



MORCO | 

Bellfort Terrace Awning



Bellfort Terrace Awning

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Bellfort Terrace Awning

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Our Bellfort® Terrace Awning is a fully retractable fabric roof on fixed rails and, when installed with integrated side-screens, encloses a terrace to provide a warm, protected, unconfined space filled with natural light and minimal framework.

The exceptional strength of the awning utilizes zipped channels and storm-proof fabric. The Bellfort® Terrace Awning is the ideal choice for outdoor commercial or residential areas especially suited to exposed locations as all components are 100% corrosion resistant.

History

Morco was founded in London in 1956 by Mr G H Morrison, as a specialist manufacturer of canopies, covers, sails and tarpaulins for London's busy waterways. His popularity with employees and customers saw his business grow steadily. 1967 saw Morco move to the current Riverside location on the Greenwich Peninsula. In 1978, his son George took over. Keen to utilise his design background, he began to construct specialist awnings on a much larger scale. With his fanatical attention to detail, Morco soon gained a reputation across the UK for outstanding quality awnings.



Present Day

For over 50 years, Morco have established themselves as the nation's leading design and manufacturer of custom-made awnings and canopies. It remains a family run business that prides itself on its heritage. There remains a dedicated and skillful team of craftsman and designers who all play a vital role in Morco's success story. The majority of products are still hand-built in our London workshop and a small amount are produced in Germany. Morco are keen to lead and focus heavily on pioneering new techniques or materials to improve our end products and deliver more options to our customers.





Design

Morco have a talented and experienced design team who are skilled at working with or collaborating with architects, design teams, contractors or even working independently to produce an awning solution. We can provide sophisticated 3D-modelling on request, as well as supplying fabric samples. Morco also offer clients the opportunity to utilise their cutting-edge RAGS branding and pattern system which has revolutionised the traditional design parameters.



Craftsmanship

The Morco manufacturing team are dedicated and skilled craftsmen who are proud of maintaining Morco's on-going reputation for producing awnings of outstanding build quality.











Bellfort Terrace Awning | Overview



Maximum width: 1 section: 6.0m (Up to 5 sections can be coupled together).

Maximum projection: 4.5m (up to 6.0m depending on the width).

Pitch*: subject to suitable fixing conditions.

Operation: electric (either side of the roller).

Wind resistance: Class 3 | Beaufort 6 (48kmph / 30mph)

*Note: if the awning's angle of pitch is less than 25% = 14°, measured from the horizontal, it must not be opened in the rain. There is a risk of puddles forming in the fabric which could damage the awning or cause it to fall.

Single unit

		Awning fixture width									Minimum fixture width		
		150 ¹⁾	200 ¹⁾	250	300	350	400	450	500	550	600	Hard-wired motor	Radio-controlled motor
Order dimensions		67 ²⁾	151	201	251	301	351	401	451	501	551		
		150	200	250	300	350	400	450	500	550	600		
Overall awning width		+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10	+ 10		
H	150 ¹⁾											73 ²⁾	83 ²⁾
	200												
	250												
	300												
	350												
	400												
	450												
	500												
	550												
600													

dimensions in cm

1) = only pergola **with fixed posts**

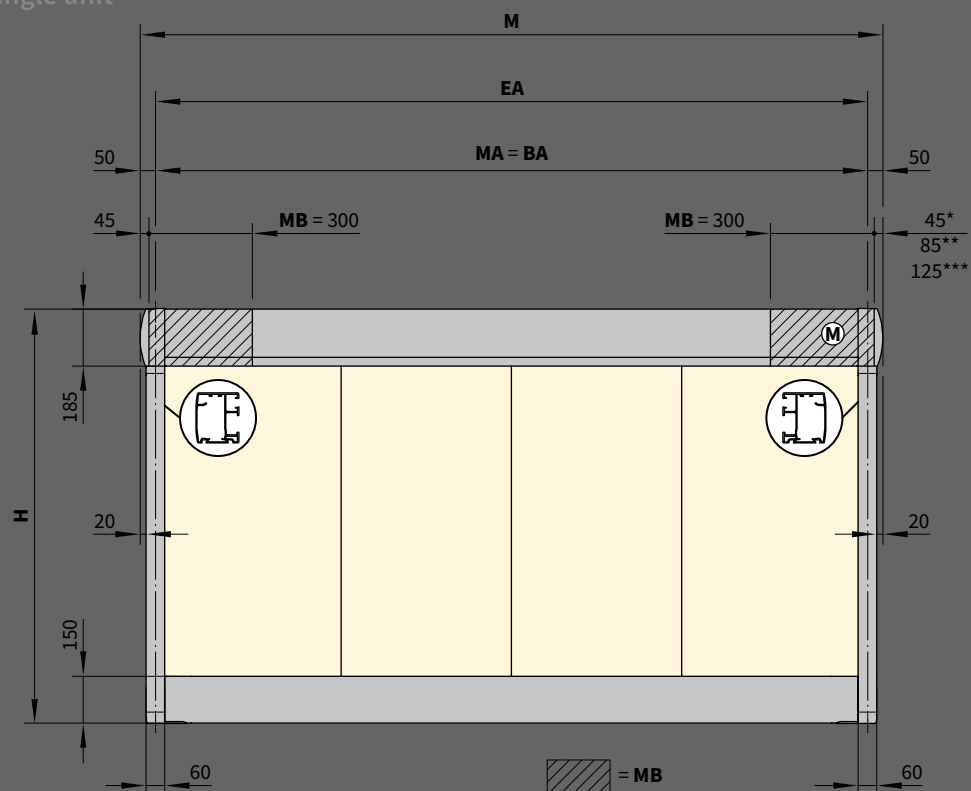
2) = 94 cm for Dropvalance with sundrive solar panel

H = *order dimension* = extension

- = optional version: adjustment range of telescopic post 20 cm
- = optional version: adjustment range of telescopic post 30 cm
- = optional version: adjustment range of telescopic post 40 cm

Bellfort Terrace Awning | Dimensions III

Fixture Dimension - Single unit



* = dimensions for rear cable exit on motor side (standard)

** = dimensions for bottom cable exit on motor side (optional)

*** = dimensions for cable duct in case of lighting

[...] = the cover gap dimension in standard units;
there is no cover gap in units with the tracfix system

AH = fixture height

BA = fixture width = awning fixture width = order width

DH = headroom

EA = single unit

F3 = concrete foundation.

Please view section "Concrete foundations"

H = *order dimension* = extension

M = overall awning width = $MA + 10 \text{ cm}$

(M) = operation side, motor drive

MA = *order dimension* = awning fixture width

MB = bracket fixture range

SH = *order dimension* = post height, standard
height 2500 mm (bespoke heights on request)

VB = height adjustment at the base of both the front
support posts during installation approximately 100 mm

W = pitch setting = $5^\circ - 45^\circ$

WS = distance from wall to support post centre

dimensions in mm

Bellfort Terrace Awning | Configuration I

The minimum pitch that will ensure water drainage

	extension ≤ 250 cm	extension ≥ 251 ≤ 350 cm	extension ≥ 351 ≤ 450 cm	extension ≥ 451 cm
Unit with fixed posts, without Dropvalance	14°	14°	14°	14°
Unit with fixed posts, with Dropvalance	17°	17°	17°	17°
Unit with telescopic post, with / without Dropvalance	7°	8°	9°	10°

Operation

	standard	optional
manual operation	—	—
hard-wired motor	X	—
silentec motor (optionally with an external io / RTS receiver) ¹⁾	—	X
radio-controlled motor io, 868 MHz	—	X
radio-controlled motor RTS, 433 MHz	—	X

1) only available for awnings with 1 field and 2 fields, 2 motors

Awning cover

Awning cover	Fabric pattern no.	Standard	Optional
sunvas ^{1) 6)}	301.. / 309..–315..	X	—
perla ^{1) 5)}	370 ..	—	X
sunsilk ^{1) 6)}	324.. / 325.. / 328.. / 369..	X	—
perla FR ^{1) 5)}	374.. / 375..	—	X
perfotex ²⁾	331.. / 332..	X	—
transolair	338.. ³⁾ / 339.. ¹⁾	—	X
vuscreen Alu	317..	—	—
Soltis Perform 92 ⁴⁾	92-20..	—	X
Glass fibre screen	272..	—	—

Standard fabric panel widths

- 1)** 60 cm **2)** 120 cm **3)** 84 cm
4) 88.5 cm **5)** Only with tracfix

6) In the case of striped patterns, an even repeat at every second seam in the seam area is not possible.

Coupled awning

2–5 fields, 1 motor per field
Alternatively 2 fields 1 motor / 3 fields 2 motors / 4 fields 2 motors
Maximum size per field: see "single unit" dimensions

General notes

Different field extensions are available in a coupled awning. The rolling up behaviour of the covers may vary in coupled awnings that have different field sizes. This does not effect the functionality of the awning or shorten the service life of the covers.

The option of having telescopic posts in awnings with 3–5 fields is only available on request.

Dropvalance ^{1) 2)}

	Standard	Optional
Height 230 cm (manual operation, winding handle)		
Height 230 cm (motor operation, depending on the fabric series chosen)		
Winding handle	X	—
Hard-wired motor	—	—
Radio-controlled motor io, 868MHz	—	—
Radio-controlled motor, 433 MHz, RTS with sundrive	—	X
Cover sunvas / sunsilk / transolair / vuscreen Alu / Soltis Perform 92		

1) Dropvalance cover is narrower than the awning cover

2) In the case of coupled awnings, available for all fields only



Bellfort Terrace Awning | Configuration II

Optional accessories

Adjustable posts, manual or motor-driven
Posts with stabilisation boxes
Dropvalance, radio remote control with solar module sundrive or manual
LED-Line on the guide tracks, on both sides
LED-Line in the cover support tube ¹⁾
LED-Spots on the cover support tube ¹⁾
Infrared heater 2500 W
Infrared heater 2500 W with integrated radio-controlled receiver 868 MHz io
Wall sealing profile
Several motors in a coupled awning, can be operated independently
Vertical cassette blind markilux 776 tracfix
Automatic controls (light, wind, rain)

1) LED-Line and LED-Spots cannot be combined with each other

Dropvalance with radio-controlled motor RTS ²⁾ ³⁾

Dropvalance cover	fabric range no.	standard	optional	blind fixture width	height	cover manuf.
sunvas	301.. / 309..-315..	X	—	≤ 600	160	LN
				≤ 600	230	QN
sunsilk	324.. / 325.. / 328.. / 369..	X	—	≤ 600	160	LN
				≤ 600	230	QN
sunvas (250 cm)	31008, -09, -13, -16, -18, -25, 27, -28, -31, -36, -37, -57, -58, 31109, -14, -17	X	—	≤ 600	230	N
transolair	338.. / 339..	—	X	≤ 600	230	N
vuscreen Alu	317..	—	X	≤ 600	160	N
Soltis Perform 92	92-20..	—	X	≤ 490	230	QN
glass fibre screen	272..	—	—			
perfotex	331.. / 332..	—	—			
perla	370..	—	—			
perla FR	374.. / 375..	—	—			

2) = 433 MHz radio-controlled RTS motor powered by a sundrive solar panel, minimum fixture width 94 cm

3) = only available in plain seamless fabrics (oversized, fabric width > 120 cm) or in plains with a horizontal joint (fabric width 120 cm)

N = seamless

LN = vertical seam(s), panel width usually 60 cm

QN = horizontal seam(s)

Frame colours

Standard colours

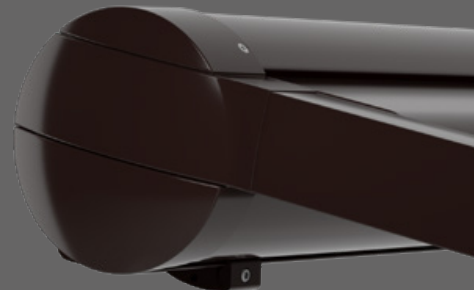
traffic white, RAL 9016



metallic aluminium, RAL 9006



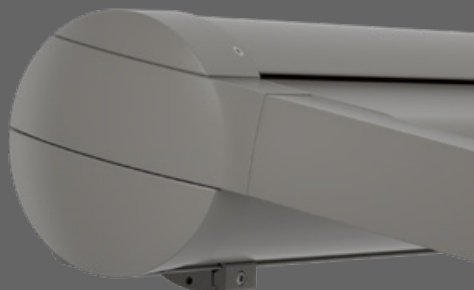
grey brown, similar to RAL 8019



off-white textured finish, 5233 ¹⁾



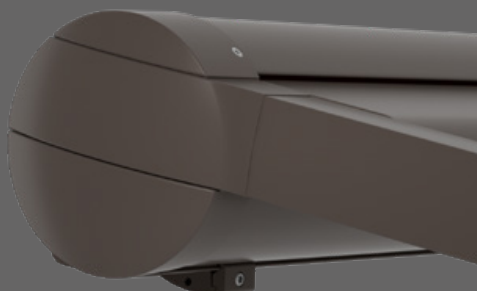
stone grey metallic, 5215 ¹⁾



anthracite metallic, 5204 ¹⁾



Havana brown textured finish, 5229 ¹⁾



1) textured finish

Non-standard powder-coated finish

Bespoke frame colours at a surcharge – matt, metallic and pearl finishes as well as other colour ranges (DB, Tiger etc.) on request. All frame colours are available at a surcharge with enhanced corrosion protection.

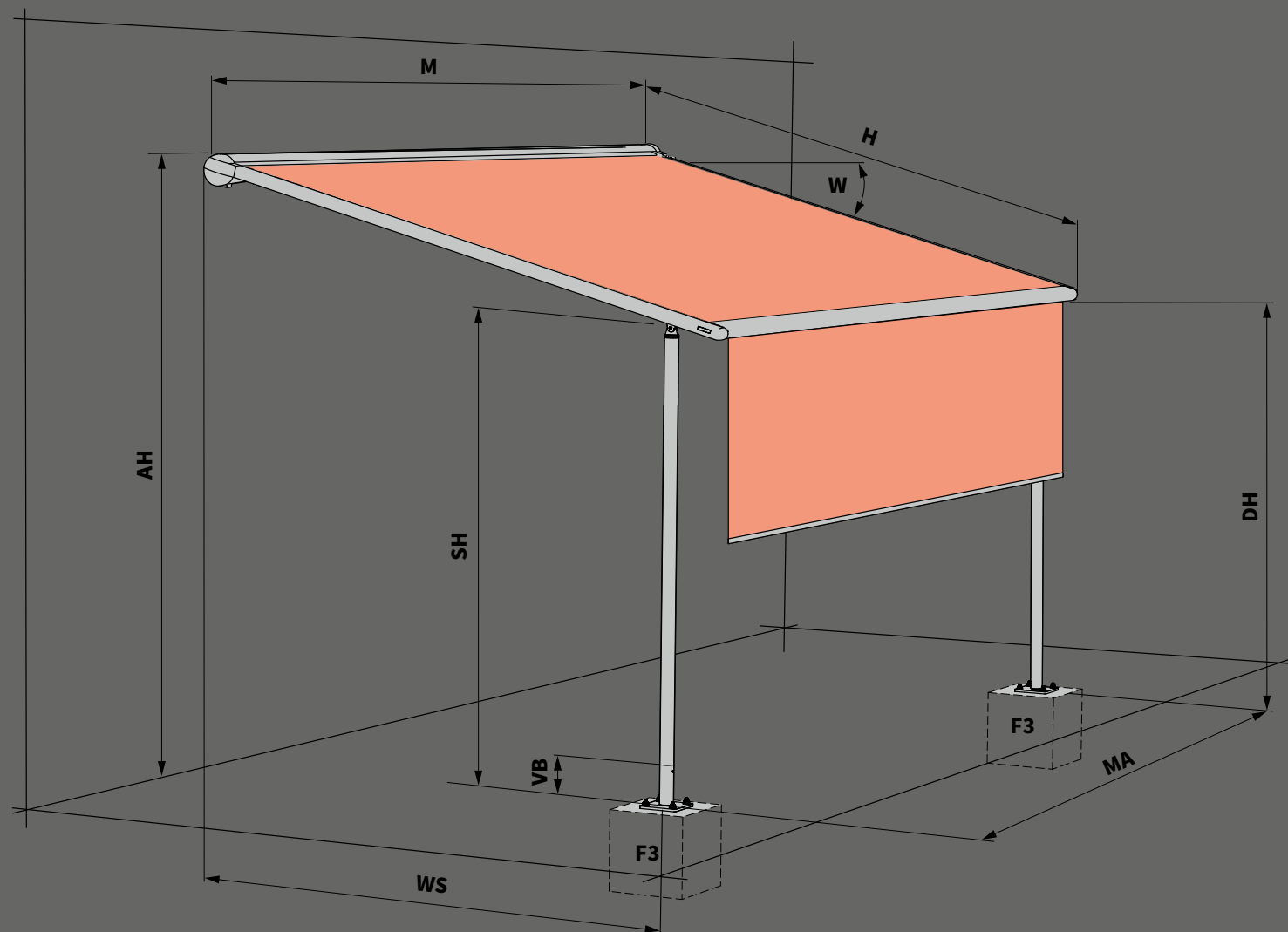
Colours may differ slightly from those depicted in both hue and finish.





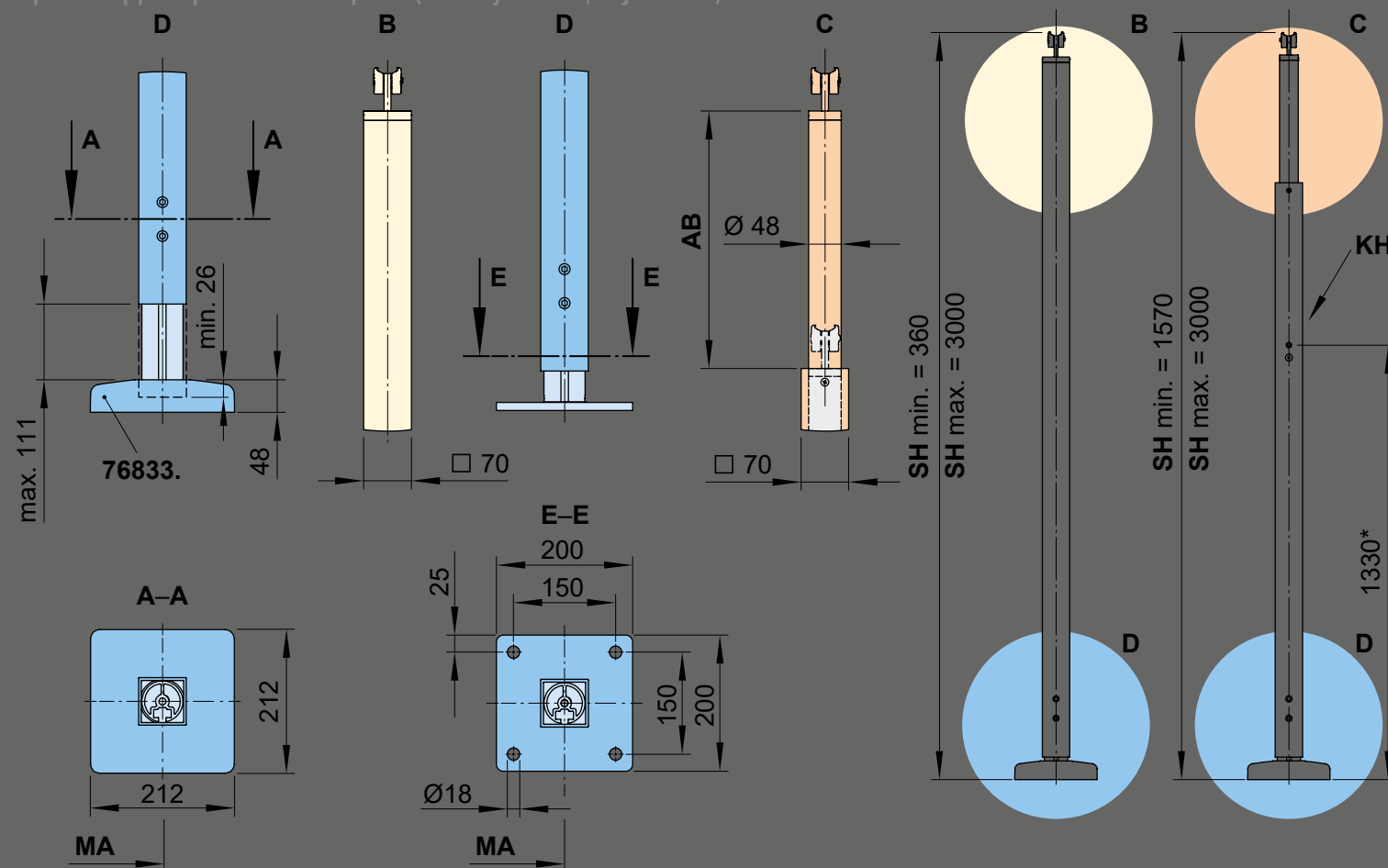
Bellfort Terrace Awning | Options | Footplates I

Support post fixture to a concrete footing



Post dimensions

Square support post with footplate (not adjustable/adjustable)



* = dimensions at the standard height

AB = adjustment range of a post 200, 300 or 400 mm.
For more detailed information please refer to
"Dimensions and configuration options"

B = support post without manual adjustment option

C = support post with manual adjustment option

D = height adjustment at the base of both the front support posts during installation approximately 100 mm

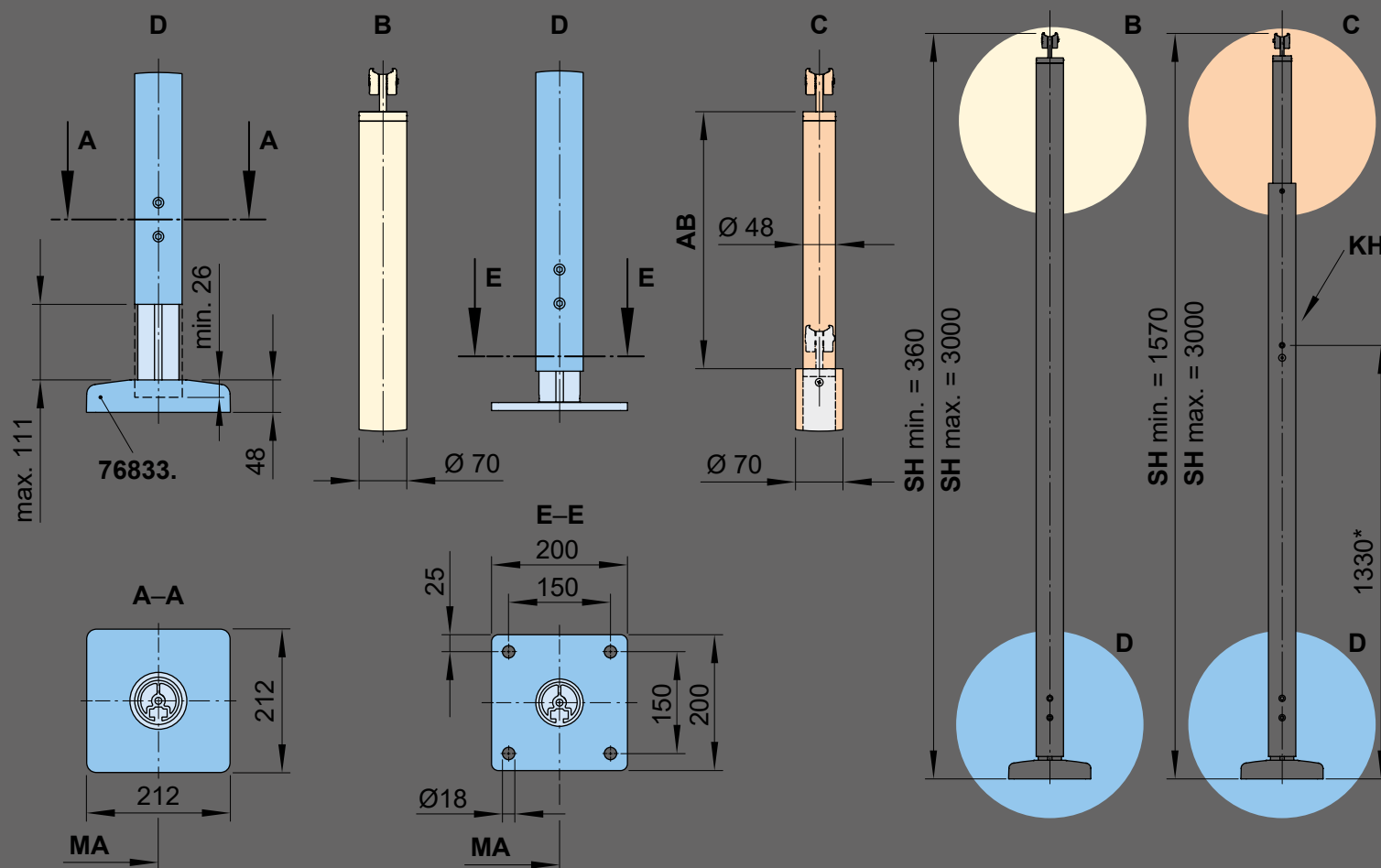
KH = winch handle socket

MA = *order dimension* = awning fixture width = fixture width

SH = *order dimension* = post height post height, standard height

2500 mm (bespoke heights on request)

dimensions in mm



* = dimensions at the standard height

AB = adjustment range of a post 200, 300 or 400 mm.
For more detailed information please refer to
"Dimensions and configuration options"

B = support post without manual adjustment option

C = support post with manual adjustment option

D = height adjustment at the base of both the front support posts during installation approximately 100 mm

KH = winch handle socket

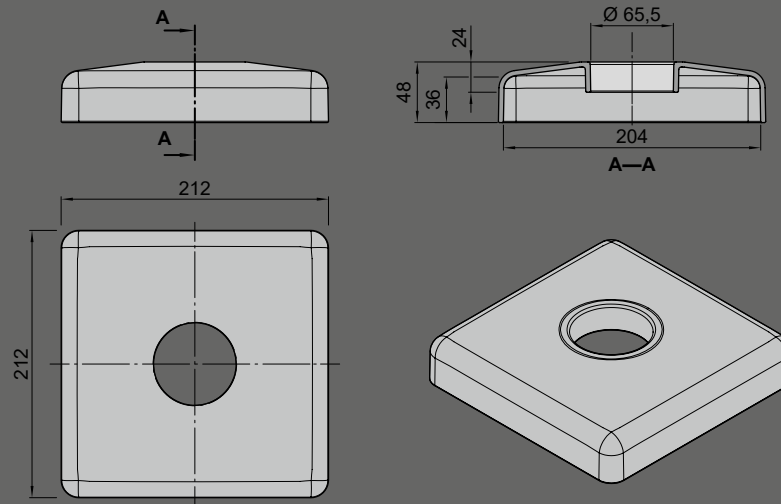
MA = *order dimension* = awning fixture width = fixture width

SH = *order dimension* = post height post height, standard height

2500 mm (bespoke heights on request)

dimensions in mm

Footplate cover

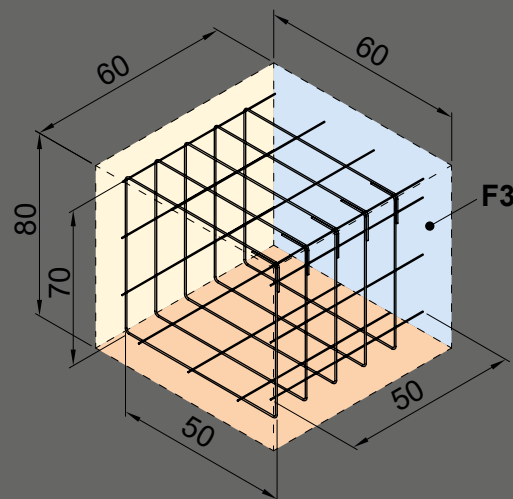


Concrete foundations

To be supplied on site:

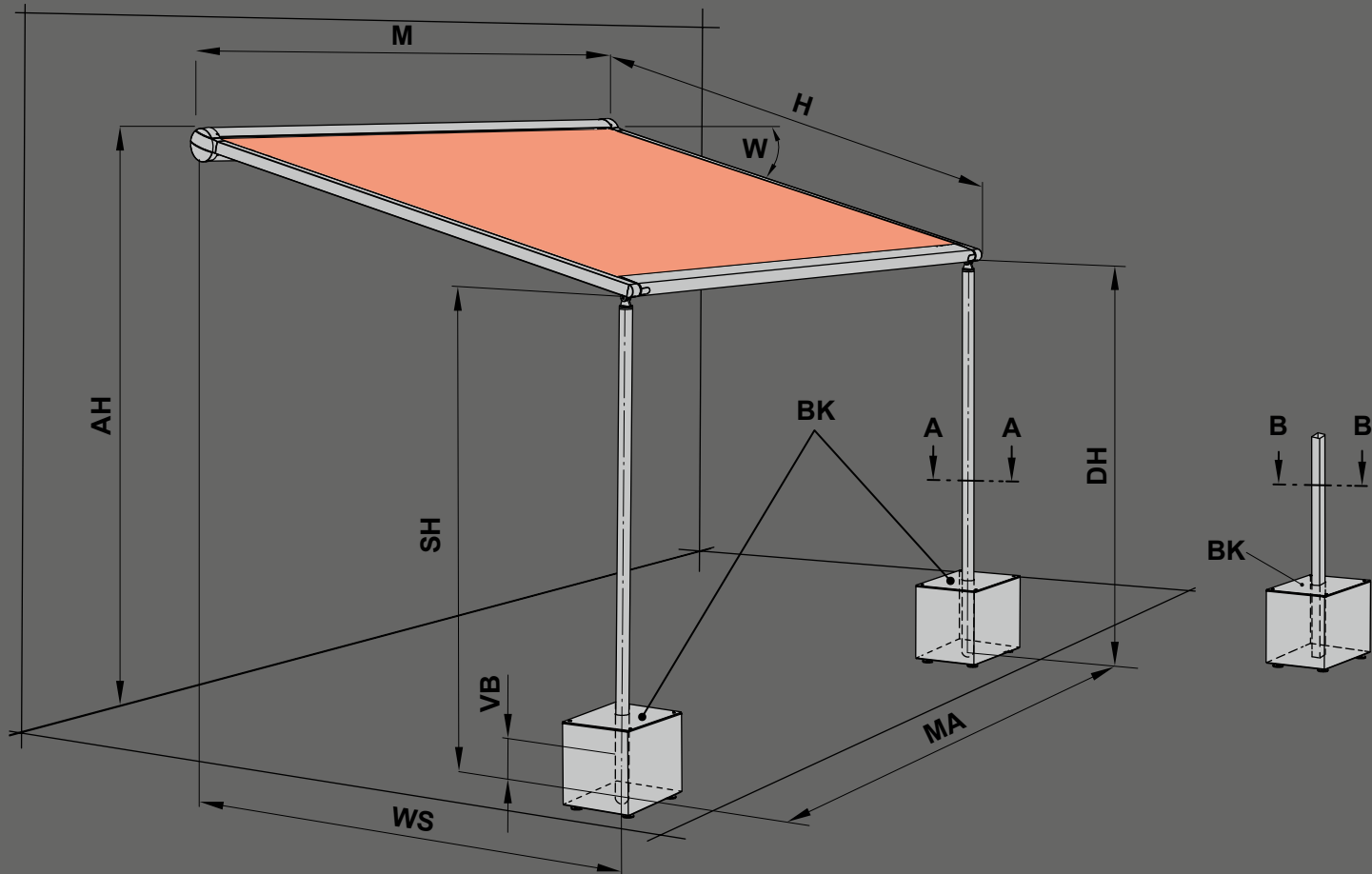
Concrete foundations with a compressive strength complying with C25/30 (previously B25) with a reinforcement cage made of rebar matting Q188.

F3



The footplates (F3) are to be fitted to the concrete footings using Fischer marine-grade stainless steel anchor bolts (FAZ 10/30 and washers certified to DIN 9021 (or equivalent)

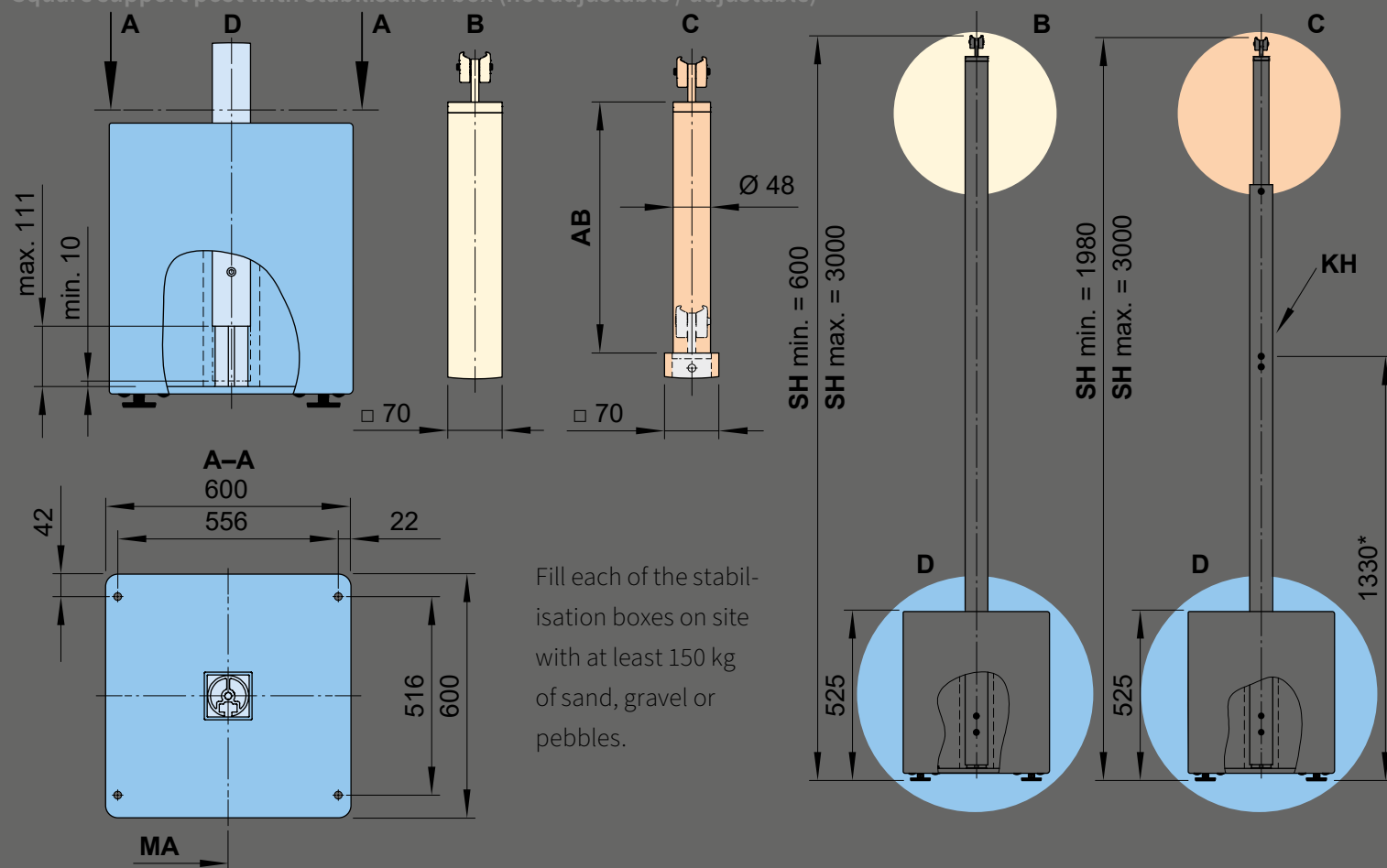
Support posts with stabilisation boxes



AH	= fixture height	MA	= <i>order dimension</i> = awning fixture width = fixture width	
BK	= stabilisation box	SH	= <i>order dimension</i> = support post height	
DH	= headroom	VB	= height adjustment at the base of both the front support posts during installation approximately 100 mm	
H	= <i>order dimension</i> = extension	W	= pitch setting = 5°–45°	
M	= overall awning width = MA + 10 cm	WS	= distance from wall to support post centre	dimensions in mm

Post dimensions

Square support post with stabilisation box (not adjustable / adjustable)



* = dimensions at the standard height

AB = adjustment range of a post 200, 300 or 400 mm.
For more detailed information please refer to
"Dimensions and configuration options"

B = support post without manual adjustment option

C = support post with manual adjustment option

D = height adjustment at the base of both the front support posts during installation approximately 100 mm

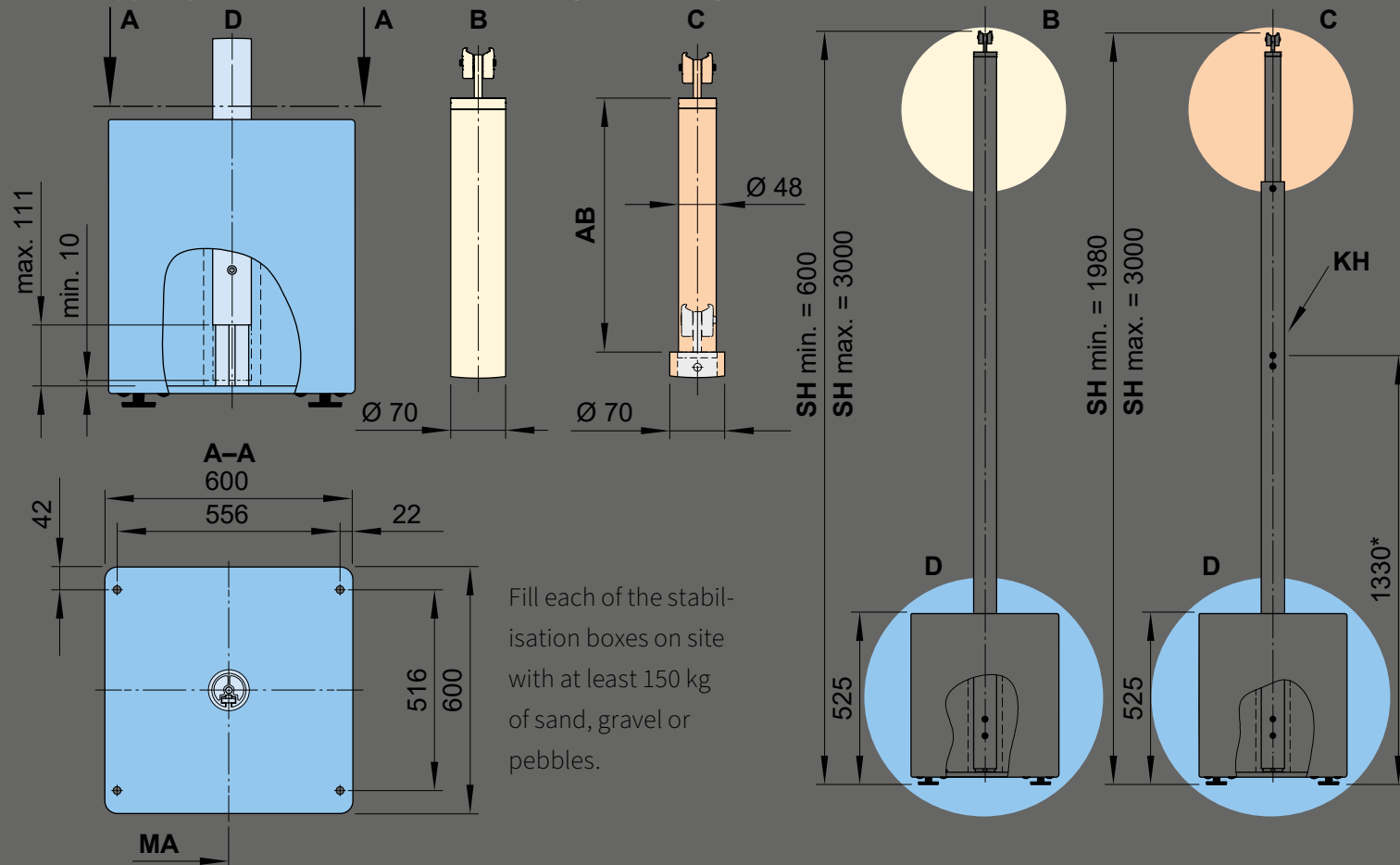
KH = winch handle socket

MA = *order dimension* = awning fixture width = fixture width

SH = *order dimension* = post height post height, standard height
2500 mm (bespoke heights on request)

dimensions in mm

Round support post with stabilisation box (not adjustable / adjustable)



* = dimensions at the standard height

AB = adjustment range of a post 200, 300 or 400 mm.
For more detailed information please refer to "Dimensions and configuration options"

B = support post without manual adjustment option

C = support post with manual adjustment option

D = height adjustment at the base of both the front support posts during installation approximately 100 mm

KH = winch handle socket

MA = *order dimension* = awning fixture width = fixture width

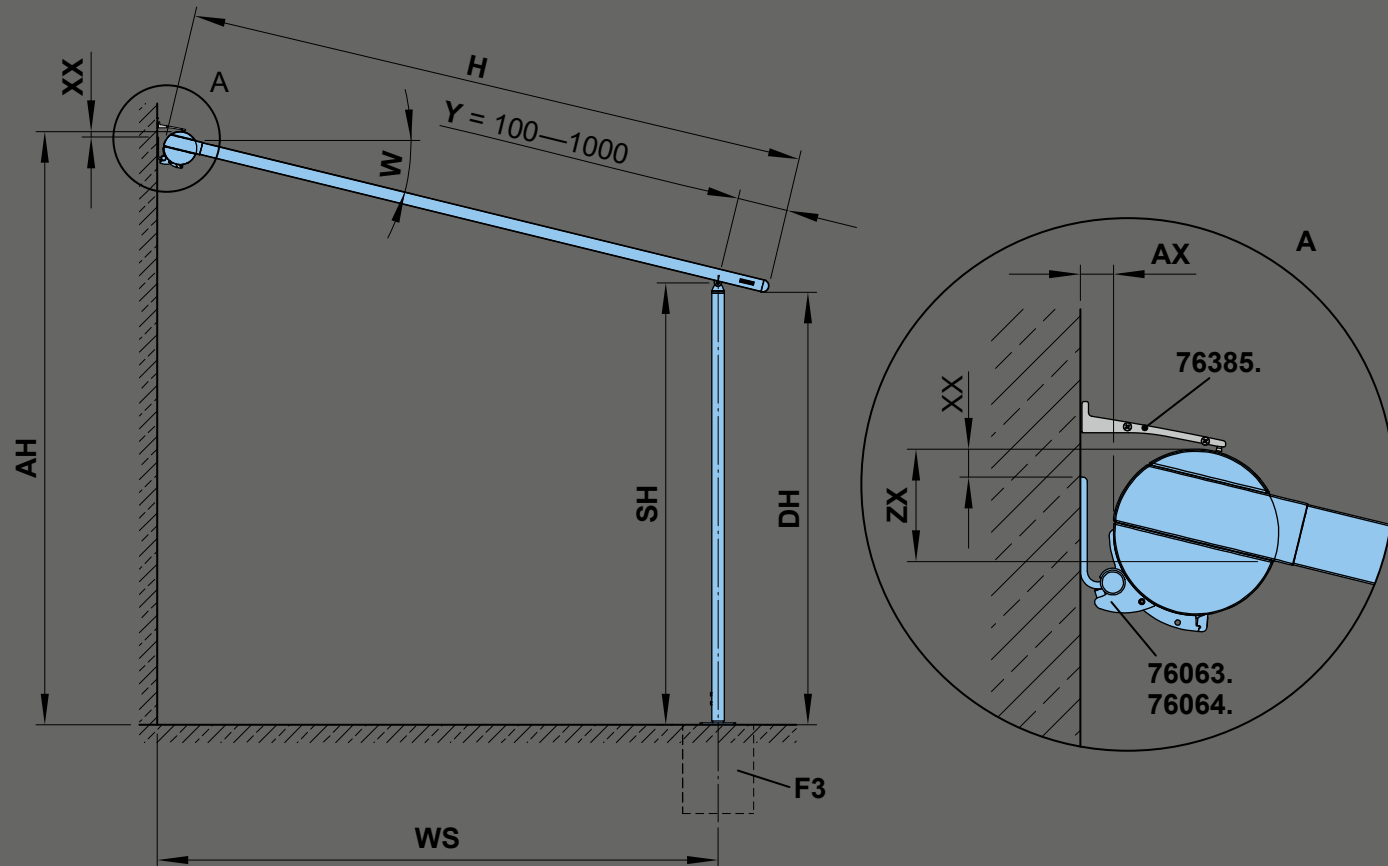
SH = *order dimension* = post height post height, standard height
2500 mm (bespoke heights on request)

dimensions in mm



Face fixture

Dimension overview support post with footplate



76385. = wall sealing profile (standard width = awning fixture width (**MA**) + 58 mm)

AH = fixture height = $SH + ZX + \sin W \times (H - Y)$

AX = distance from wall cassette

DH = headroom = $SH - \sin W \times Y$

F3 = concrete foundation. Please view section "Concrete foundations"

H = *order dimension* = extension

SH = *order dimension* = $AH - ZX - \sin W \times (H - Y)$

W = pitch (measured from the horizontal)

WS = distance from wall support post centre = $\cos W \times (H - Y) + AX$

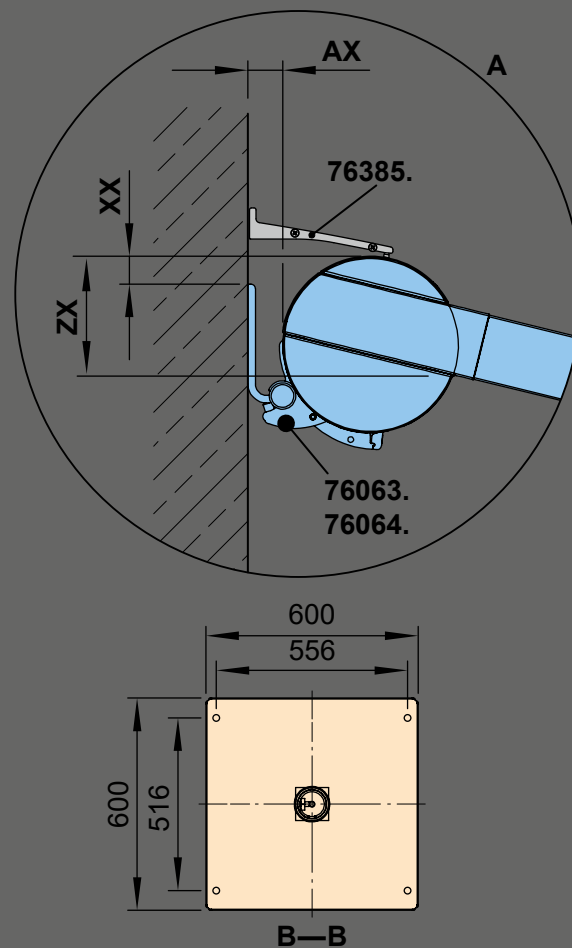
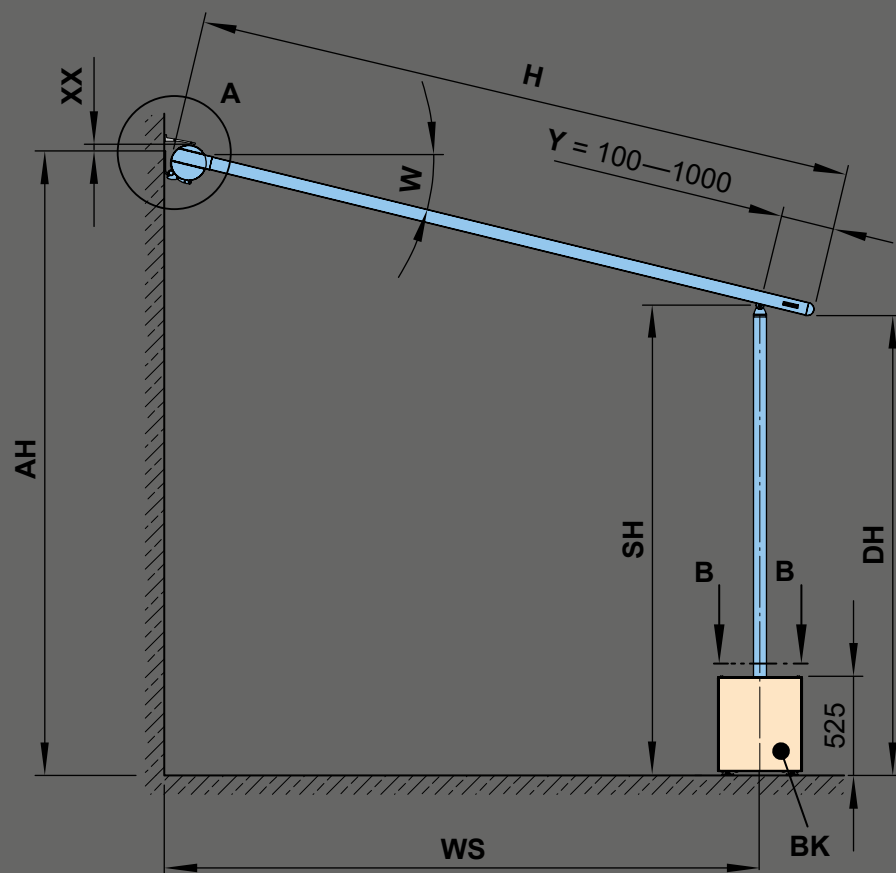
Y = the support post can be moved back by min. 100 mm and max. 1000 mm

XX = distance from the top edge of the fixture bracket to the top edge of the cassette (see table)

ZX = distance upper edge cassette – bottom edge of guide track

dimensions in mm

Face fixture



76385. = wall sealing profile (standard width = awning fixture width (**MA**) + 58 mm)

$$AH = \text{fixture height} = SH + ZX + \sin W \times (H - Y)$$

AX = distance from wall cassette

BK = stabilisation box

DH = headroom = $SH - \sin W \times Y$

H = *order dimension* = extension

$$\text{SH} = \text{order dimension} = AH - ZX - \sin W \times (H - Y)$$

W = pitch

WS = distance from wall support post centre = $\cos W \times (H - Y) + AX$

Y = the support post can be moved back by min. 100 mm and max. 1000 mm

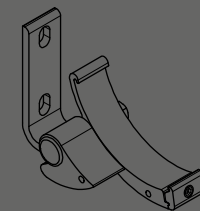
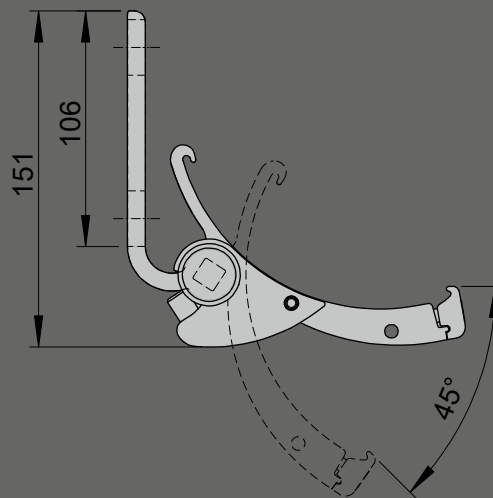
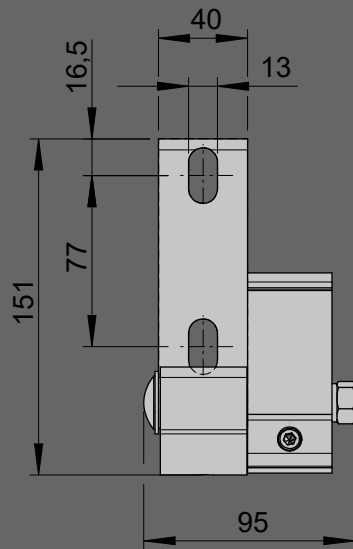
ZX = distance upper edge cassette – bottom edge of guide track

Fill each of the stabilisation boxes on site with at least 150 kg of sand, gravel or pebbles.

dimensions in mm

Face fixture

Face fixture cassette bracket, left



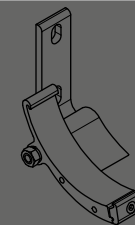
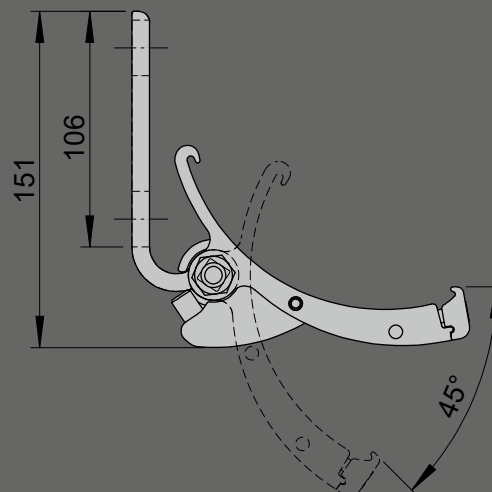
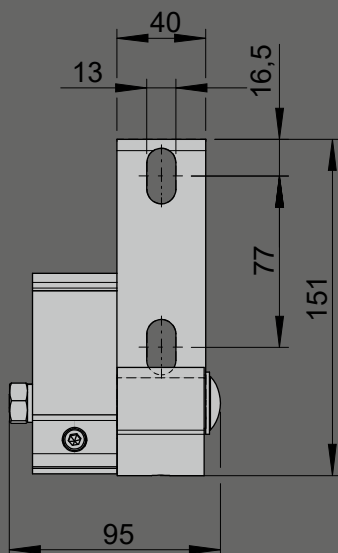
face fixture cassette bracket

left

pitch adjustment range
5°–45°

76063.

face fixture cassette bracket, right



face fixture cassette bracket

right

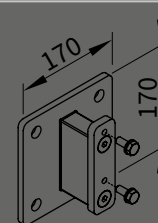
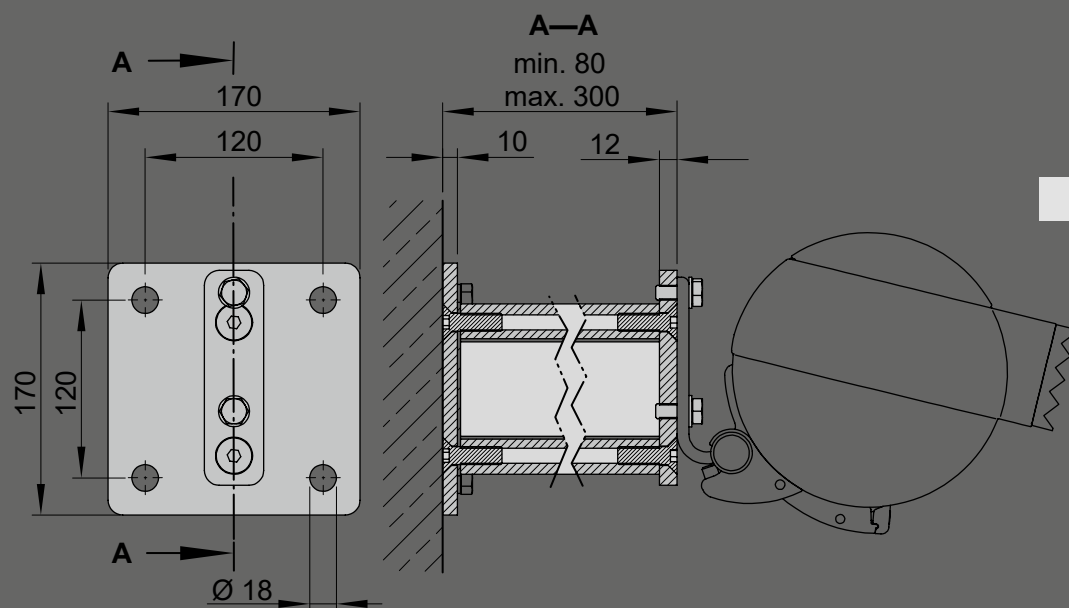
pitch adjustment range
5°–45°

76064.

dimensions in mm

dimensions in mm

Face fixture using stand-off brackets



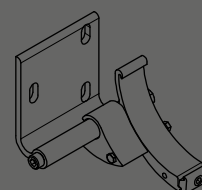
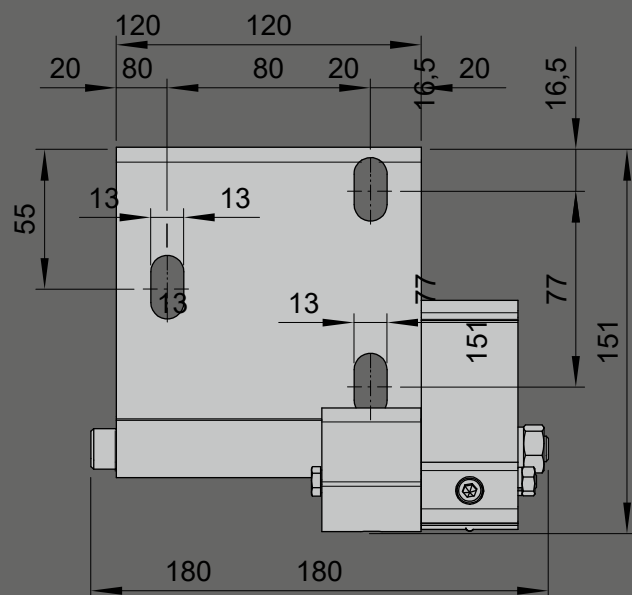
stand-off brackets for
face fixture brackets
76063., 76064. and 76181.

length min. 80 mm up to
max. 300 mm

77956.

dimensions in mm

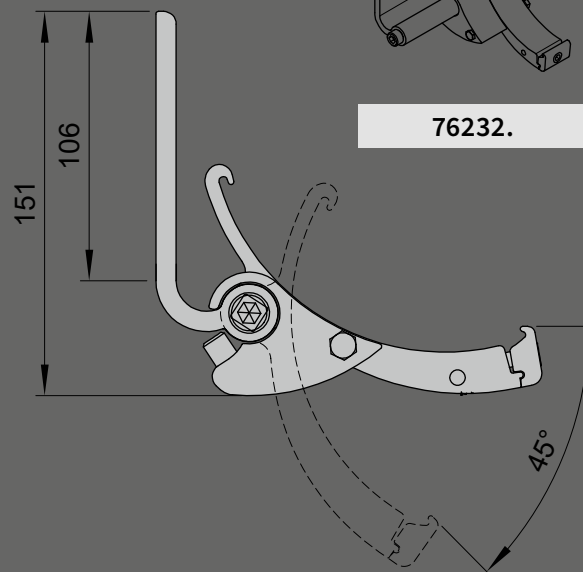
Face fixture cassette bracket, wide, right



face fixture cassette
bracket, wide, right

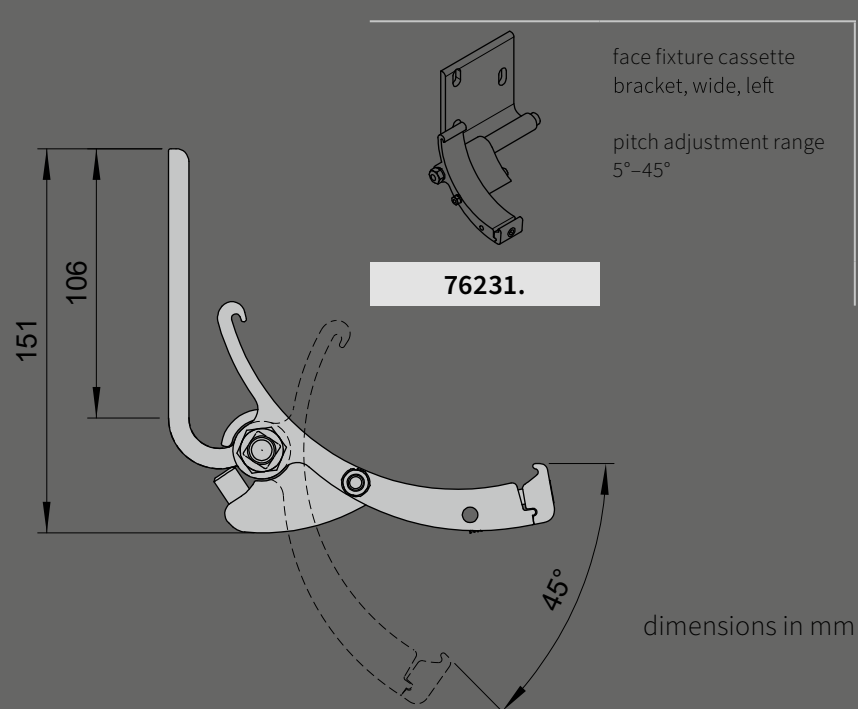
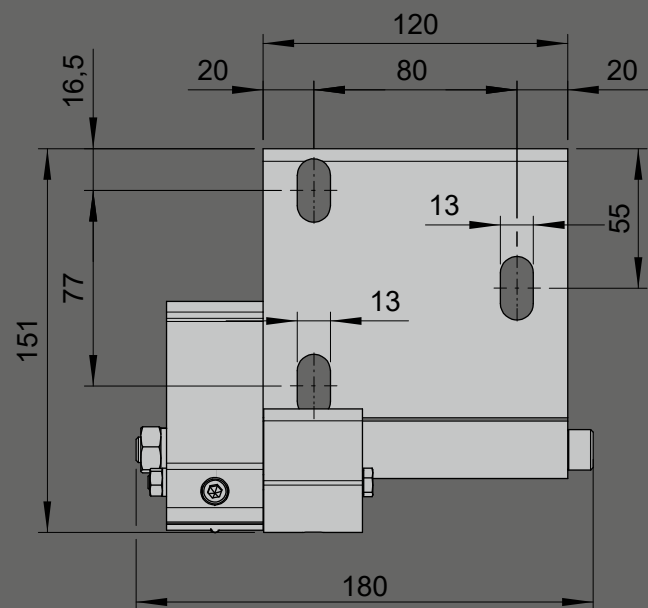
pitch adjustment range
5°-45°

76232.

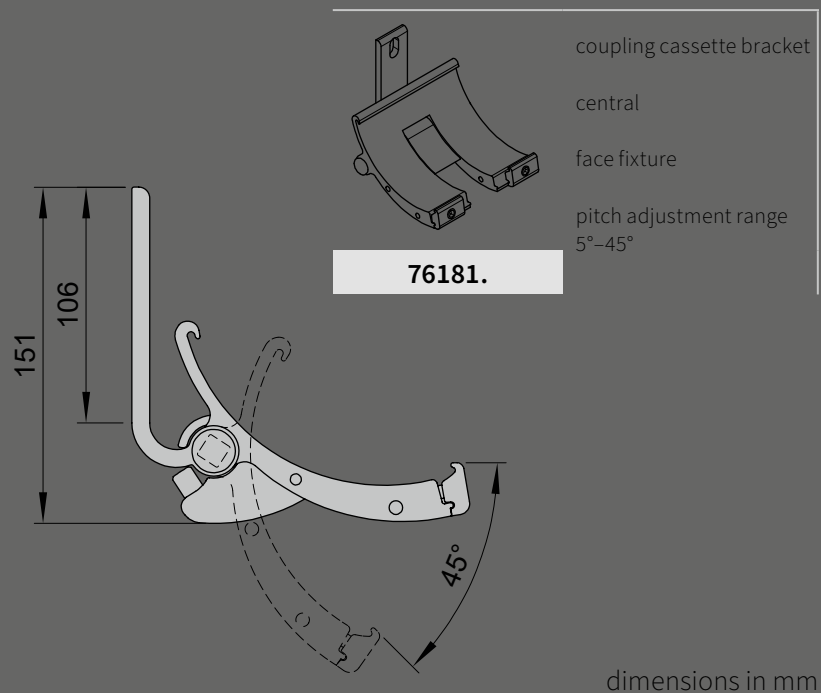
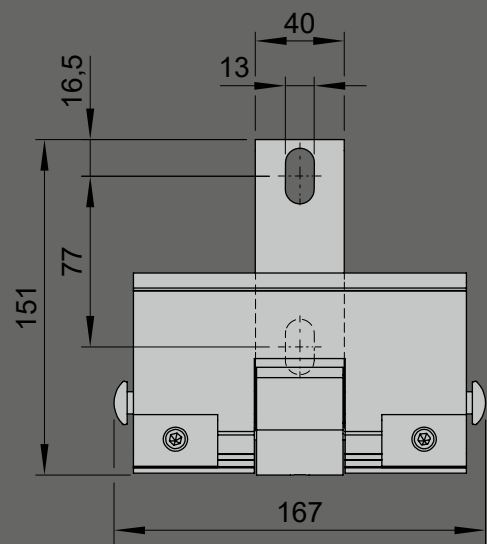


dimensions in mm

Face fixture cassette bracket, wide, left



Coupling cassette bracket (central in coupled units)

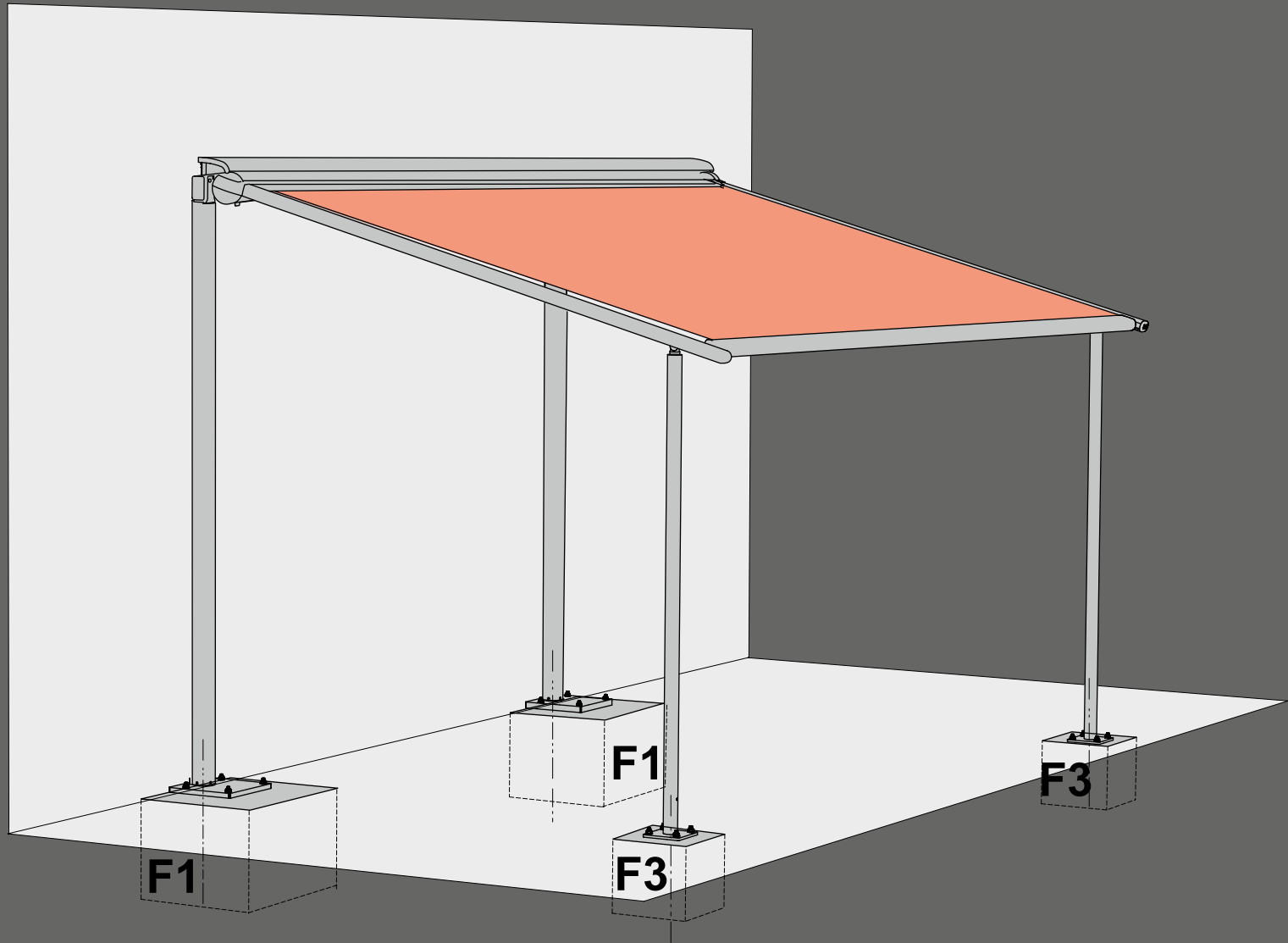






Bellfort Terrace Awning | Self-Supporting Configurations

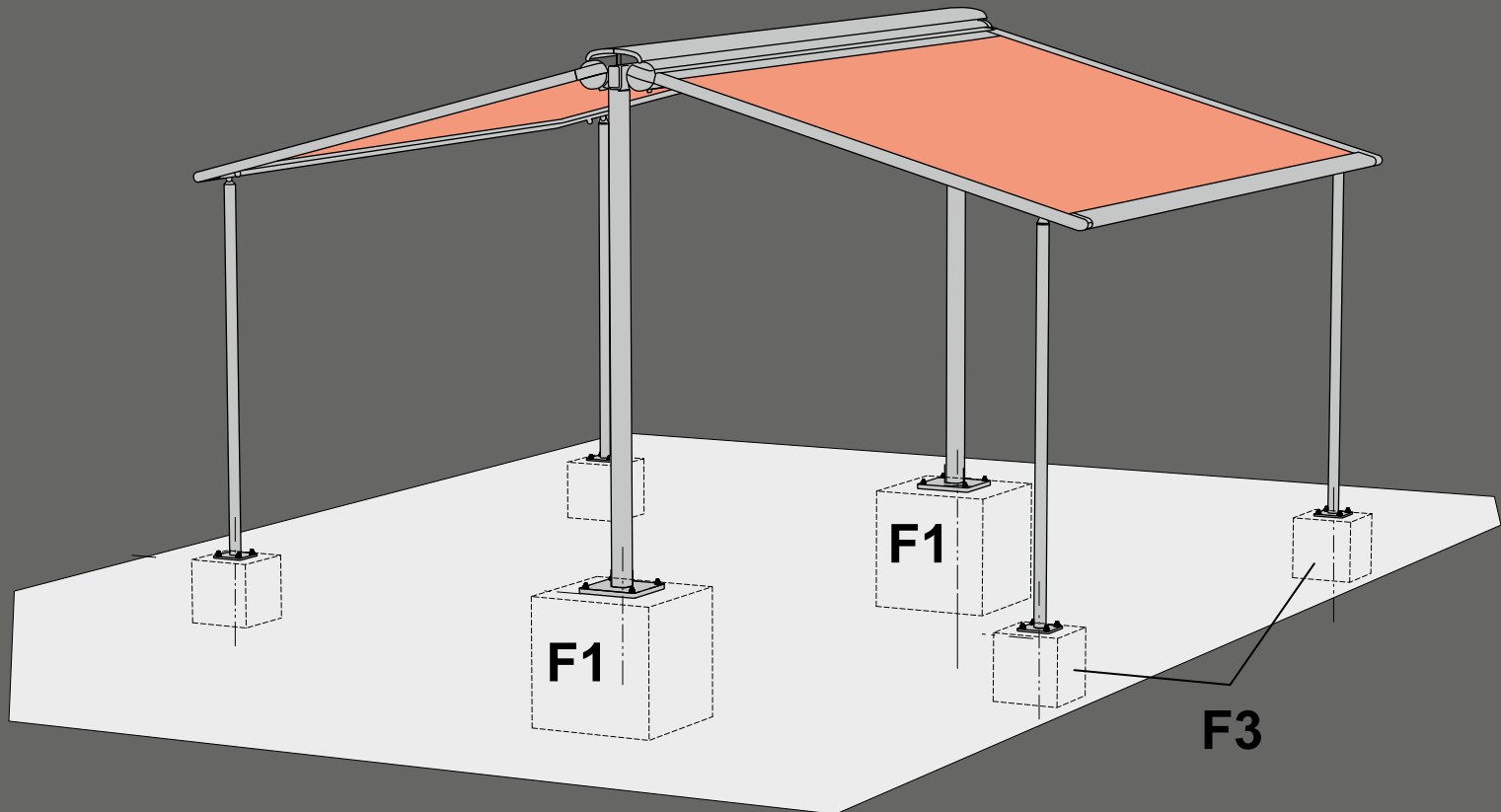
“Single” with Footplates





Bellfort Terrace Awning | Self-Supporting Configurations

“Back-to-Back” with Footplates

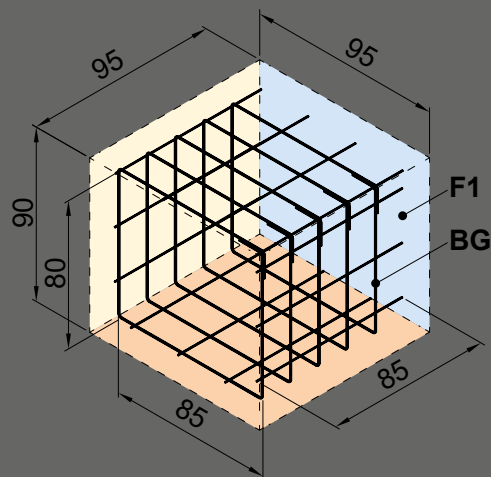


Concrete foundations

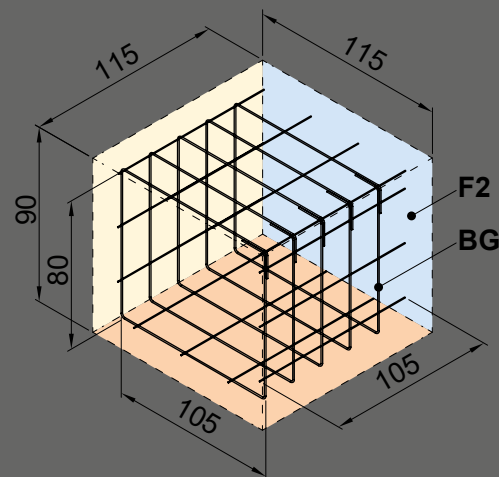
To be supplied on site:

Concrete foundations with a compressive strength complying with C25/30 (previously B25) with a reinforcement cage made of rebar matting Q188 for the outermost posts version F1 and the central posts version F2.

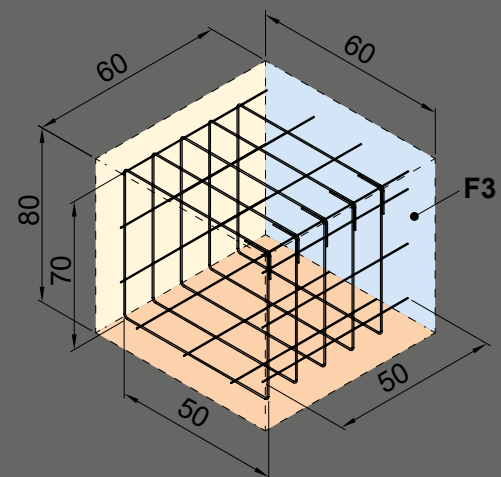
F1



F2



F3



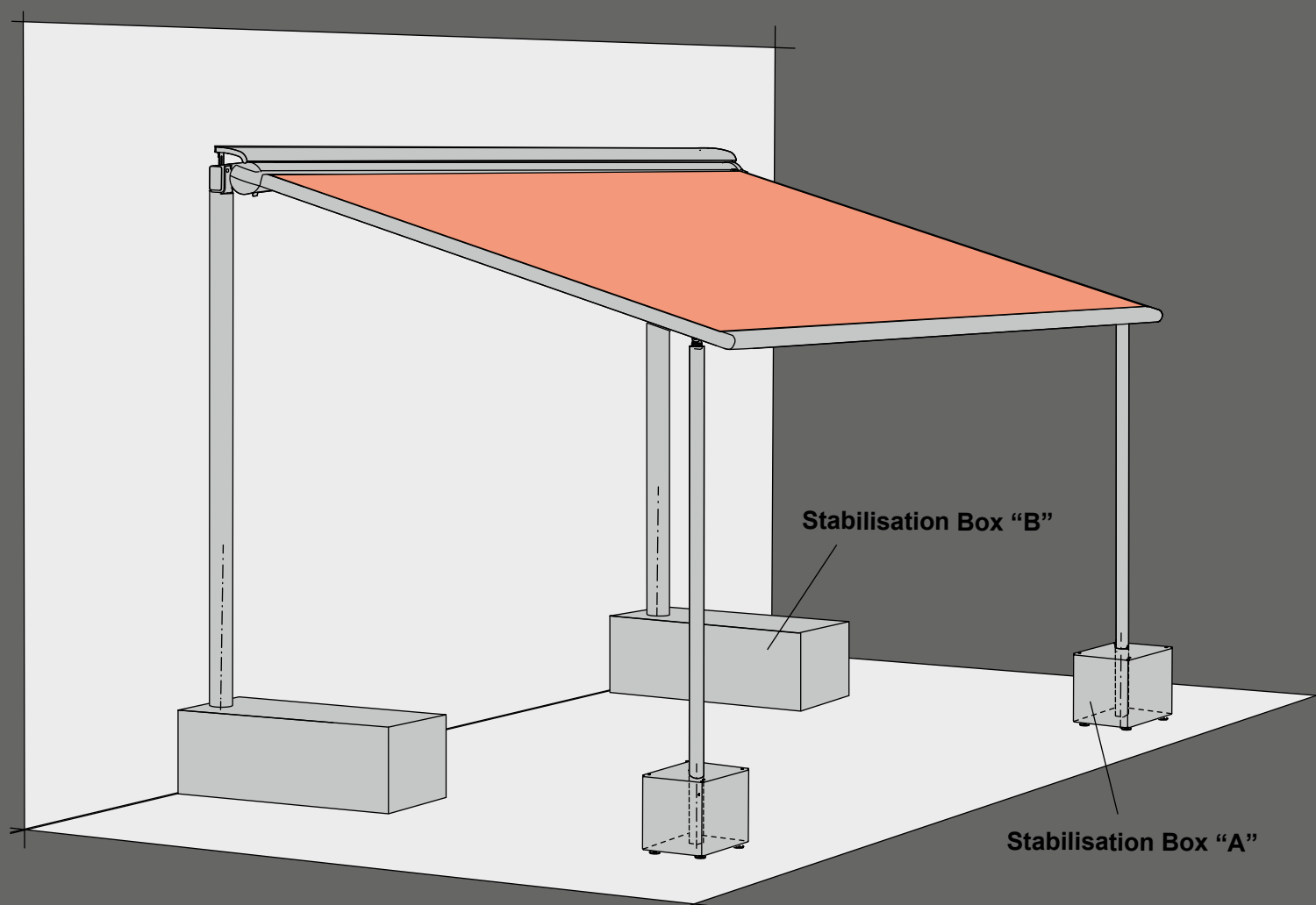
The footplates are to be fitted to the concrete footings F1 and F2

using Fischer marine-grade stainless steel anchor bolts FAZ II 16/50 and washers certified to DIN 9021 (or equivalent)

The footplates are to be fitted to the concrete footings F3

using Fischer marine-grade stainless steel anchor bolts FAZ 10/30 and washers certified to DIN 9021 (or equivalent)

“Single” with Stabilisation Boxes

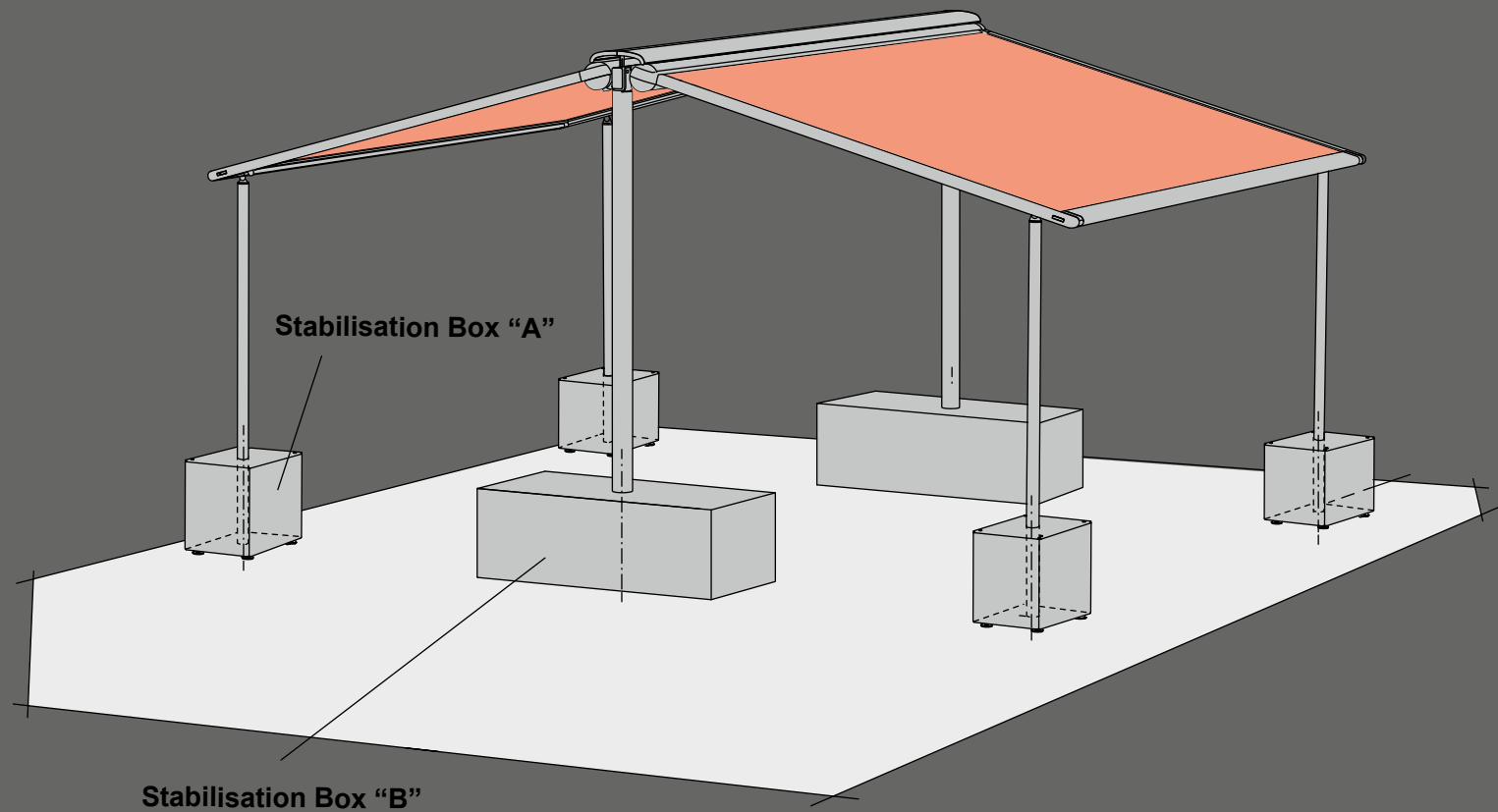


To be supplied on site:

100 kg of ballast to fill each stabilisation box “A”

625 kg of ballast to fill each stabilisation box “B”

“Back-to-Back” with Stabilisation Boxes



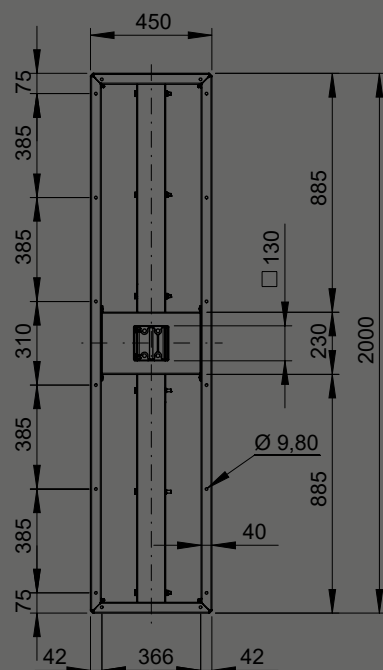
To be supplied on site:

100 kg of ballast to fill each stabilisation box “A”

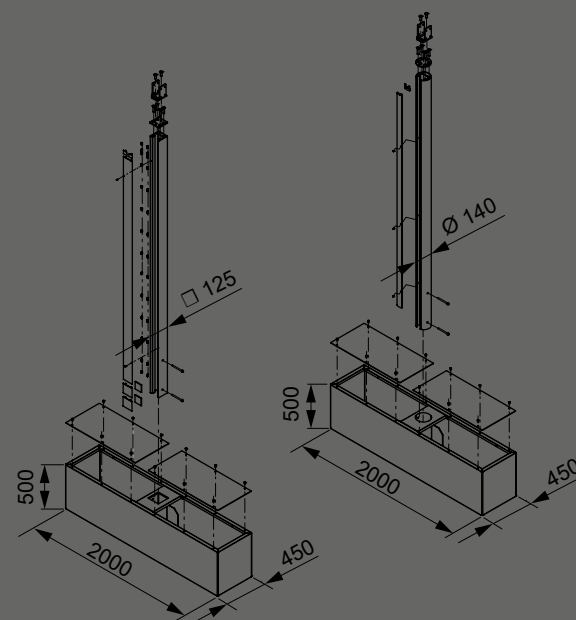
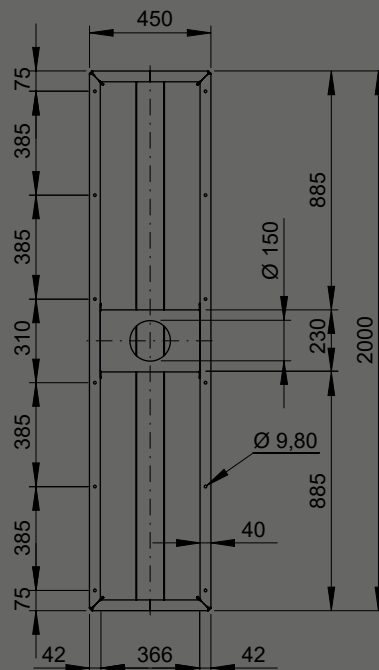
625 kg of ballast to fill each stabilisation box “B”

Stabilisation Box “B”

stabilisation box for square posts



stabilisation box for round posts



Fill each of the stabilisation boxes on site with at least 625 kg of sand, gravel or pebbles.

dimensions in mm



