### **Traditional cassette awning**









# Opal Design II

Opal Design II LED | Opal Design II Valance Plus Opal Design II LED Valance Plus





# weinor Opal Design II – classic design with the latest technology



The new Opal Design II cassette awning stands out for its timeless, classic design hand in hand with groundbreaking weinor technology. Made to shade large areas, it blends in harmoniously with its surrounding architecture, the attractive shape of the cassette adding a sophisticated element. A wide range of tempting and practical optional extras make it easy to operate and wonderfully convenient while also extending its lifetime.

3





47 frame colours and 9 trend colours



10-year warranty on LongLife arm



## Product benefits in detail

Sophisticated design and technology: highlights of the weinor Opal Design II



#### Awning cassette – classic design with the latest technology

Classic, timeless design plus superior high-tech elements are united in the top-class weinor Opal Design II awning.

- cassette is just 16 cm high: particularly flat, attractive shape
- smart cassette design for the utmost stability and safety



#### End cap design – uniquely safe closing device

If the cassette end caps are closed then the awning is properly closed and protected against damp and dirt closed.

- unique, patented weinor technology
- the only awning on the market with this USP



#### weinor LongLife Arm – durable, quiet operation

The new arm features an exceptionally robust high-tech belt.

- tested to more than 100,000 cycles
- extremely quiet operation
- no maintenance required
- die-forged aluminium in joint light but highly robust
- excellent fabric positioning
- 10-year warranty



#### Multi-section units – to shade especially large areas

The Opal Design II also comes as a combined multi-section unit for very large terraces.

- as a 2-part unit up to 1,200 cm
- jockey cover: easy to fit
- coupled version not possible with Valance Plus



#### LEDs and Valance Plus – integrated lighting and vertical protection

The Opal Design II LED variant adds integrated 'warm light' LED lighting to the awning

- individual LED spotlights integrated into awning cassette
- dim to any level with BiConnect remote control

The Opal Design II Valance Plus option provides vertical protection against the sun and prying eyes.

- attractive fabric combinations
- patented weinor Opti-Flow-System® to keep fabric ideally positioned and to close the front rail safely

# **Product benefits in detail**



# standardoptionalunavailable

# Opal Design II versions

	Opal Design II	Opal Design II LED		
Technology				
Max. width, 1-section/2-section with jockey cover	650 cm/1,200 cm	650 cm/1,200 cm		
Max. projection	400 cm	400 cm		
Cassette size (W x H) incl. standard bracket	265 mm x 160 mm	265 mm x 165 mm		
Coupled systems	0	0		
Crank drive	0	_		
Motor drive	<ul><li>as standard</li></ul>	<ul><li>as standard</li></ul>		
Awning pitch	5° to 40° (with a projection > 351 cm: 7° to 40°)	5° to 40° (with a projection > 351 cm: 7° to 40°)		
Installation options	can be installed on walls, ceilings and ra	fters		
LED lighting (separate spotlights)	_	<ul><li>integrated into awning cassette</li></ul>		
Optional: Valance Plus				
Max. width	500 cm/600 cm	500 cm/600 cm		
Max. projection	350 cm/300 cm	350 cm/300 cm		
Cassette size (W x H)	326 x 160 mm	326 x 165 mm		
Crank drive	0	0		
Motor drive	<ul><li>as standard</li></ul>	<ul><li>as standard</li></ul>		
Awning pitch	10° to 20°	10° to 20°		
Valance Plus projection (H)	100 cm, 150 cm, 210 cm	100 cm, 150 cm, 210 cm		
Design				
47 standard frame colours	•	•		
More than 150 other RAL colours	0	0		
9 trend colours	•	•		
Other textured colours	0	0		
weinor fabric collection	•	•		
Valance Plus fabrics	for fabrics which can be selected for verti	ical sun protection, see p. 12		
Accessories				
Tempura heating system	attaches using universal bracket			
Controls				
Remote control	see p. 14			
No remote	fully wired and ready to plug in	fully wired and ready to plug in		
Quality				
Tested up to	wind Force 5 on the Beaufort scale and w to DIN 13561	vind resistance class 2 according		







#### Fabrics – attractive, brilliant long-lasting colours

For an attractive awning you need a high-quality fabric. The 'colours by weinor®' collection and the Perluca climate-control fabrics provide a wide range.

- solution-dyed to make them colour-fast
- stay beautiful thanks to dirt- and water-repellant nanocoating
- optional: wide range of collections by other manufacturers



Fabric collections 155 patterns

- high-quality acrylic
   proven for decades
  - fabric width: 120 cm/240 cm
- innovative polyester quality
  - high-stretch with memory effect®
- fabric width: 120 cm



Air-permeable acrylic fabrics, 5 patterns

- high-quality perforated acrylic
- translucent, breathable climatecontrol fabric for Valance Plus
- fabric width: 120 cm/240 cm



High-tech climate-control fabrics
10 patterns

- translucent, breathable climatecontrol fabric for Valance Plus
- fabric width: 177 cm (Soltis® 86, 92)
- extra-wide: 267 cm (Soltis® 86, 92)



#### Wide range of frame colours – abundance of choices

weinor coats all of its products in its own workshop. This ensures that they have the best-possible colour tonality and identical gloss levels.

- 47 standard RAL frame colours, silk gloss (gloss level 70 ± 5% when measured at a 60° angle)
- 9 scratchproof, resistant trend colours with a textured look
- over 150 special RAL colours

#### 47 standard frame colours

RAL 1002	RAL 1003	RAL 1014	RAL 1015	RAL 1023	RAL 1034	RAL 2000	RAL 2002	RAL 2011
Sandy yellow	Signal yellow	Ivory	Light ivory	Traffic yellow	Pastel yellow	Yellow orange	Vermilion	Deep orange
RAL 3002	RAL 3004	RAL 3007	RAL 4005	RAL 4006	RAL 5005	RAL 5009	RAL 5014	RAL 5021
Carmine red	Magenta red	Black red	Blue lilac	Traffic purple	Signal blue	Azure blue	Pigeon blue	Water blue
RAL 5022	RAL 5024	RAL 6005	RAL 6009	RAL 6011	RAL 6012	RAL 7015	RAL 7016	RAL 7021
Night blue	Pastel blue	Moss green	Fir green	Reseda green	Black green	Slate grey	Anthracite grey	Black grey
RAL 7030	RAL 7032	RAL 7035	RAL 7039	RAL 7040	weinor 7319	RAL 8001	RAL 8003	RAL 8014
Stone grey	Pebble grey	Light grey	Quartz grey	Window grey	weinor grey	Ochre brown	Clay brown	Sepia brown
RAL 8016	RAL 8017	RAL 8019	RAL 8022	weinor 8077	RAL 9001	RAL 9005	RAL 9006	RAL 9007
Mahagony brown	Chocolate brown	Grey brown	Black brown		Cream	Jet black	White aluminium	Grey aluminium

#### 9 trend colours

RAL 9016

RAL 9010

WT 29/10797	WT 29/50704	WT 29/60740	WT 29/70786	WT 29/71289	WT 29/80077	WT 29/80081	WT 29/90147
Approx. RAL 9010	Approx. RAL 6009 metallic	Chestnut 04 metallic	Sparkling iron effect	Approx. RAL 7016	Approx. DB 703 metallic	Iron glimmer effect P7	Approx. RAL 9007 metallic

weinor is an eco-friendly company. To ensure compliance with high environmental standards, manufacturing processes and materials undergo regular testing by experts. As a result of the ban on the use of heavy metals in powder coatings, paint manufacturers can no longer guarantee colour stability despite making every effort to do so. It therefore canot be excluded that colours in general, and Fire Red (RAL 3000) in particular, may fade with time. For technical reasons, the colours may appear significantly different when printed.

# **Opal Design II LED – with LED lighting**



# LED lighting – 30,000 hours of lighting require minimal energy consumption

Select LED components for top weinor quality:

- integrated into the cassette
- atmospheric light thanks to special glass lenses
- lighting remains on when awning is retracted
- especially energy-efficient
- lifetime of 30,000 hours
- dim to any level with the BiConnect remote control
- easy to service: simply replace individual LED lights without uninstalling the awning

Awning width	Number of separate LED spotlights
187 – 219 cm	3
220 – 274 cm	4
275 – 329 cm	5
330 – 384 cm	6
385 – 439 cm	7

Awning width	Number of separate LED spotlights
440 – 494 cm	8
495 – 549 cm	9
550 – 603 cm	10
604 – 650 cm	11





## **Opal Design II option with Valance Plus**





Opal Design II Valance Plus with motor

# Valance Plus – greater privacy thanks to vertical protection against the sun and prying eyes (optional)

The motorised vertical sun protection elegantly blends in with the awning's front rail.

- glare protection and privacy shield up to a maximum valance height of 210 cm
- extends to any length
- awning can be set to any angle from 10° to 20°
- Valance Plus cannot be retrofitted



Opal Design II Valance Plus with crank drive



 $\label{thm:conditional} \mbox{Opal Design II Valance Plus - closed and with Valance Plus slightly extended}$ 



Maximum awning size for Valance Plus								
Width	500 cm	projection	350 cm					
Width	600 cm	projection	300 cm					

#### Available fabrics for the Valance Plus

	Soltis® 86, 92	Soltis® 86, 92	Acrylic		Perluca		WeiTex polyester		
Fabric width	single colour	single colour	striped	single colour	single colour	single colour	single colour	striped	single colour
Valance length	177 cm	267 cm	120 cm	120 cm	240 cm	120 cm	240 cm	120 cm	120 cm
100 cm	S	S	L	S	S	S/L	S	L	S
150 cm	S	S	_	T	S	T	S	_	T
210 cm	T	S	_	T	S	T	S	-	T

- S seamless: seamless fabric; structure of fabric runs diagonally to structure of awning fabric
- T transverse seam: fabric with transverse seam; either in top or bottom third as desired; structure of fabric runs diagonally to structure of awning fabric
- L longitudinal seam: structure of fabric runs longitudinally to structure of awning fabric

#### weinor Opti-Flow-System®



#### Patented weinor Opti-Flow-System®

to keep fabric perfectly positioned on Valance Plus roller

The patented weinor Opti-Flow-System® ensures that the front rail closes reliably, even when the fabric is wide and the fabric roller is small.

#### **Conventional holder**

In this case, the fabric roller is not supported from side to side. The result:

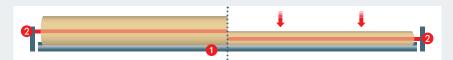
- the fabric is not ideally positioned
- dirt gathers on the fabric over time due to the central position of the support

#### weinor Opti-Flow-System®

Here, the fabric roller rests unattached on the glide profile: the entire width of the fabric is supported and cannot sag. The advantage:

- the fabric positioning is ideal even for wide fabrics
- specially coated glide profile means the fabric enjoys long-term protection

#### Advantages of the fabric roller support



**Fabric roller is unrolled:** the glide profile **(1)** supports the fabric roller along its entire length and thus effectively prevents sagging.

Fabric roller is rolled up: the fabric roller steadily rolls into its holder (2). The glide profile continues to provide support along its entire length.

#### Remote control



BiEasy 5M

BiEasy 15M with display

# weinor BiConnect – coordinated control for awning, light, heating and Valance Plus (optional)

The awning comes as standard with one motor and can optionally be controlled with the pre-programmed BiConnect remote control.

There are handheld transmitters with different numbers of channels: choose from 1, 5 or 15 channels with a display.



# weinor BiEasy handheld transmitter

- safe to operate on protected frequency (868 MHz)
- range of up to 100 m

#### BiRec remote-controlled receiver

- various remote-controlled receivers depending on functions used
- to suit awning fittings e.g. to extend and retract the awning or dim the lights

#### **Exclusive retraction protection**

- co-ordinated retraction: first the Valance Plus, then the awning
- to make sure nothing gets knocked over on the terrace

Product	Comes with (integrated)		Remote receiver	Handheld transmitter
Opal Design II	awning motor		BiRec MA	BiEasy 1M/5M/15M
Opai Design II		+ Tempura heating system*	BiRec HD	BiEasy 5M/15M
	awning motor			
Opal Design II LED	+ LED light		BiRec MLED	BiEasy 5M/15M
	+ LED light	+ Tempura heating system*	BiRec MLED + BiRec HD	BiEasy 5M/15M
Opal Design II Valance Plus	awning motor, Valance Plus*		BiRec MVLED	BiEasy 5M/15M
Opai Design ii Valance Flus		+ Tempura heating system*	BiRec MVLED + BiRec HD	BiEasy 5M/15M
	awning motor, Valance Plus*			
Opal Design II LED Valance Plus	+ LED light		BiRec MVLED	BiEasy 5M/15M
	+ LED light	+ Tempura heating system*	BiRec MVLED + BiRec HD	BiEasy 5M/15M

Requires: awning with BiConnect remote control; sensors require at least a BiEasy 1M, 5M or 15M  $\,$ 

\* option

Product	BiConnect	Somfy RTS	Somfy io
Opal Design II	receiver integrated into cassette	receiver integrated into fabric roller	receiver integrated into fabric roller
Optional: LED	dimmable	not dimmable	not dimmable
Optional: Volant Plus	<ul> <li>no additional receiver required</li> <li>gradual switch-off</li> <li>retraction protection</li> </ul>	<ul><li>extra receiver integrated into cassette</li><li>no gradual switch-off</li><li>no retraction protection</li></ul>	unavailable

#### Automatic weather control and accessories



#### Product protection sensor BiSens Agido-3V

The awning retracts when the wind protection sensor BiSens Agido-3V is activated by suitable wind levels.

- threshold value adjustable
- only sold with BiConnect
- energy-saving technology
- battery life 2 years
- awning remains in place approx.
   20 minutes after retraction
- fitted into front rail



BiSens SWR-230 V

# Sun, wind and rain sensors – automatically protect your product and prevent excess heat (optional)

The BiConnect series remote sensors automatically extend the awning when the sun shines and reliably retract it in the wind or rain.

Available types:

- BiSens SWR-230 V sun, wind and rain sensor
- BiSens SW-230 V sun and wind sensor
- also solar-run:
   BiSens SW-Solar



# Tempura Universal heating system, high-performance level (optional)

The energy-efficient Tempura infrared heating system has an impressive heating capacity of over 1,500 watt in a tiny housing.

- instant heat: no warm-up time
- turn as required for targeted warmth
- operate and dim using BiConnect remote control
- splash protection
- comes in 47 standard frame colours plus 9 scratchproof, resistant trend colours with a smart, textured look
- option: 150 special RAL colours
- universal bracket makes it easy to retrofit
- TÜV tested

## Planning/measuring



# Determining the diagonal and clearance height:

- 1. Find the diagonal by looking in the 'Diagonal' table for the terrace depth.
- 2. Using the diagonal from the table and the required pitch, consult the 'clearance height' table for the clearance height. This clearance height refers to a mounting height of 300 cm.
- 3. Add/subtract the difference between 300 cm and the actual mounting height to/from the clearance height in the table.

#### Determining the diagonal

This table can be used to find the awning diagonal for any given horizontal terrace depth.

Pitch	Terrace depth in cm								
	150	200	250	300	350	400			
5°	150	200	250	300	350	400			
15°	160	210	260	310	360	410			
25°	170	220	280	330	390	440			

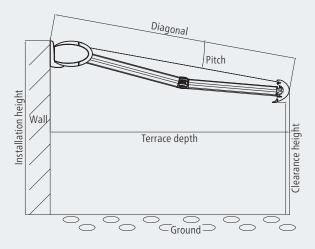
Diagonal in cm (rounded figures)

#### Determining the clearance height

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

Pitch	Diagonal in cm								
	150	200	250	300	350	400			
5°	275	270	270	260	260	250			
15°	250	240	220	210	200	190			
25°	220	200	180	160	140	120			

Clearance height in cm (rounded figures)



#### Sizes and bracket recommendations



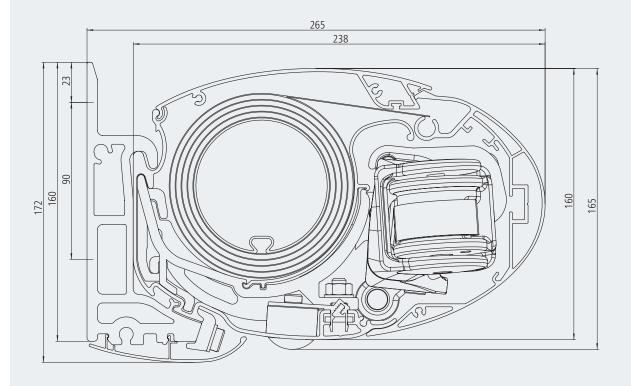
Wall mounting on C20/25 concrete with up to 200 mm facing, wind resistance class 2 and a permissible centic tensile load of 5.71 kN for anchor bolts

Width	Number	Diagonal in cm (irregular figures possible)						
in cm	of arms	150	200	250	300	350	400	
187 – 200	2							
201 – 250	2							
251 – 300	2							
301 – 350	2							
351 – 400	2							
401 – 450	2							
451 – 500	2							
501 – 550	2							
551 – 600	2							
601 – 650	2					<b>A</b>	<b>A</b>	

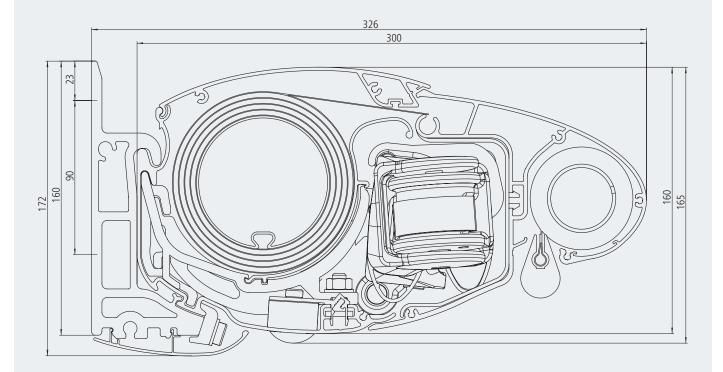
- 2 Opal Design II standard wall brackets, 150 mm
- 2 Opal Design II wall brackets, 300 mm
- △ 3 Opal Design II standard wall brackets, 150 mm
- ▲ 2 Opal Design II wall brackets, 300 mm and 1 standard wall bracket, 150 mm

# Cross-sections of Opal Design II/LED/Valance Plus

# Cross-section of Opal Design II LED



## Cross-section of Opal Design II LED Valance Plus with motor



# Installation on wall, ceiling or rafter – suitable for various building conditions

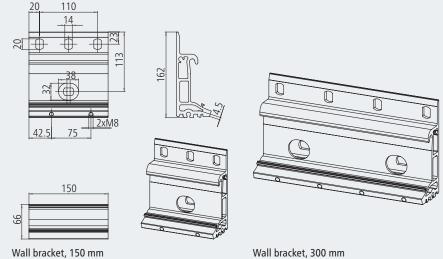
Its dimensions mean that the Opal Design II can be mounted in a wide range of ways: not only on a wall but also on a ceiling or a rafter.

The brackets and mounting plates are made of extruded, powder-coated aluminium.

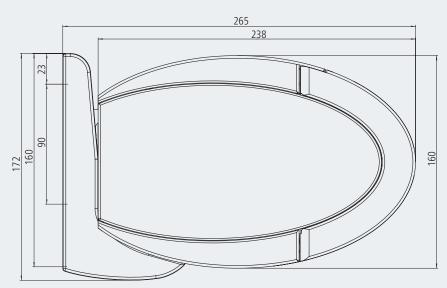
#### Wall installation







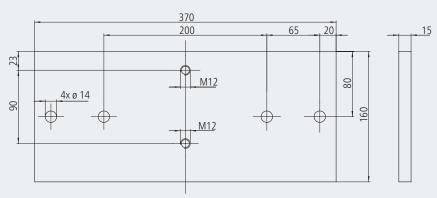




Cross-section of Opal Design II with ceiling bracket

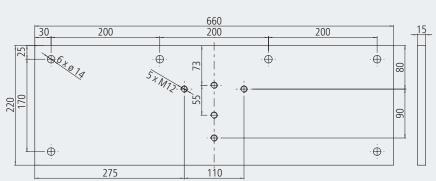
# Mounting plate 370 x 160 x 15 mm





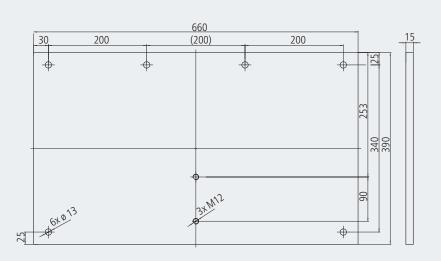
# Mounting plate, 660 x 220 x 15 mm





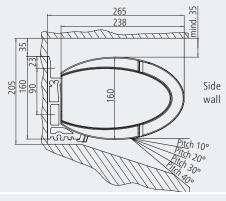
## Mounting plate 660 x 390 x 15 mm

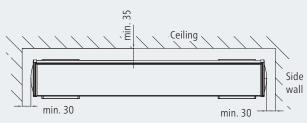


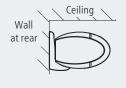


# **Installation options**

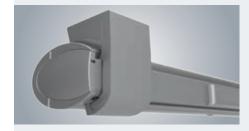
# Minimum spacing distances for installation

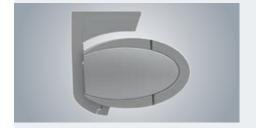


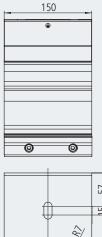


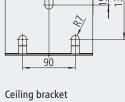


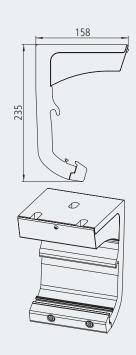
# Ceiling installation

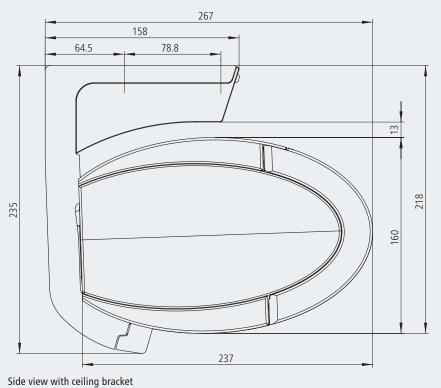








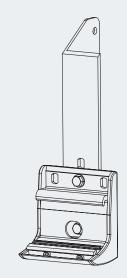




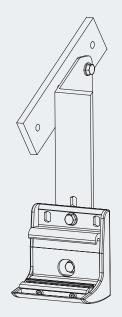
## Rafter bracket installation



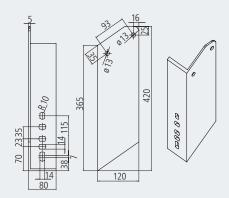




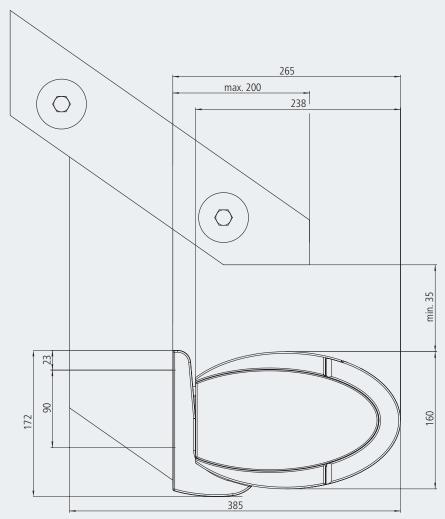
Right-hand rafter bracket



Rafter bracket with mounting plate for right-hand rafter bracket. weinor recommends using a mounting plate for the rafter bracket.



Rafter bracket



Side view: mounting rafter bracket

#### Extraction forces for Opal Design II/LED

**Wall mounting on C20/25 concrete** with up to 200 mm of facing, extraction force in N per upper fixing for wall bracket

The extraction force is the force with which the weight of the awning and the wind load pull on each upper 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 that is available for a fixing and will 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 used and the assembly base.

See separate bracket overview for other bases.

1 standard wall bracket (150 mm),
1 standard wall bracket (150 mm)
per awning arm,
1 standard wall bracket (150 mm)
as a central bracket from a width of
501 cm
fasteners: 6* in all

1 wall bracket (300 mm) plus 1 standard wall bracket (150 mm) as a central bracket from a width of 501 cm, 1 wall bracket (300 mm) per awning

1 wall bracket (300 mm) per awning arm

fasteners: 15\* in all

Mounting plate (660 x 220 mm) incl.
1 standard wall bracket (150 mm),
1 standard wall bracket (150 mm)
as a central bracket incl. base plate
fasteners: 15\* in all

Mounting plate (660 x 390 mm) incl.
1 standard wall bracket (150 mm),
1 standard wall bracket (150 mm)
as a central bracket incl. base plate
fasteners: 15\* in all

1 standard wall bracket (150 mm) incl. roof front plate (370 x 160 mm), 1 standard wall bracket (150 mm) as central bracket, 1 standard wall bracket (150 mm)

per awning arm fasteners: 11\* in all

Width	Projection in o	Projection in cm						
n cm	150	200	250	300	350	400		
	647							
	324							
.00	159							
	83							
	454							
	766	1140						
	383	570						
250	189	280						
	98	146						
	537	797						
	884	1317	1861					
	442	659	930					
00	218	324	457					
	113	169	238					
	620	921	1299					
	1003	1495	2108	2871				
	501	747	1054	1436				
50	247	367	517	704				
50	129	191	270	367				
	703	1045	1472	2003				
	1121	1672	2355	3199	4069			
	560	836	1178	1599	2034			
00								
100	276	411	578	784	996			
	144	214	301	409	519			
	786	1169	1644	2231	2836	6440		
	1239	1850	2602	3527	4488	6418		
	620	925	1301	1763	2244	3209		
50	305	454	638	864	1099	1571		
	159	237	333	450	573	818		
	869	1294	1817	2460	3127	4470		
	1358	2027	2849	3854	5548	7024		
	679	1014	1425	1927	2774	3512		
00	334	498	699	945	1359	1719		
	174	260	364	492	708	896		
	952	1418	1990	2688	3867	4892		
	1476	2205	3097	4710	6034	7630		
	738	1102	1548	2355	3017	3815		
50	363	542	760	1154	1477	1867		
	189	282	396	602	770	973		
	1035	1542	2162	3286	4205	5314		
	1594	2382	3344	5087	6519	8237		
	797	1191	1672	2544	3259	4118		
00	393	585	820	1247	1596	2016		
	205	305	427	650	832	1050		
	1117	1666	2335	3549	4543	5737		
	1713	2559	4036	5465	7004	8843		
	856	1280	2018	2732	3502	4422		
550	422	629	990	1339	1715	2164		
	220	328	516	698	894	1128		
	1200	1790	2818	3812	4881	6159		

<sup>\*</sup> Number of fasteners required on site

## **Extraction forces for ceiling mounting**

#### Extraction forces for Opal Design II

#### Ceiling installation (on C20/25 concrete)

Extraction forces in N for ceiling mounting

1 universal ceiling bracket (with holder plate), 1 universal ceiling bracket (with holder plate) as a central bracket from a width of 501 cm, 1 universal ceiling bracket (with holder plate) per awning arm fasteners: 12\* in all

Width	Projection in c	m				
in cm	150	200	250	300	350	400
200	449					
250	536	794				
300	623	921	1299			
350	709	1049	1475	2009		
400	796	1176	1651	2241	2858	
450	882	1303	1827	2474	3156	4502
500	969	1430	2003	2706	3883	4929
550	1055	1558	2179	3287	4224	5357
600	1142	1685	2354	3552	4566	5785
650	1228	1812	2817	3817	4907	6213

#### Rafter bracket installation

Shear forces in N for rafter mounting

Width	dth Projection in cm					
in cm	150	200	250	300	350	400
200	1153					
200	526					
250	1368	2050				
250	628	903				
300	1584	2371	3357			
300	730	1048	1447			
350	1799	2692	3805	5195		
330	832	1193	1643	2205		
400	2014	3013	4253	5790	8294	
400	934	1338	1839	2460	3473	
450	2230	3335	4700	6385	9172	11663
430	1036	1482	2035	2716	3843	4850
500	2445	3656	5148	6980	10050	12766
300	1138	1627	2231	2971	4213	5311
550	2661	3977	5596	8477	10928	13868
550	1240	1772	2426	3591	4583	5771
600	2876	4298	6044	9156	11806	14970
000	1342	1917	2622	3881	4953	6232
650	3092	4619	7233	9835	12684	16072
טכט	1444	2061	3118	4171	5322	6692

<sup>1</sup> rafter bracket + 1 standard wall bracket (150 mm) (one left, one right for each),

1 rafter bracket + 1 standard wall bracket (150 mm) as a central bracket from width of 501 cm

1 rafter bracket + 1 mounting plate for rafters + 1 standard wall bracket (150 mm) (one left, one right for each),

1 rafter bracket + 1 mounting plate for rafters + 1 standard wall bracket (150 mm) as a central bracket from a width of 501 cm

<sup>\*</sup> Number of fasteners required on site

#### **Awnings**



Awning



Awning with Valance Plus and Tempura





Premium quality Made in Germany

Pergola awnings



Pergola awning PergoTex II and Tempura





Pergola awning Plaza Pro with Paravento and VertiTex

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Patent no			
994221	1936061	2383402	EP1936105
1206609	1936062	2458107	EP2136214
1382770	2009192	2631386	EP3048213B1
1522650	2072709	3054063	EP3054063B1
1541776	2136013	EP0916781	
1564364	2199484	EP0959195	
1835089	2202376	EP1310609	

# Customised, systemised solutions

Patio roof and Glasoase®



Glasoase® with conservatory awning and all-glass elements



Patio roof with SUPER LITE fixed glazing



Sottezza II sun protection

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