

Conservatory/roof awning

# WGM Top WGM Top Stretch | OptiStretch

Thanks to its flexible construction the **WGM Top** from weinor fits over almost any building project, from wooden, aluminium or steel patio roof, to the weinor Glasoase® and warm conservatory. It reliably protects against overheating, thus contributing to a pleasant atmosphere. The WGM Top also has quite a bit to offer in terms of design. With its slimline profiles, almost screwless look and a huge variety of fabric patterns and frame colours it integrates subtly into the overall appearance of the building facade.

#### UPDATE august 2021

Page 330, Technical drawing corrected Page 331, Bottom up installation added



**Attractive design:** Slimline, no visible fixings



#### Receiver housing on top:

The BiConnect receivers are housed on top of the cassette making it easy to access for maintenance purposes



#### weinor carriage system:

Quiet and easy running

#### Flexible support brackets:

The awning height can be individually adjusted thanks to the different support bracket versions (fixed/adjustable, standard/special version)



Fixed support bracket top in 4 heights: 80, 120, 150 and 220 mm



Adjustable support bracket top in 3 heights: 120–165, 165–210 and 210–255 mm



Adjustable support bracket top for multi-section units in 3 heights: 120–165, 165–210 and 210–255 mm



#### New flat rope:

Quiet and extremely tear-resistant

## WGM Top Highlights





The best protection: Can be combined with a sun/wind sensor



Ideal for large areas especially commercial applications:

Ideal for covering very large areas, especially in the commercial sector



**WGM Top OptiStretch:** 

Held captive on 4 sides, no light gap, with strip reinforcement



WGM Top Stretch:

Held captive 2 sides, with light gap, with corner reinforcement

## **WGM Top** Benefits



## An ideal atmosphere under any conservatory or on any glass roof

The WGM Top can be retrofitted to a whole range of different untrussed roofs. It fits perfectly on a weinor Glasoase®, as well as on a warm conservatory and on a wooden or aluminium patio roof. It protects against overheating, thus contributing to a pleasant atmosphere. The WGM Top impresses due to its slim, elegant design with almost no visible fixings.

- Suitable for larger cross sections and dimensions up to 36 m<sup>2</sup>
- Wind-resistant up to wind force 6 on the Beaufort scale
- Elegant design without any visible screws, caps or fixings



## Reliable tension system – with new quiet flat rope

The tried and tested tension system is used with the WGM Top with a new flat and at the same time tear-resistant rope. The rope winds up extremely quietly over itself instead of side by side. This prevents the rope from bouncing.

- Long-lasting equalised fabric tautness with pulley block technology
- The flat rope is quiet and tear-resistant. It prevents the rope from twisting and bouncing and does not fray on the sides.



### Tried and tested weinor carriage system

The tried and tested carriage impresses with highly-precise and quiet running.

- Precision rollers for reduced rolling friction, resulting in very easy and quiet extension and retraction
- Accurate guiding of the flat rope in the carriage
- Loose-fitting bearing on carriage prevents it from jamming in side winds



### Supporting brackets for every requirement

The conservatory awning's support brackets top impress with their subtle and almost screwless look. The awning height can be individually adjusted thanks to the different versions (fixed, adjustable, standard and special version). Even several WGM 2030 support brackets are compatible with the WGM Top.

#### **WGM Top** Benefits



#### Receiver housing on top:

The well designed and positioned housing is positioned on top of the cassette for ease of access.

- Easier access to the motor input and components
- The programming of the drive's end positions is made easier by the housing position
- Decoupling of the wind sensors during maintenance



#### **Clever Stretch and OptiStretch versions**

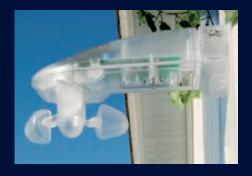
**Stretch WGM Top:** the consistent tension and fabric position creates a cosy atmosphere.

- Held captive on 2 sides, cost effective solution, easy to install **OptiStretch WGM Top:** excellent tension without any light gaps or sagging fabric edges. In very large constructions, it reduces the central sagging of the fabric during extension and retraction.
- Held captive on 4 sides, no light gap
- Long-lasting equalised fabric tautness with pulley block technology
- The flat rope is quiet and tear-resistant. It prevents the rope from twisting and bouncing and does not fray on the sides.



## Multi-section units – for large cross sections and dimensions

The maximum size of a WGM Top is  $6,500 \times 5,000 \text{ mm}$  or  $6,000 \times 6,000 \text{ mm}$ . The individual units installed next to each other have a separate motor drive and can thus be retracted and extended separately.



#### BiSens sun, wind and rain sensors

BiSens radio sensors provide maximum convenience. They open the awning automatically when the sun comes out and retract it in the rain and wind.

Available in the following versions:

- Sun, wind and rain sensor
- Sun/wind sensor
- Sun sensor

## **WGM Top** Technology

WGM Top versions	WGM Top Stretch OptiStretch Top conservatory awning		
Technology			
Max. axial dimension for 1 unit (width: axial dimension + 61 mm)	6,500/6,000 mm	6,500/6,000 mm	
Max. projection	5,000/6,000 mm	5,000/6,000 mm	
Max. fabric area	36 m <sup>2</sup>	36 m <sup>2</sup>	
Cassette size (width x height)	323 x 166 mm	323 x 166 mm	
Motor drive	<ul><li>as standard</li></ul>	<ul><li>as standard</li></ul>	
Gear drive	_	_	
Pitch	0°*-45°	0°*-45°	
Installation alternatives	See WGM Top installation section	See WGM Top installation section	
Lighting	_	_	
Accessories			
Fixing materials	see WGM Top installation section	see WGM Top installation section	
Controls			
Radio control	0	0	
No remote	•		
Weather sensors			
Sun/wind sensor BiConnect BiSens SW-230 V	0	0	
Sun/wind sensor solar powered BiConnect BiSens SW-Solar+**	0	0	
Sun/wind/rain sensor BiConnect-BiSens-SWR-230V	0	0	
Quality			
Tested up to	wind force 6 on the Beaufort scale, wind rainfall) according to DIN 13561	wind force 6 on the Beaufort scale, wind resistance class 3*** and rain class 2 (56 l/h/m² rainfall) according to DIN 13561	

<sup>\*</sup> Please note that on a shallow pitch the WGM Top must not be used in the rain. Even if a rain sensor is used, water may accumulate and ruin the awning. Due to the low pitch or horizontal installation, the fabric may also get wet when retracted due to driving rain. The risk of water accumulation (pooling) is very low with a pitch of 14° or greater.

● standard ○ optional — unavailable

<sup>\*\*</sup> Not suitable for awnings used as privacy shields.

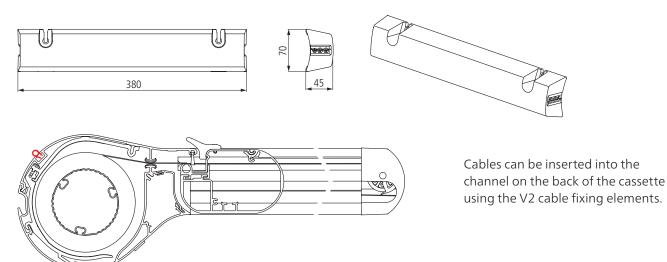
<sup>\*\*\*</sup> The wind resistance class applies with a supporting bracket height of max. 220 mm (fixed support bracket) and/or 265 mm (adjustable support bracket).

## **WGM Top** Controls



#### Receiver housing on top:

The cleverly designed housing is positioned on top of the cassette for easy access for maintenance purposes and gives simple access to the motor. The control box allows for easy access, for example to program the drive's end positions. The wind sensors can also be decoupled during maintenance.



The WGM Top from weinor is only available with motor drive. On the basis of radio technology, it can be controlled using the weinor BiConnect or the Somfy io-homecontrol® and RTS systems. A wired version is also available.

## weinor BiConnect radio technology

Product	Electronics	BiConnect control	Remote receiver	Transmitter
WGM Top	WGM Top drive	BiRec receiver integrated into control box	BiRec MA-K	BiEasy 1M/5M/15M Go! hand transmitter     App     1MW-3V wall transmitter

#### **WGM Top** Controls

## Somfy io-homecontrol® radio technology

Product	Electronics	Somfy io-homecontrol control	Remote receiver	Transmitter
WGM Top	WGM Top drive	Somfy io remote-controlled motor integrated into unit	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

## Somfy RTS radio technology

Product	Electronics	Somfy RTS control	Remote receiver	Transmitter
WGM Top	WGM Top drive	Somfy RTS receiver integrated into unit	Somfy Universal Receiver RTS	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

## Hard wired with Somfy control

Product	Electronics	Firmly wired Somfy control	Controls
WGM Top	WGM Top drive	Somfy control for awning drive	e.g. Soliris Smoove Uno

## Hard wired (existing switch/power supply on site)

Product	Electronics	Firmly wired control	Controls
WGM Top	WGM Top drive	Awning commutator for the awning drive	e.g. Double rocker switches (on site)

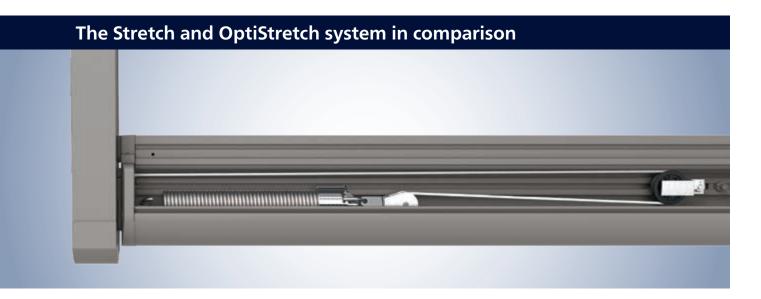


#### Note:

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.

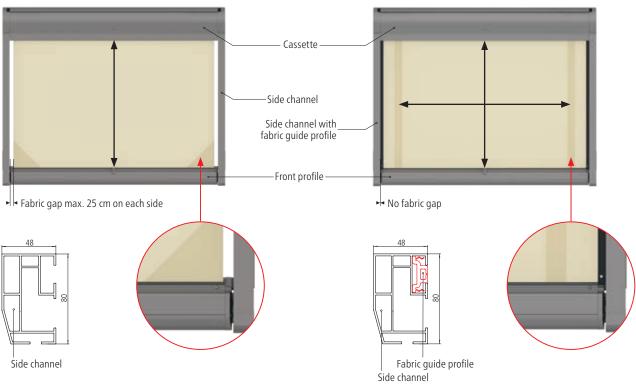
## WGM Top Stretch/OptiStretch



The WGM Top Stretch and OptiStretch consist of identical frame constructions and use the same tried and tested weinor tension system with a new flat rope that winds up extremely quietly. The fabric guide is the difference between the two systems. In the Stretch system, the fabric is tensioned between the fabric roller bearing and the front profile in the ascending direction, while in the OptiStretch, the fabric is additionally guided sideways in the guide rail. The WGM Top OptiStretch thus achieves a significantly higher degree of fabric tensioning.

#### The Stretch system

#### The OptiStretch system



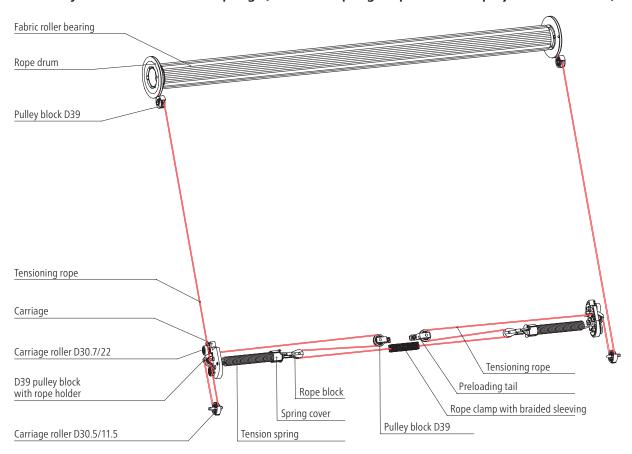
- Held captive on 2 sides
- With corner reinforcement
- Cost-effective solution
- Easy installation
- Fabric gap up to 25 mm
- Good fabric tautness also for Soltis® fabrics

- - Held captive on 4 sides
  - With strip reinforcement
  - No edges hanging down the sides
  - No light gap
  - Soltis® fabrics are not available for the OptiStretch version

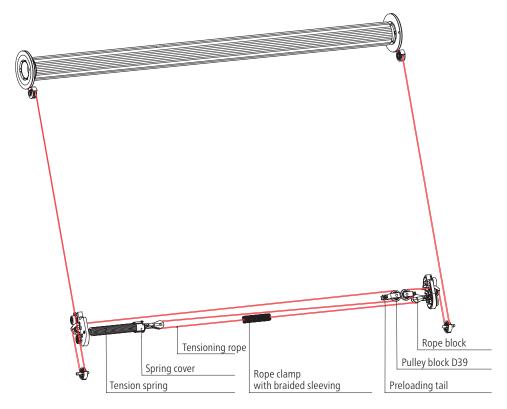
### WGM Top Stretch/OptiStretch

## Fabric tensioning technology Rope clamping system

Tension system with 2 tensioned springs (number of springs depends on the projection and width)



Tension system with 1 tensioned spring (depends on projection and length of spring)

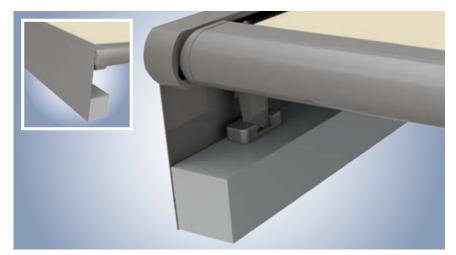


## Wall sealing profile (optional)



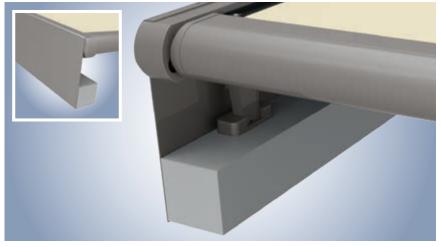
The wall sealing profile\* conceals the gap between the wall and the cassette. This is a useful option if there is no on-site protection above the cassette, e.g. a roof overhang.

### Side cover plates form A/form B (option)



The cover plates prevent light coming in on the sides. They are always supplied to fit the support bracket height and 3000 mm long and are trimmed on site. They are available selectively in a flat version (form A) and folded at 90° with a fold edge of 20 mm.

Side cover plate form A



cannot be used in conjunction with the receiver housing. Instead the Hirschmann coupling can be attached under the wall profile using clips. The receiver housing can only be used when there is a clearly defined gap between the cassette housing and the wall or when fixing with a wall bracket.

\* Please note that the wall sealing profile

Side cover plate form B

weinor 2021 | 04 Conservatory/roof awnings | WGM Top

www.samsonawnings.co.uk 01933 448 844

327

## Use of fabric support roller at bottom



A fabric support roller is used under the WGM Top as standard with 4001 mm or more. The use of fabric support rollers depends on the support bracket height (generally a fabric support roller cannot be used with 80 mm support brackets).

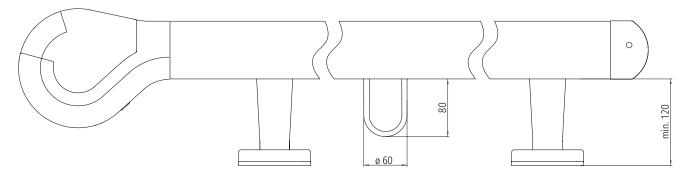
The use of additional support brackets and fabric support rollers is recommended:

- In strong winds
- With weak substructures

## Use of fabric support roller at top

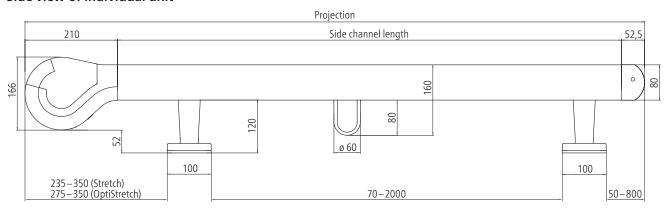


An additional fabric support roller can also be installed above the fabric on request.

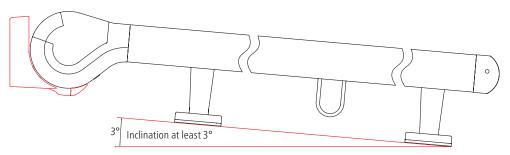


#### Overall views of individual units

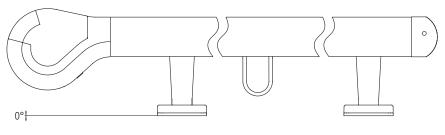
#### Side view of individual unit



The WGM Top with 120 mm high support bracket – when determining the mounting height take obstacles such as rain gutters etc. into account.



Installation with wall brackets only possible between  $3^\circ$  and  $30^\circ$ 



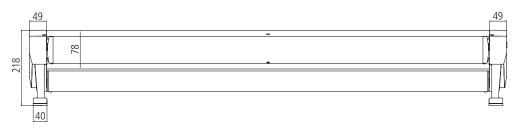
#### Installation with $0^{\circ}$ inclination without wall brackets

#### Note:

Please note that on a shallow pitch the WGM Top must not be used in the rain. Even if a rain sensor is used, water may accumulate and ruin the awning. Due to the low pitch or horizontal installation, the fabric may also get wet when retracted due to driving rain. The risk of water accumulation (pooling) is very low with a pitch of 14° or greater.

With rain class 2 (56 l/h/m² rainfall), the risk of water pooling is reduced from a pitch of 14° or above.

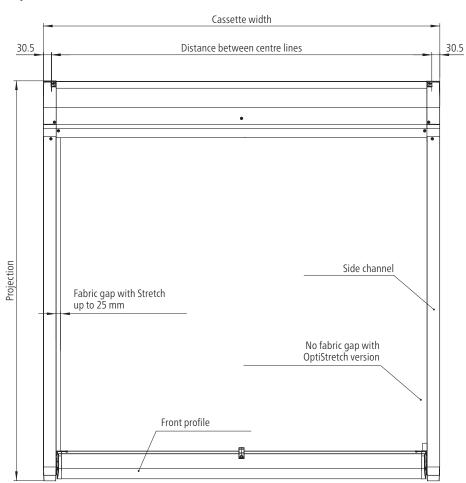
#### Front view of individual unit



WGM Top with 120 mm high support bracket

## Overall views of individual units

#### Top view of individual unit



## Determining dimensions for individual unit

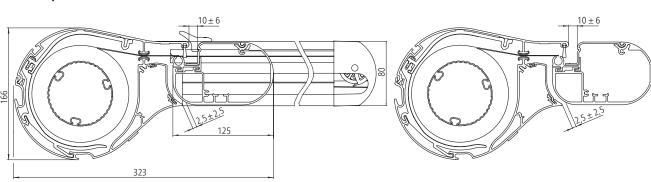
#### **Projection:**

rear edge of cassette to leading edge of side channel

## Distance between centre lines:

cassette width minus 61 mm (2 x 30.5 mm)

#### **WGM** Top cross section



Note: Please observe the tolerances.

Update

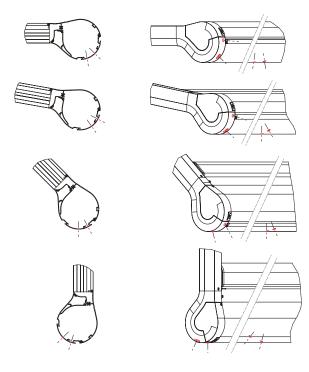
**Update** 

### **Bottom up installation**



The bottom up WGM Top is suitable for special structural conditions where the WGM Top standard configuration cannot be installed and the construction must be extended from the bottom up.

To ensure that everything works perfectly, water drainage holes are drilled depending on the brackets for bottom up WGM Top constructions.



Water drainage holes with a pitch of -0,1° to - 10°

Water drainage holes with a pitch of - 10° to -45°

Water drainage holes with a pitch of -45° to -90°

Water drainage holes with a pitch of -90°

#### **Limitations:**

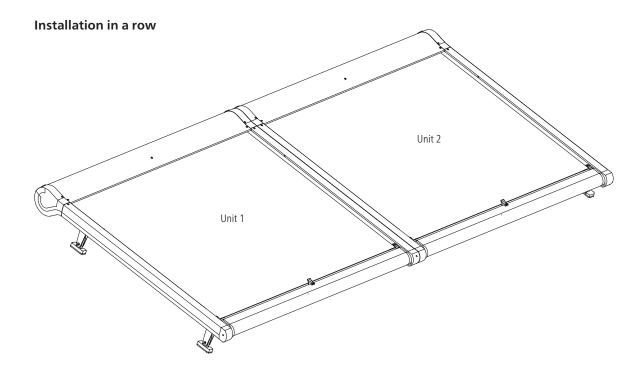
- The construction must not be extended when it is raining.
- The bottom up installation does not meet a rain class.
- If the construction is exposed to rain, increased fabric sagging, creasing and wrinkling are to be expected. We do not assume any warranty for this kind of damage.
- Rainwater may accumulate on both the extended and retracted fabric, making it dirty and damaging it.
- The construction's set pitch must be strictly complied with during installation. The drive may potentially be too weak or rainwater may accumulate in the cassette and cause a short circuit. Damage
- to the drive due to rainwater getting in is excluded from the warranty.
- Regular maintenance and cleaning of all water drainage holes is necessary.
- The control box may only be mounted on the cassette at a pitch of 57°, otherwise rainwater may accumulate in it.

332

## **Multi-section unit**

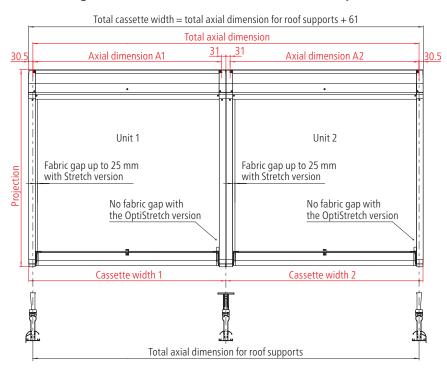


The maximum size of the WGM Top is  $6,500 \times 5,000$  mm or  $6,000 \times 6,000$  mm. Wider systems can be extended easily to become a multi-section unit by placing individual units next to each other. The individual units installed next to each other have a separate motor drive and can thus be retracted and extended separately.



## **Determining dimensions for multi-section units**

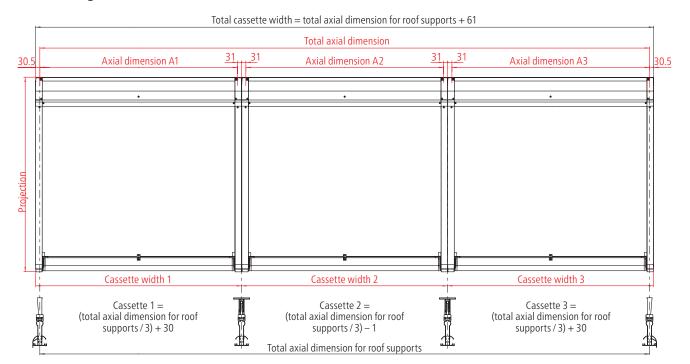
#### Determining dimensions for multi-section units with 2 panels



#### Calculation of cassette width

(Total axial dimension for roof supports/2) + 30 mm. Only applies if both units have the same axial dimension.

#### Determining dimensions for multi-section units with 3 units or more\*



#### Calculation of cassette width 1 + 3 (outside cassettes):

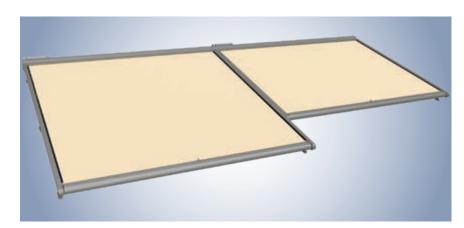
(Total axial dimension for roof supports/3) + 30 mm

#### Calculation of cassette width 2 (inside cassettes):

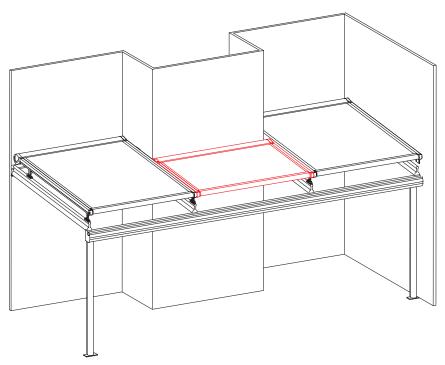
(Total axial dimension for roof supports/3) – 1 mm

<sup>\*</sup>The determining of measurements applies to a maximum total width of 14 m and only if all distances between centre lines are the same and the number of roof units can be divided by 3.

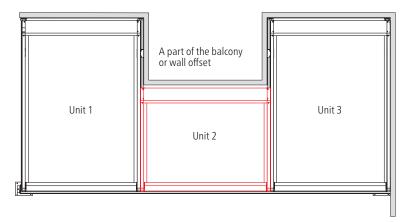
## Multi-section unit with wall or guttering offset



Different offset versions can be designed on request (e.g. guttering offset).

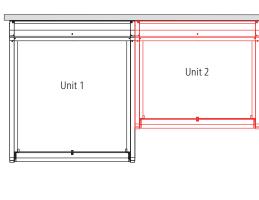


Multi-section unit with offset (profile view)



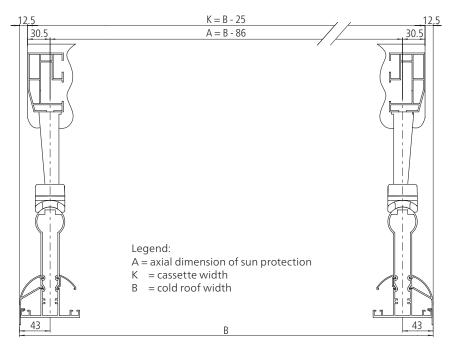
Multi-section unit with wall offset (top view)

334



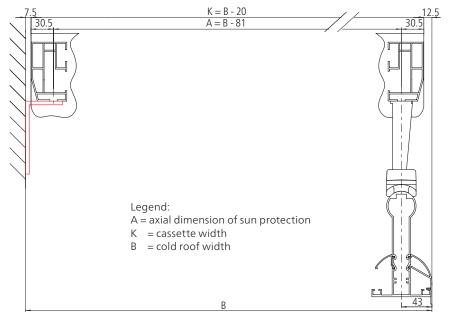
Multi-section unit with guttering offset (top view)

#### **Individual** unit



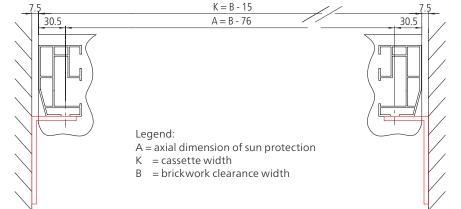
#### Mounting alternative without sideways bordering

Fixing with top support bracket.



### Mounting alternative with one-sided bordering, top support

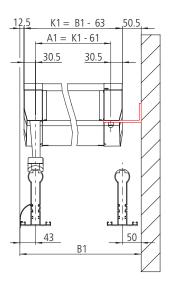
WGM Top on a conservatory with e.g. adjacent wall on side. Fixing with wall-mount angle bracket and top support bracket.



#### Mounting alternative with wall bordering on both sides

The installation is mounted directly onto the brickwork using wallmount angle brackets.

### Multi-section unit with a part of the balcony or wall offset



## Mounting alternative with one-sided bordering in wall offset

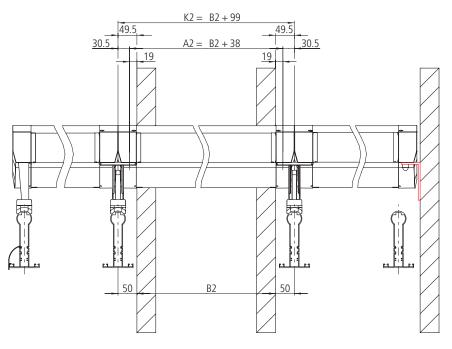
Fixing with wall-mount angle bracket and top support bracket

#### Legend:

A1 = axial dimension of sun protection

K1 = cassette width 1

B1 = wall offset width



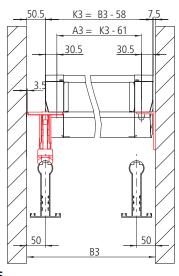
Mounting alternative for multi-section unit with part of the balcony in the centre.

#### Leaend:

A2 = axial dimension of sun protection

K2 = cassette width 2

B2 = balcony width



#### Legend:

A3 = axial dimension of sun protection

K3 = cassette width 3

B3 = masonry clearance width

## Mounting alternative with double-sided bordering and wall offset

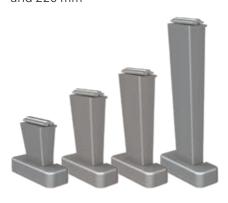
Fixing with wall-mount angle brackets directly on the brickwork and top support bracket adjustable for multi-section units.

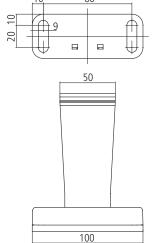
336

## **Support brackets**

#### Top support bracket

Height: 80 mm, 120 mm, 150 mm and 220 mm





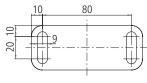


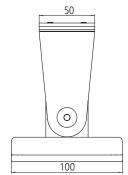
#### Adjustable top support bracket

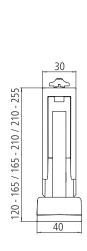
Height: 120 mm – 165 mm 165 mm – 210 mm, 210 mm – 255 mm The support bracket angle is adjustable

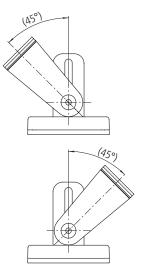
The support bracket angle is adjustable up to  $45^\circ$ . The support bracket bottom section is not visible with an angle of  $4^\circ$ .







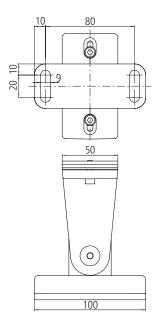


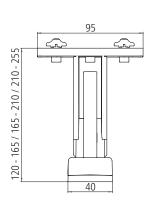


## Adjustable top support bracket for multi-section unit

Height: 120 mm – 165 mm 165 mm – 210 mm, 210 mm – 255 mm





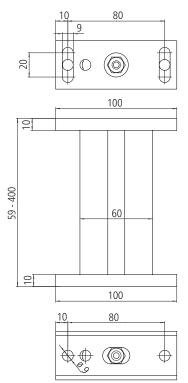


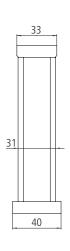
## **Special support brackets**

#### **Special support bracket**

59 – 400 mm customisation







Special support bracket installation

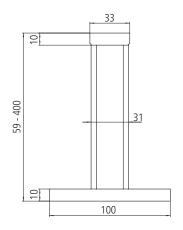
#### **Cross-shaped support bracket**

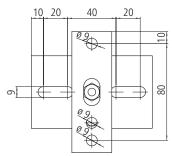
59 – 400 mm customisation

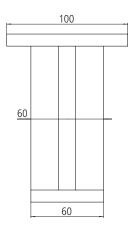




Cross-shaped bracket installation





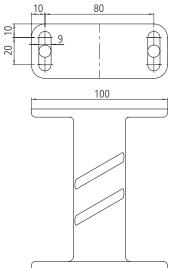


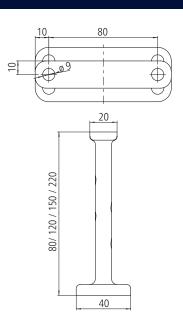
## Other support brackets

#### Modern support bracket

Height: 80 mm, 120 mm, 150 mm and 220 mm







### **Installation on weinor Terrazza**



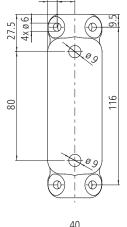
Installation on a Terrazza patio roof

#### Support bracket mounting plate for weinor Terrazza L 150 roof

100

support

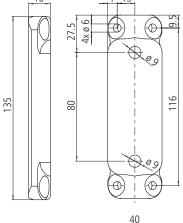




### Support bracket mounting plate

for weinor Terrazza S 110 roof support





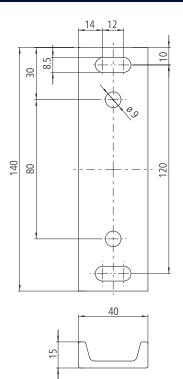


The DIN7982-5.5x19-C-A2-Tx countersunk self-tapping screw is required to fix the 110 and 150 mounting plates.

## U profile for fins







## Base plates for support brackets



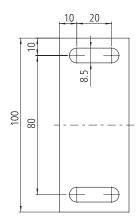
Installation with base plate

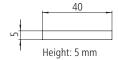
Base plate, 5 mm

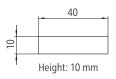


Base plate, 10 mm









340

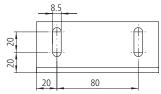
01933 448 844 www.samsonawnings.co.uk www.samsonawnings.co.uk

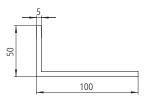
## **Special brackets**

## **Z-shaped bracket** (2 100 x 50 x 5 x 120 mm

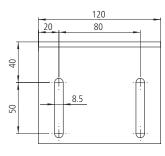
wall-mount angle brackets)









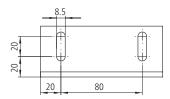


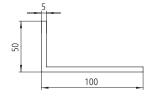


Installation on lateral wall or niche using a Z-shaped bracket

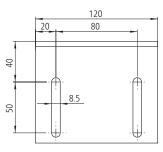
#### Wall-mount angle bracket (100 x 50 x 5 x 120 mm)











Installation on a lateral wall

www.samsonawnings.co.uk

## **Special brackets**

Long angle bracket (200 x 100 x 10 x 120 mm)



Installation on a lateral conservatory using a long angle bracket



