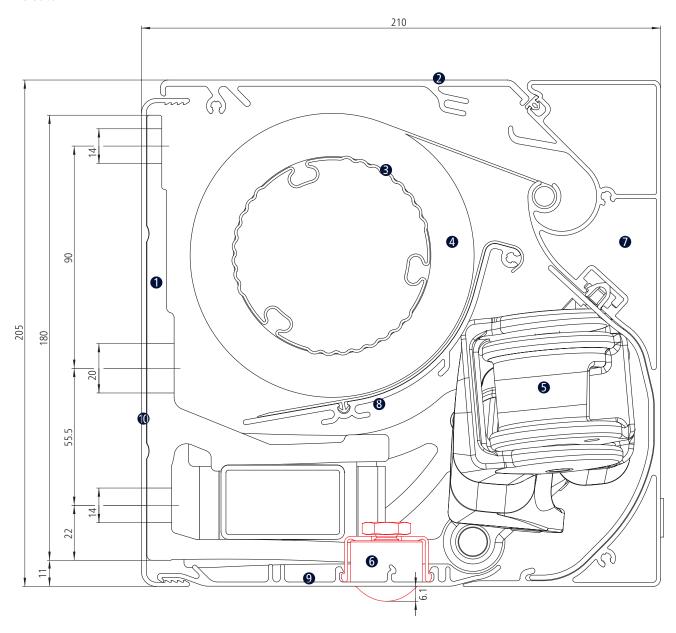
Punched hole B (used when mounting without 100 x 180 x 15 mm base plates)

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.



Cross-section

Kubata LED



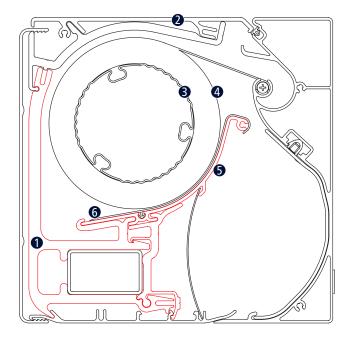
- Wall bracket
 Roof profile
 Fabric roller bearing
 Fabric rolls
 Spring-tensioned arm
- 6 LED spotlight
 7 Front profile
 8 Support profile
 9 Bottom profile
 10 Back profile

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.



- Housing bracket
- **2** Cassette
- **3** Fabric roller bearing
- 4 Fabric rolls
- **5** Support profile
- **6** Glide profile



Kubata centre bracket: wall mounting



Kubata centre bracket: roof mounting (rear view)



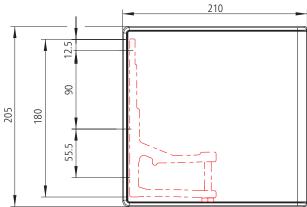
Kubata centre bracket: rafter mounting with rafter bracket (rear view)

Kubata Installation

Wall mounting – brackets

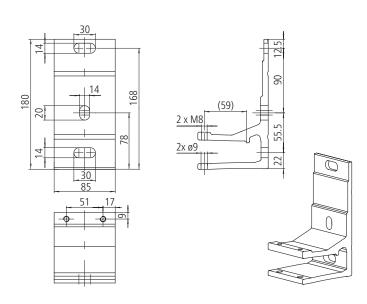


Wall bracket



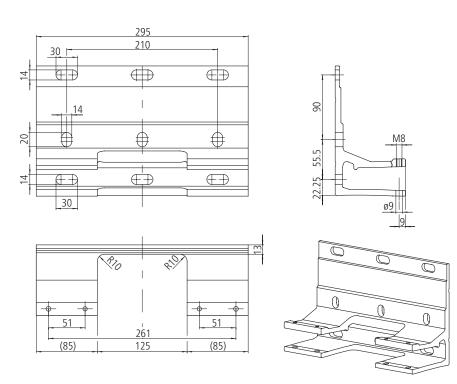


85 mm wall bracket





295 mm wall bracket (arm enclosure)

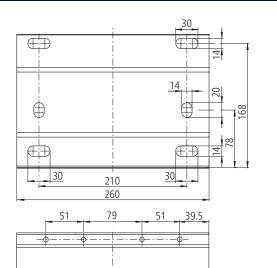


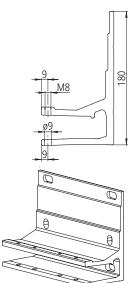
Kubata Installation

Wall mounting – brackets



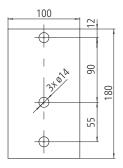
260 mm wall bracket

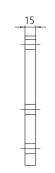






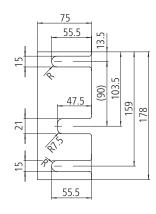
Baseplate (100 x 180 x 15 mm)

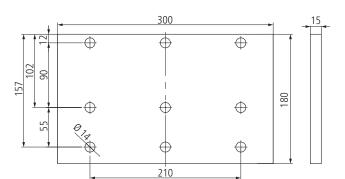






Baseplate (75 x 178 x 4 mm)







Baseplate (300 x 180 x 15 mm)

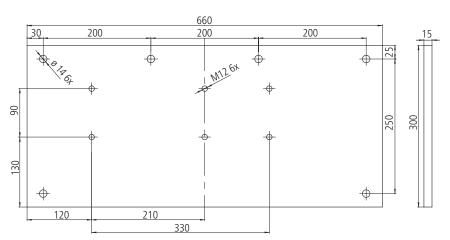
Wall mounting - mounting plates



Mounting plate 660 x 300 x 15 mm*



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

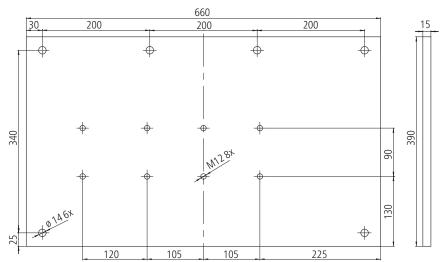




Mounting plate 660 x 390 x 15 mm*

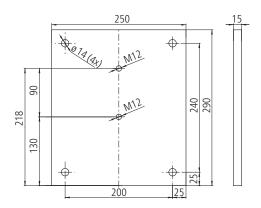


Position of the mounting plates using the Kubata 500 x 300 cm** as an example.





Mounting plate 250 x 290 x 15 mm



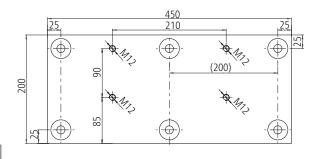
^{*} Mounting plate also possible with 2 wall brackets 85 mm.
**Depending on the width of the awning, the positioning of the mounting plates may vary.

Kubata Installation

Wall mounting - mounting plates



Mounting plate 450 x 200 x 30 mm*





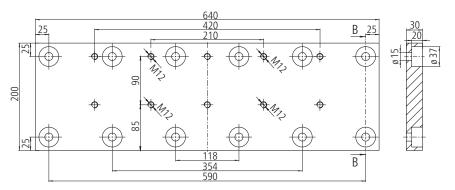
Position of the mounting plates using the Kubata 500 x 300 cm** as an example.



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.

Installation with stand off bracket (special bracket)



Kubata with stand off bracket, e.g. to overcome a soil pipe

80 to 300 mm gaps can be bridged using the stand off bracket.

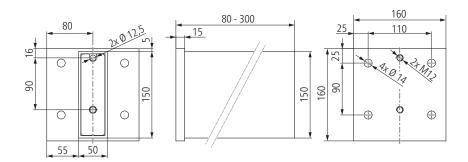
The stand off bracket can be cut to size on site if required. But for a more durable quality and better appearance weinor recommends ordering the bracket to the required dimensions, as it will be fully powder coated leaving no





Stand off bracket for wall bracket 85 mm

Stand off bracket with wall bracket 85 mm





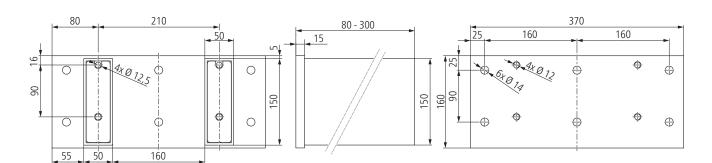
Stand off bracket for two wall brackets 85 mm or one wall bracket 260 mm



Stand off bracket with two wall brackets 85 mm



Stand off bracket with wall bracket 260 mm

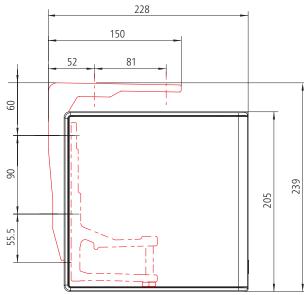


Kubata Installation

Ceiling mounting

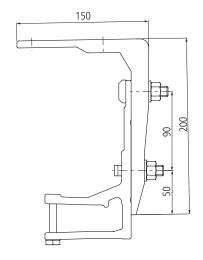


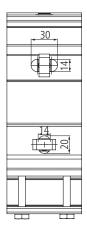
Ceiling bracket

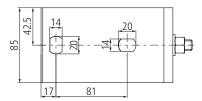




Ceiling bracket



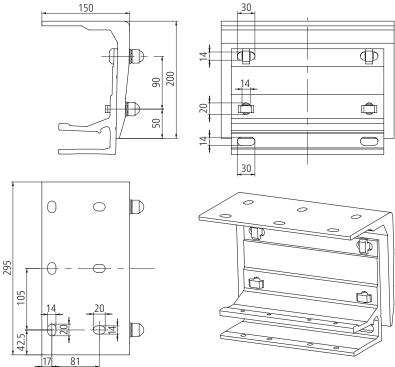




Ceiling mounting

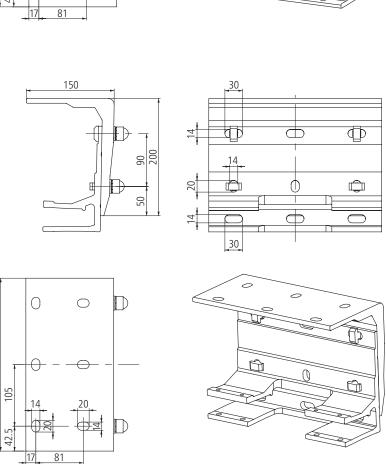


Ceiling bracket 295 mm with wall bracket 260 mm





Ceiling bracket 295 mm with wall bracket 295 mm



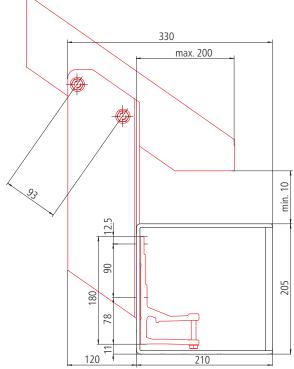
295

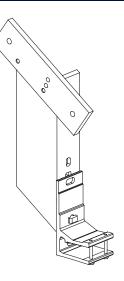
Kubata Installation

Rafter mounting



Rafter bracket





Rafter bracket with mounting plate

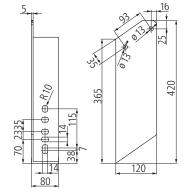
weinor recommends using a mounting plate for rafter brackets

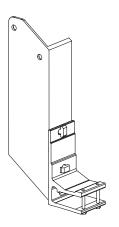


Rafter bracket and wall bracket, without mounting plate



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.

1x wall bracket 85 mm per arm or 2x wall bracket 85 mm per arm Number of fixings: 4 or 8
1 x wall bracket 260 mm per arm or
2x 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!

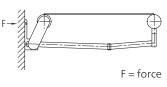
In the event of installation on a pressureresistant surface, the indicated extraction force decreases (see bracket overview)

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









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.

	Width	Projection in cm						
1 x mounting plate 250 x 290 x 15 mm	in cm	150	200	250	300	350	400	
incl. 1 x wall bracket 85 mm per arm Number of fixings: 8	III CIII		200	250	300	330	400	
		148 320						
1x mounting plate 450 x 200 x 30 mm	200	160					2869 1434 1284 944 3141 1571 1405 1033 3413 1707 1527 1123 3685 1843 1649 1212 3957 1979 1771 1302	
incl. 1x wall bracket 85 mm per arm	200	142						
or		105						
1x mounting plate 450 x 200 x 30 mm		176	257					
incl. 2x wall bracket 85 mm per arm Number of fixings: 12		380	553					
	250	190	276					
1 x mounting plate 640 x 200 x 30 mm	230	169	246					
incl. 1x wall bracket 85 mm per arm		124	181					
or		204	297	409				
1x mounting plate 640 x 200 x 30 mm incl. 2x wall bracket 85 mm per arm		439	639	880				
Number of fixings: 24	300	220	320	440				
		195	285	393				
1 x mounting plate 660 x 300 x 15 mm		144	209	289				
incl. 1x wall bracket 85 mm per arm		231	337	464	618			
or		499	726	998	1329			
1x mounting plate 660 x 300 x 15 mm	350	249	363	499	664			
incl. 2x wall bracket 85 mm per arm Number of fixings: 12		222	323	446	594			
		163	238	328	436			
1 x mounting plate 660 x 390 x 15 mm		259	377	519	690			
incl. 1x wall bracket 85 mm per arm		558	812	1116	1482	1865		
or	400	279	406	558	741	932	4	
1x mounting plate 660 x 390 x 15 mm		248	362	498	662	834	-	
incl. 2x wall bracket 85 mm per arm		183	266	366	487	613		
Number of fixings: 12		286 618	417	574 1234	761 1636	2050	2060	
Please note:	450	309	899 449	617	818	2058 1029		
from a width of 451 cm additional	430	275	401	551	731	920		
– for mounting plates with a thickness of		202	295	405	537	677		
15 mm		314	457	628	337	077	344	
1 x wall bracket 85 mm incl.		677	985	1352	1789	2512	3141	
1 x shim plate 100 x 180 x 15 mm	500	339	493	676	894	1256		
as central bracket required.		301	439	603	799	1123		
– for mounting plates with a thickness of		222	323	444	588	826		
30 mm		341	498	683				
1 x wall bracket 85 mm incl.		737	1072	1469	1942	2732	3413	
2 x shim plate 100 x 180 x 15 mm	550	368	536	735	971	1366		
as central bracket required.		328	478	656	868	1221	1527	
This means an additional 2 fixings will be		241	351	482	638	898	1123	
required always.		369	538	738				
		796	1158	1587	2331	2952		
	600	398	579	794	1165	1476	1843	
Taking the width to projection dimension		354	516	709	1041	1320		
limits into account, two brackets can also		260	380	521	766	971	1212	
be used per arm instead of one bracket		397	578	793	-			
per arm.		856	1245	1705	2504	3172		
Does not apply to 250 x 290 x 15 mm	650	428	622	853	1252	1586	2869 1434 1284 944 3141 1571 1405 1033 3413 1707 1527 1123 3685 1843 1649 1212 3957 1979 1771	
mounting plate! This has no impact on the extraction force!		381	555	761	1119	1418		
In the case of red-bordered cells, the		280	408	560	823	1043	1302	
bracket sub-assemblies are equipped with		424	618	938	2070			
two brackets per arm.	700	915	1331	2019	2678			
two brackets per arm.	700	458	666	1009	1339			
		407	593	901	1196			

299

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

662

880

436

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

1x ceiling bracket 295 mm incl. 1x wall bracket 260 mm per arm

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.

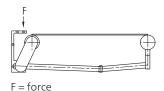
Taking the width to projection dimension limits into account, two brackets can also be used per arm instead of one bracket per arm.

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





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 2 x rafter bracket incl. 2x wall bracket 85 mm per arm Applies to two brackets per arm on a rafter. or 2x rafter bracket incl. 2x wall bracket 85 mm per arm Applies to two brackets per arm, each with separate rafters. 1 x rafter bracket with 1x mounting plate incl. 1 x wall bracket 85 mm per arm 2 x rafter bracket with 2x mounting plate incl. 2x wall bracket 85 mm per arm Applies to two brackets per arm on a rafter. or 2 x rafter bracket with 2x mounting plate incl. 2x 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 <u>one</u> rafter, the shear force does <u>not</u> 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	Projection i	Projection in cm							
in cm	150	200	250	300	350	400			
200	1635								
	746								
250	1932	2762							
	876	1215							
300	2230	3188	4348						
300	1007	1398	1870						
350	2527	3615	4924	6515					
	1138	1581	2114	2762					
400	2824	4042	5501	7262	8992 4496				
400	1269	1765	2358	3076	3712 1856				
450	3122	4468	6077	8009	9922 4961	13803 6901			
	1400	1948	2602	3389	4094 2047	5666 2833			
500	3342	4815	6572	8604 4302	12059 6029	15082 7541			
	1454	2052	2765	3550 1775	4948 2474	6173 3086			
550	3633	5236	7143	9340 4670	13114 6557	16387 8193			
	1579	2229	3003	3852 1926	5379 2689	6705 3352			
600	3924	5656	7713	11187 5593	14169 7084	17691 8845			
	1704	2406	3241	4603 2301	5810 2905	7237 3618			
650	4216	6077	8283	12018 6009	15224 7612	18996 9498			
	1829	2584	3479	4944 2472	6241 3120	7769 3884			
700	4507	6497	9776	12850 6425					
	1954	2761	4090	5284 2642					

