### **Traditional cassette awning**









# Opal Design II

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

www.weinor.com





# 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.



## 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	cal 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	rind resistance class 2 according





#### **Fabrics and frame colours**



#### 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	weinor dark 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 29/90146 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 9006 metallic 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

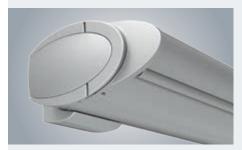
Awning width	Number of separate LED spotlights
440 – 494 cm	8
495 – 549 cm	9
550 – 603 cm	10
604 – 650 cm	11





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





Opal Design II Valance Plus with motor

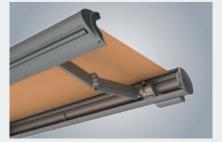
# Valance Plus – greater privacy thanks to vertical protection against the sun and prying eyes (optional)

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



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:

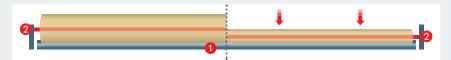
- the fabric is not ideally positioned
- dirt gathers on the fabric over time due to the central position of the support

#### 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
O al Dada II	awning motor		BiRec MA	BiEasy 1M/5M/15M
Opal 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
Onal Design II Valance Plus	awning motor, Valance Plus*		BiRec MVLED	BiEasy 5M/15M
Opal Design II Valance Plus		+ 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



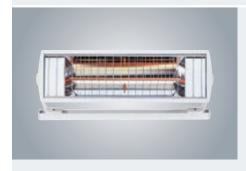
BiSens SWR-230 V

# 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							
PILCII	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		

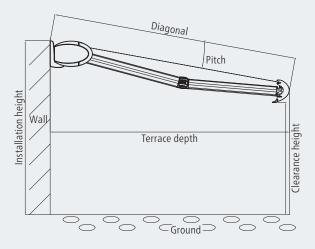
Diagonal in cm (rounded figures)

#### 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 cr	n				
PILCII	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



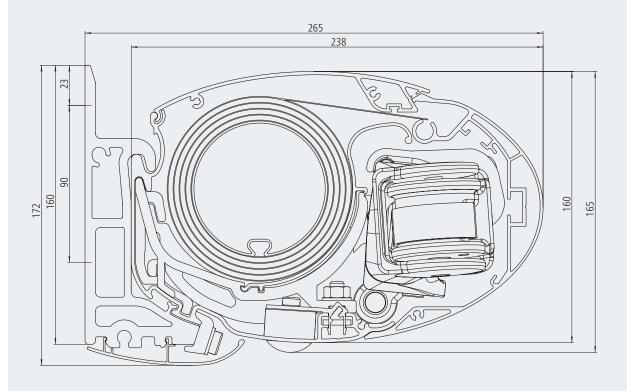
Wall mounting on C20/25 concrete with up to 200 mm facing, wind resistance class 2 and a permissible centic tensile load of 5.71 kN for anchor bolts

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>

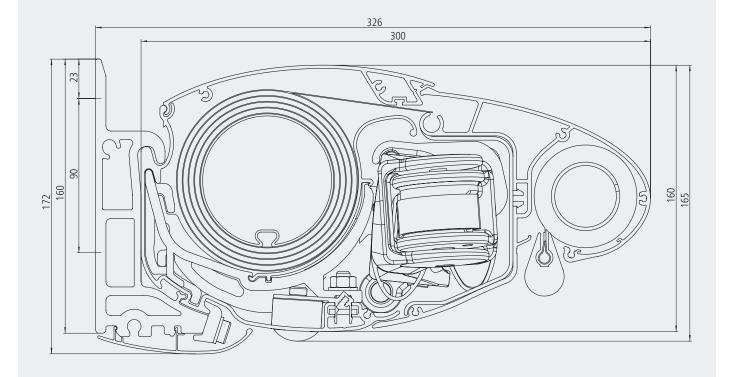
- 2 Opal Design II standard wall brackets, 150 mm
- 2 Opal Design II wall brackets, 300 mm
- ▲ 3 Opal Design II standard wall brackets, 150 mm
- ▲ 2 Opal Design II wall brackets, 300 mm and 1 standard wall bracket, 150 mm

# **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

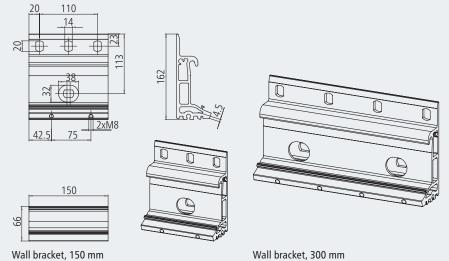
Its dimensions mean that the Opal Design II can be mounted in a wide range of ways: not only on a wall but also on a ceiling or a rafter.

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

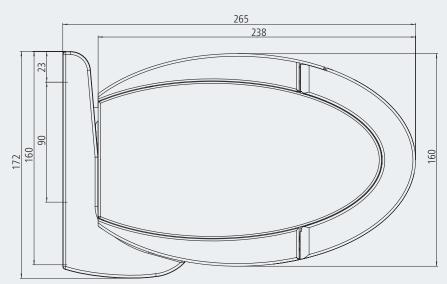
#### Wall installation







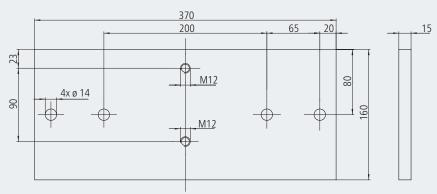




Cross-section of Opal Design II with ceiling bracket

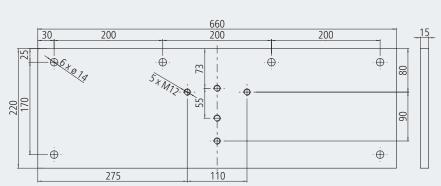
### Mounting plate 370 x 160 x 15 mm





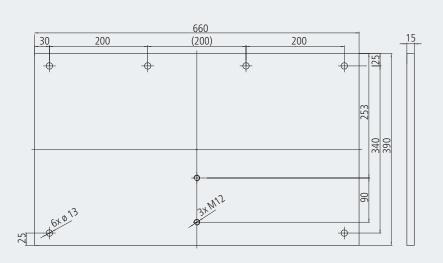
# Mounting plate, 660 x 220 x 15 mm





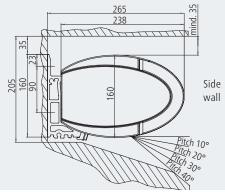
### Mounting plate 660 x 390 x 15 mm

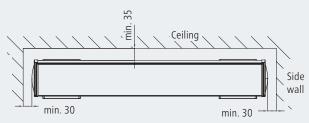




# **Installation options**

## Minimum spacing distances for installation



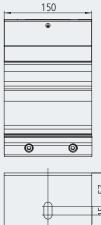


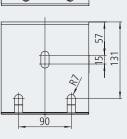
# Wall at rear

# Ceiling installation

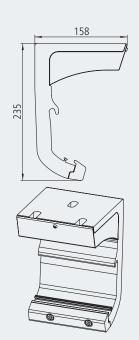


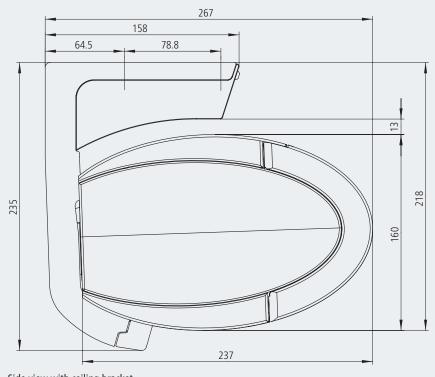






Ceiling bracket

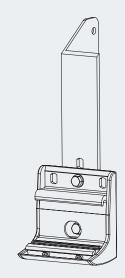




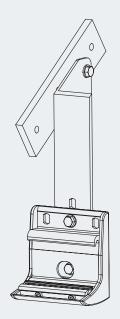
#### Rafter bracket installation



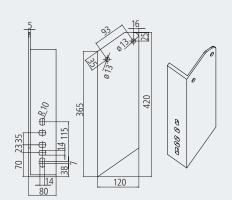




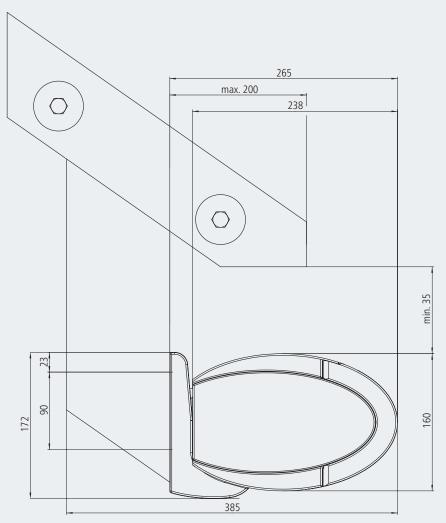
Right-hand rafter bracket



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

Nidth	Projection in o	Projection in cm							
n cm	150	200	250	300	350	400			
	647								
200	324								
	159								
	83								
	454								
250	766	1140							
	383	570							
	189	280							
	98	146							
	537	797							
	884	1317	1861						
	442	659	930						
00	218	324	457						
,00	113	169	238						
	620	921	1299						
	1003	1495	2108	2871					
350	501	747	1054	1436					
	247	367	517	704					
130									
	129	191	270	367					
	703	1045	1472	2003	4000				
	1121	1672	2355	3199	4069				
400	560	836	1178	1599	2034				
	276	411	578	784	996				
	144	214	301	409	519				
	786	1169	1644	2231	2836				
450	1239	1850	2602	3527	4488	6418			
	620	925	1301	1763	2244	3209			
	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			
550	1476	2205	3097	4710	6034	7630			
	738	1102	1548	2355	3017	3815			
	363	542	760	1154	1477	1867			
	189	282	396	602	770	973			
	1035	1542	2162	3286	4205	5314			
600	1594	2382	3344	5087	6519	8237			
	797	1191	1672	2544	3259	4118			
	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			
650	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 o	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

650

Shear forces in N for rafter mounting

1444

Width	Projection in o	:m			
in cm	150	200	250	300	350
200	1153				
200	526				
250	1368	2050			
230	628	903			
300	1584	2371	3357		
300	730	1048	1447		
250	1799	2692	3805	5195	
350	832	1193	1643	2205	
400	2014	3013	4253	5790	8294
400	934	1338	1839	2460	3473
450	2230	3335	4700	6385	9172
450	1036	1482	2035	2716	3843
500	2445	3656	5148	6980	10050
500	1138	1627	2231	2971	4213
FFO	2661	3977	5596	8477	10928
550	1240	1772	2426	3591	4583
600	2876	4298	6044	9156	11806
600	1342	1917	2622	3881	4953
650	3092	4619	7233	9835	12684
し わちひ					

2061

3118

4171

5322

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

for each),

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

11663

6692

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

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