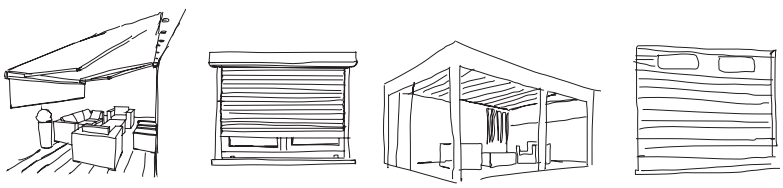
TECHNICAL DATA SHEET

Outdoor living

Terrace awnings

AIR

Article number 063644



HAROL®

ALWAYS READ THE INSTALLATION INSTRUCTIONS BEFORE FITTING!!!

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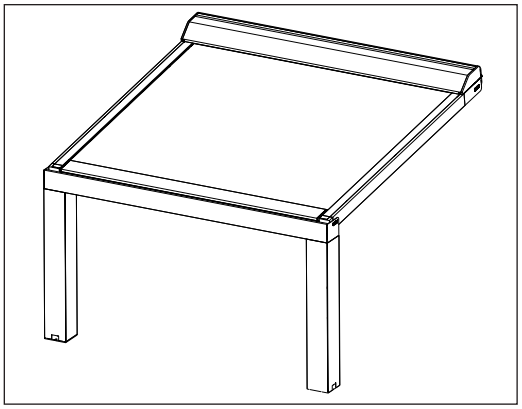
Harol reserves the right to make alterations to the product without prior notice.

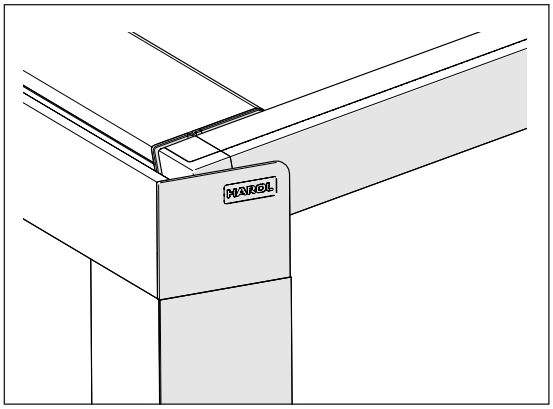
1. GENERAL

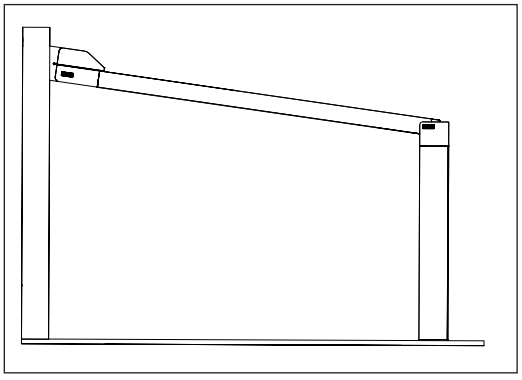
- The AIR terrace system has been designed as sun and/OR rain protection. The sun-resistant or waterproof fabric is protected and rolled up in a box that is closed by the extension pole when the screen is rolled in fully. The system also has drainage gutters that drain the rain water to the ground (waterproof fabric required). The box is fitted to the wall behind using wall and suspension brackets.
- The entire system is made of non-corroding materials.
- The system has a zip system that ensures the fabric remains properly tensioned at every height position of the extension pole, which prevents the fabric from pulling out of the guide rails. The sections of fabric are always finished with a zip on the left and right, the thicker side of which slides into a plastic zip profile. This is placed in a separable aluminium guide profile which can be unscrewed.
- The AIR consists of:
  - A box with an easily removable fabric roll with motor control.
  - A fabric with zip that is rolled up in the box.
  - Separable guide rails that can be unscrewed to reach the zip guide smoothly.
  - An extension pole with spring and cords to keep the fabric tensioned, with water drainage.
  - Separable opening posts on which the guide rails sit.
  - A gutter profile at the front. Provides the horizontal connection between the vertical posts.
  - Zip guide and tensioning system.
  - Gutters in the guide rails and rain water drainage along the posts.

2. FITTING TYPES

This type of sun protection has only one fitting option - wall-mounting. The back of the box is fitted with suspension brackets. These allow the box to be hooked into the pre-installed wall brackets. Once the box is suspended, the posts (with cross beam) are positioned at the front and connected to the sun protection with a hinge.
The posts are anchored in/to the ground. The water is always drained into the gutter via the side and from the extension pole if the angle is sufficient. From the gutter, the water is drained to the ground via the posts and drainpipe.







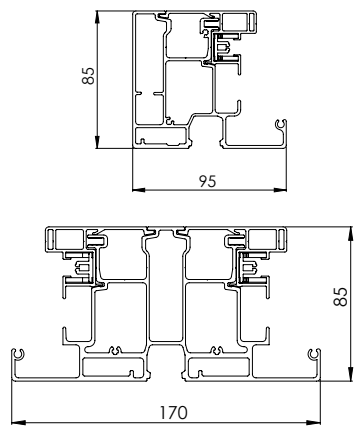
The AIR terrace system is always viewed from outside.



3. PROFILES & PARTS

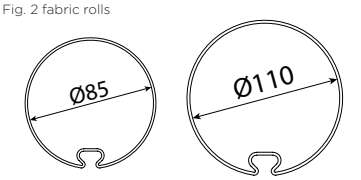
3.1. The separable guide rails
- Material: extruded aluminium with powder coating
- Wall thickness: 1.8mm.
- Two types:
  - lateral guides: installed on the outer sides, with a rail slot on one side only.
  - coupling guides: installed in the middle, with a running surface and water drainage.
- The profiles have a hollow chamber into which the support pins of the side caps fit and in which the cords run.
- Aluminium end caps coated to match the frame.

Fig. 1 guide rails



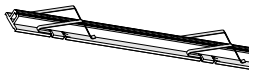
3.2. The fabric roll
- Material: circular tube made of galvanised steel, with a groove for attaching the fabric.
- Wall thickness: 1.25 mm.
- Function: rolling the fabric up and down

Fig. 2 fabric rolls



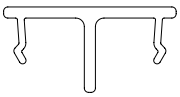
3.3. Zip guide profile
- Material: extruded PVC clip profile
- Function: Absorption of the zip profile on the fabric to keep the fabric tensioned in the guide rails with the aid of stainless steel springs.

Fig. 3 zip guide profile



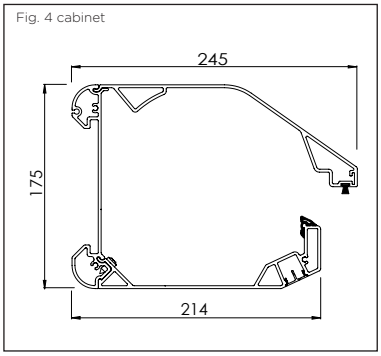
3.4. The box
- Material: extruded aluminium with powder coating
- Wall thickness: 2mm.
- Consists of two sections:
  - a removable chamfered upper section or cover;
  - a fixed lower section.
- A fabric guide profile is attached to the fixed section, which guides the fabric out of the box.
- A brush is secreted in the cover.

Fig. 3b LED finishing profile



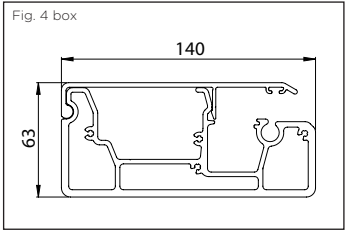
3.5. LED finishing profile
- Material: aluminium with powder coating

Fig. 4 cabinet



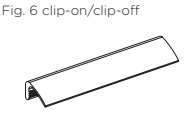
3.5. The extension pole
- Material: extruded aluminium with powder coating
- Wall thickness: basic section 4mm
- locking profile 1.5 mm
- Function:
  - The basic section is provided with a groove to which the fabric can be attached.
  - A locking profile: is clipped on to the basic section.
  - This profile runs along the slots in the side guides via specially designed carriages.

Fig. 4 box



3.6. Clip-on/Clip-off
- Material: extruded PVC clip profile
- Function:
  - attaching the fabric in the fabric slot without the use of screws, so that the fabric can be removed from the front instead of sliding it sideways.
- Diameter of the fabric retainer to be combined: Ø3 mm.
  Advantage: quick and easy fabric changing.

Fig. 6 clip-on/clip-off



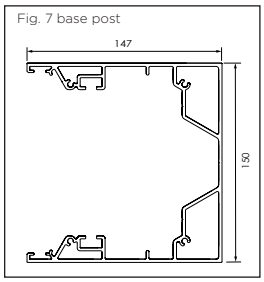
3.7. The vertical posts

Separable clipped post in which water drainage can be fitted. The base is connected to the cover with clamps, not screws. This gives a beautiful, homogeneous whole with no visible screws. If water drainage is fitted in the post, the cover may have a run-off opening (see p.13).

3.7.1 Base post

- Material: extruded aluminium with powder coating
- Wall thickness: 2.5mm.
- Dimensions: 150mm x 147mm
- Function:
  - To support the guide rails and gutter.
  - A base plate is fitted to the bottom.

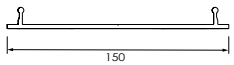
Fig. 7 base post



3.7.2 Cover

- Material: extruded aluminium with powder coating
- Wall thickness: 2.75mm.
- Dimensions: 150mm.

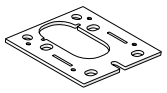
Fig. 8 cover



3.7.3 Base plate

- Material: stainless steel with powder coating
- Wall thickness: 5mm.
- Dimensions: 150mm x 150mm
- Function:
  - connection between the ground and post

Fig. 8 base plate



3.7.4 Drainpipe

- Material: plastic PVC pipe diameter 50mm.

Fig. 10 drainpipe



3.7.5 Elbow fitting 45°

- Material: plastic PVC pipe diameter 50mm.

Fig. 11 elbow fitting 45°



3.7.6 Elbow fitting 90°

- Material: plastic PVC pipe diameter 50mm.

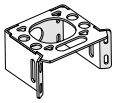
Fig. 12 elbow fitting 90°



3.7.7 Mounting bracket

- Material: stainless steel

Fig. 13 mounting bracket

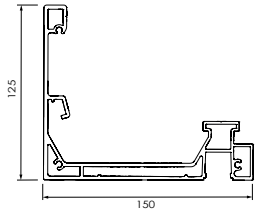


3.8. Gutter

3.8.1 Gutter profile

- Material: extruded aluminium with powder coating
- Wall thickness: 3mm.
- Dimensions: 150mm x 125mm
- The hole patterns in this are set to guarantee a smooth connection with the posts.
- These are closed at the side with side consoles

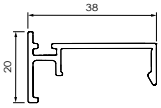
Fig. 12 gutter profile



3.8.2 Gutter cover profile

- Material: extruded aluminium with powder coating
- Wall thickness: 1.5mm

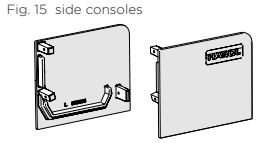
Fig. 13 gutter cover profile



3.8.3 Gutter side consoles

- Material: high-pressure-cast aluminium with powder coating.

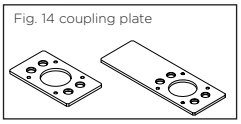
Fig. 15 side consoles



3.8.4. Gutter connecting plate

- Material: aluminium.

Fig. 14 coupling plate



3.8.5. Water drainage

– Material: plastic.

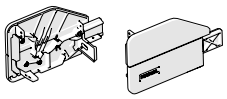
Fig. 16 water drainage



3.9 The side consoles

– Material: high-pressure-cast aluminium with powder coating.

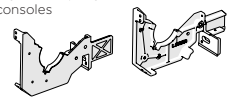
Fig. 17 side consoles



3.10 The coupling consoles

– as the side consoles

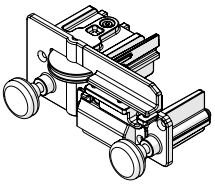
Fig. 18 coupling consoles



3.11 The carriages

– Material: Plastic injection moulding
– Colour: black
– Function:
  - connection of front rail and side guides, fitted with two carriage wheels are mounted at the end of the front rail
  - These are screwed into the left and right of the end of the extension pole.

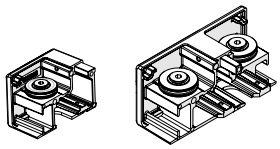
Fig. 19 carriage



3.12 The tensioning system

– Material: the castors, axles, etc. are made of non-corroding materials.
– Function:
  - fabric and extension pole can be constantly kept under tension via a spring, castors and a cord of Ø2.7 mm.

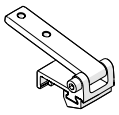
Fig. 20 coupling guide cover



3.13 Guide rail covers

– Material: high-pressure-cast aluminium with powder coating.
– Function:
  - to cover the end of the guide rail
  - to invert the cord via a turn-over wheel

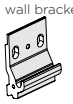
Fig. 21 hinge



3.14 Hinges

– Material: aluminium with powder coating
– Consists of three parts connected with a screw.
– Function:
  - connects the oblique guide rail and gutter.

Fig. 22 wall bracket part 2



3.15 Wall bracket part 2

– Material: extruded aluminium with powder coating

Fig. 23 wall bracket part 1



3.16 Wall bracket part 1

– Material: stainless steel folding piece with small shaft and circlips.

3.17 Console filler section

– Material: aluminium with powder coating

Fig. 24 console filler section position

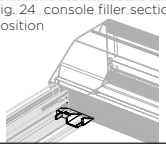
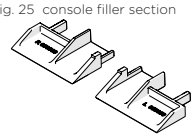


Fig. 25 console filler section



4. CONTROLS

4.1. Motor-controlled operation

Drive via tubular motors: 230 Volt (50 Hz):

- Fitted left and/or right as required
- Always one motor for each fabric section.

• **Standard:**

• Motor with built-in IO receiver (Sunea IO).

- 5 m electric cable - optional 10 m electric cable
  - the distance can be increased by fitting a waterproof junction box.
- with IO wall transmitter - optionally without IO wall transmitter

• **Options:**

1. Motor with built-in RTS receiver (Orea RTS).

- 5m electric cable - optional 10 m electric cable
- with RTS wall transmitter - optionally without RTS wall transmitter

2. Motor with automatic readjustment; screen will always be completely closed (Orea WT).

- without control buttons; end points to be adjusted via cable, with a separate adjustment set.
- can be connected in parallel (number determined by type of switch).
- 3 m electric cable - optional 5 or 10m electric cable
- Single-pin surface-mounted switch - optionally without switch

RTS and IO motors are supplied with the options "back release" and "reduced closing force" activated

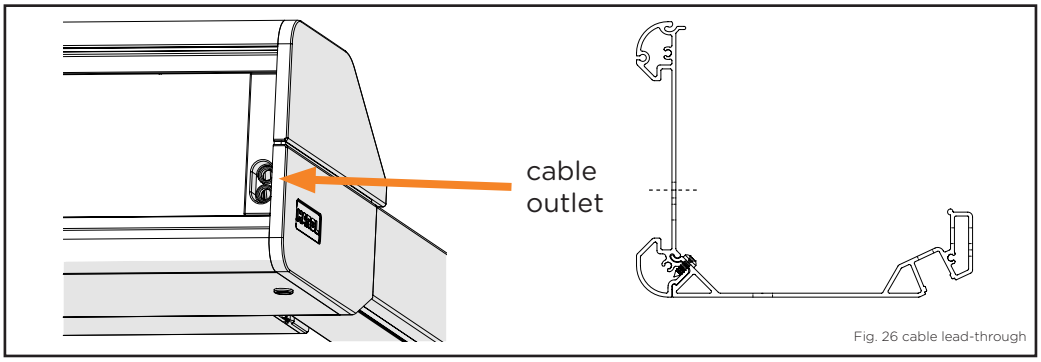


Fig. 26 cable lead-through

One motor per field for linked systems. Motors cannot be positioned 'head-to-head'.

4.2. Automation

- Accessories (For this, see the Harol Home Automation pricelist):
  - Relay boxes
  - Wind-and-solar control
  - Time switches
  - Remote control
  - ....

5. DIMENSIONS

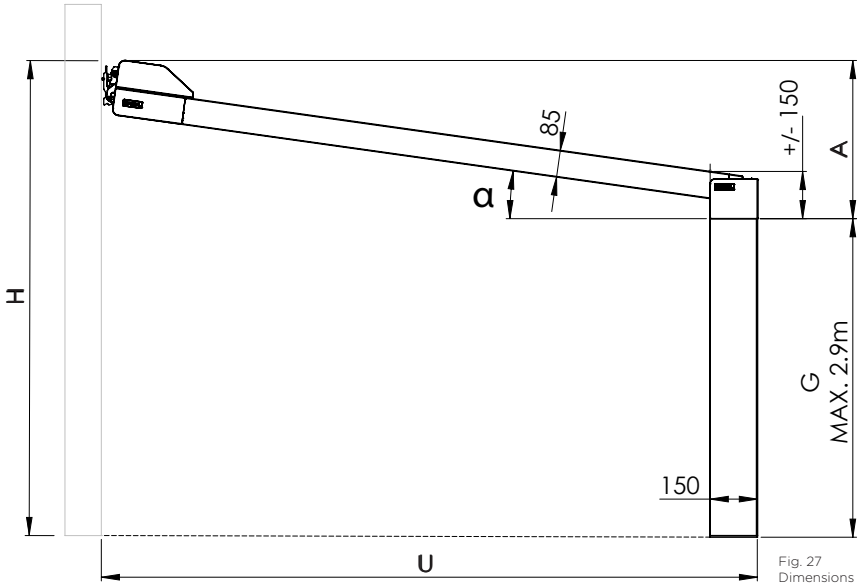


Fig. 27
Dimensions

B: Width
H: Height to top of box
U: Drop
G: Run-out height (max. 2.9m)
A: Inclination height = H - G
P: Extend posts
Q: Shorten posts
α : Angle of inclination

*** MINIMUM ANGLE OF INCLINATION (α) = 8°**

*** MAXIMUM ANGLE OF INCLINATION (α) = 30°**

* *see fabric type p.15*

HEIGHT OF INCLINATION (A) IN RELATION TO ANGLE OF INCLINATION AND DROP

	angle of inclination (α)	8°	10°	14°
drop (U)	1500	490	535	645
	2000	560	620	770
	2500	630	705	895
	3000	700	970	1020
	3500	770	1055	1145
	4000	840	1145	1270
	4500	910	1230	1395
	5000	980	1315	1520

NOTE: ALWAYS CHECK THAT THE INCLINATION OF THE FRAMEWORK IS GREATER THAN OR EQUAL TO THE VALUES IN THE TABLE TO ENSURE PROPER WATER DRAINING ALONG THE FRONT!

If the angle of inclination (α) is not observed, this may result in poor rain water drainage.
HAROL cannot be held responsible for any damage to the product or sagging to the fabric this causes.
If the inclination is too small, the product can only be used as sun protection and not as rain protection!

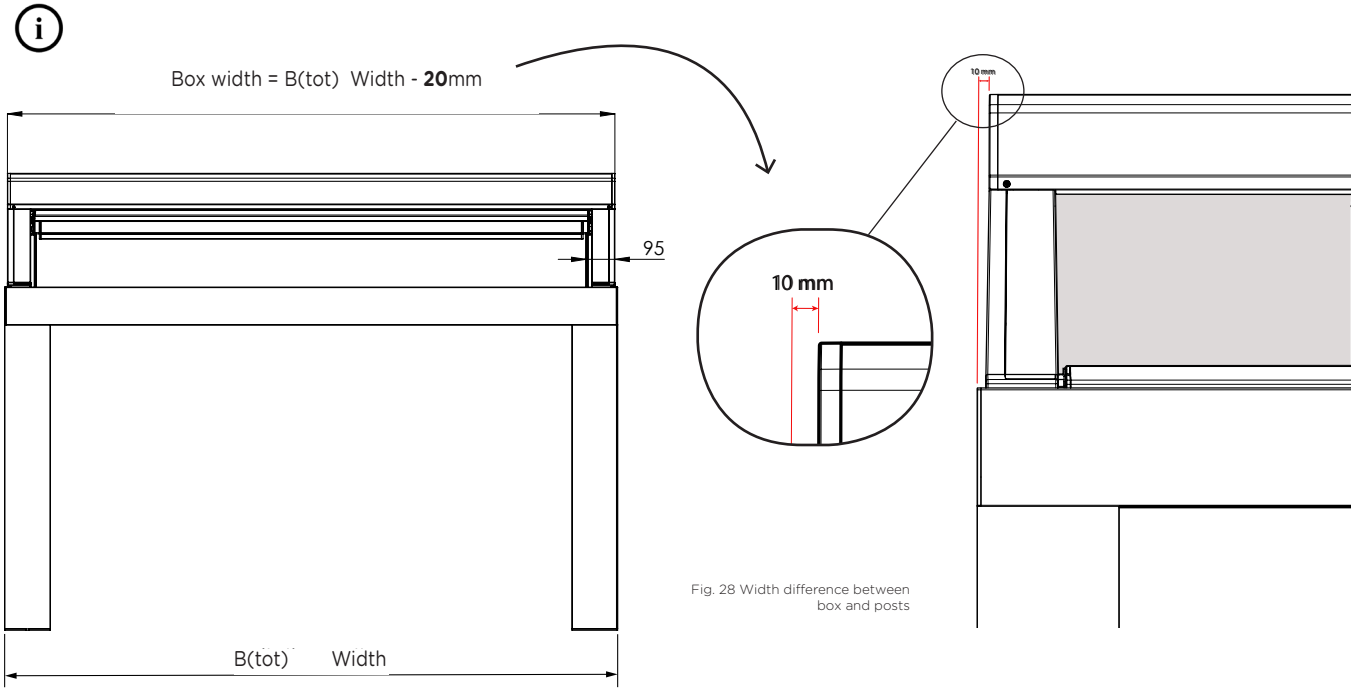


Fig. 28 Width difference between box and posts

6. TECHNICAL OPTIONS

- Minimum width per element: 1.5 m
- Maximum width per element: 6 m
- Maximum drop: 5 m
- Maximum surface area per fabric: 25 m²
- Maximum run-out height (G): 2.9 m

Type		Maximum range in metres																							Maximum surface area	Number of elements	Number of motors
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
Type 1	1 element	1 part																								25 m²	1	1
Type 2	2 elements	2 parts																								50 m²	2	2
Type 3	3 elements	3 parts																								75 m²	3	3
Type 4	4 elements	4 parts																								100 m²	4	4

Table 1: Technical options

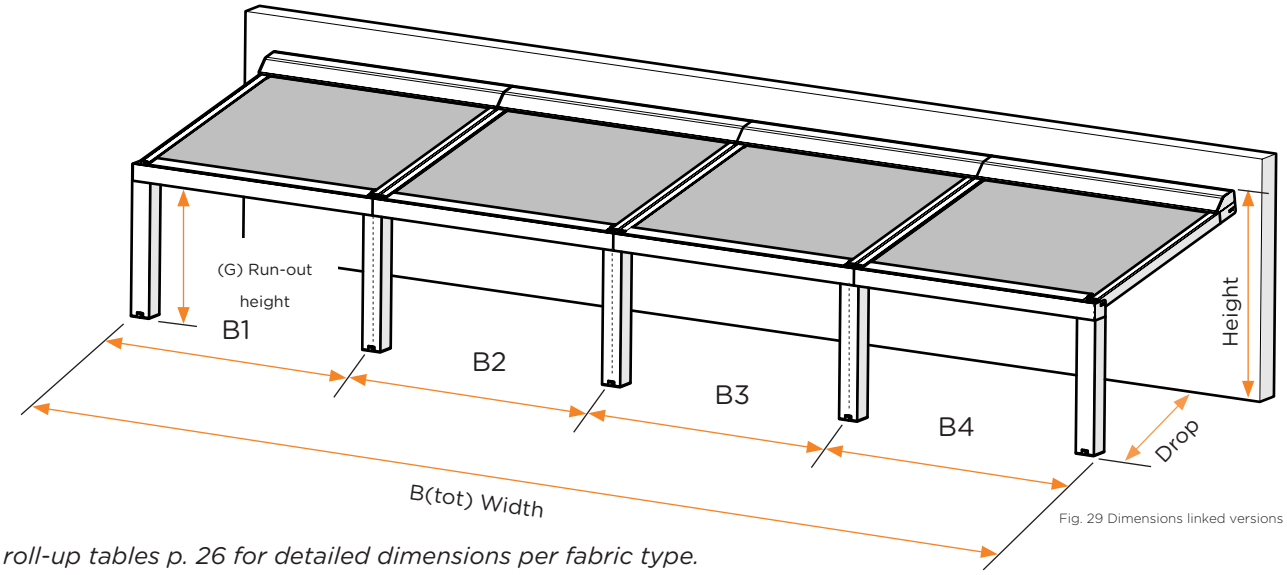


Fig. 29 Dimensions linked versions

See roll-up tables p. 26 for detailed dimensions per fabric type.

B1 = outside of post/gutter to centre of next post
B2 = centre of post to centre of next post
B3 = centre of post to centre of next post
B4 = centre of post to outside of post/gutter

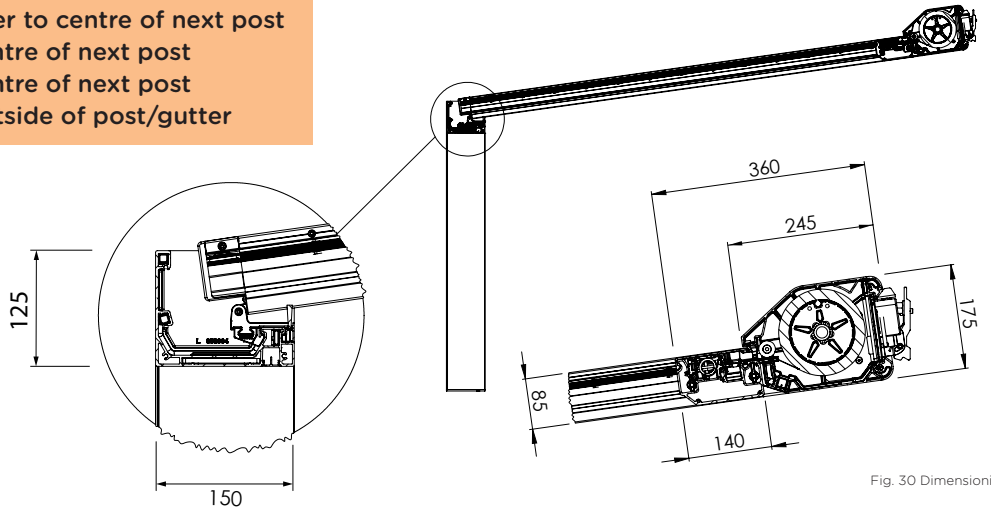


Fig. 30 Dimensioning

IN LINKED SYSTEMS, THE INTERIM POSTS ARE ALWAYS IN A FIXED POSITION JUST UNDER THE CENTRE GUIDE RAIL

7. OPTIONS

OPTION A1623
shorten post

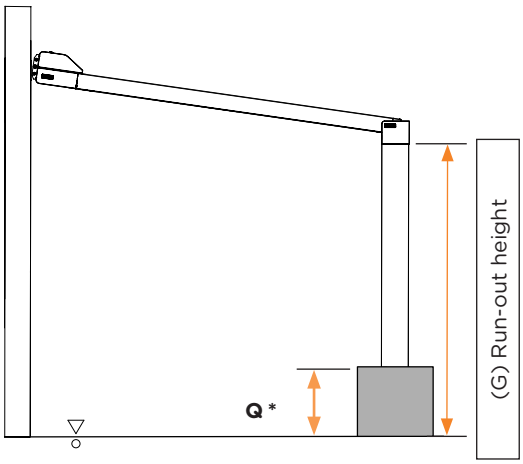


Fig. 31 Shortening option

Max. extension of screens/glass walls:

MAXIMUM HEIGHT OF SCREEN/GLASS WALL = HEIGHT SHORTEST POST

→ Q MAX. = **(G) - 100mm**

** indicated height is the section by which the post is* shortened *in length.*

OPTION A1624
extend post

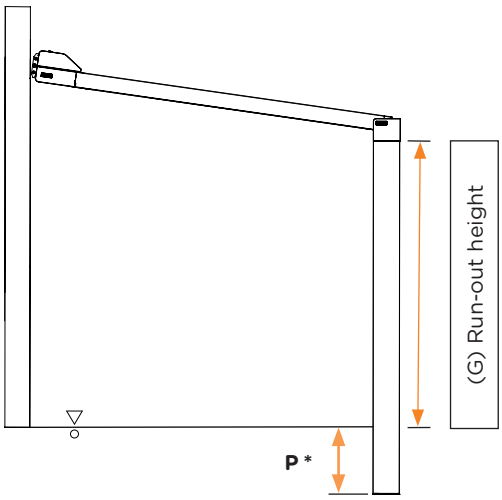


Fig. 32 Extension option

→ P = MAXIMUM **+1000mm**

Indicatedindicated height is the section by which the post* is extended *in height.*

Make sure the box(es) and extension pole(s) can always be opened, to ensure that the mechanical parts inside are accessible at all times. If this rule is not followed, Harol cannot be held responsible for the cost of demolition work!

8. MEASUREMENT AND FITTING

8.1. Guidelines for correct measurement

- Make sure that the system is perfectly parallel and square. Accurate measurement ensures quicker and easier fitting.
- Make sure that the zero-level measurement is exact.
- Make sure that the foundation is sufficiently solid for the installation of the foot supports
- N.B. for relatively weak walls: a standard fixing pack is not supplied. Ask your specialist supplier for advice (e.g. Fischer, Würth, Hilti, etc.)

- The total width (B) = outside of the left-hand post to the outside of the right-hand post. The post structure is 20 mm wider than the width of the box.
- The drop (U) = measured horizontally from the wall at the back to the vertical post at the front.
- The run-out height (G) = height at the front between the posts from the ground (zero level) to the bottom of the horizontal gutter. (excluding screen and/or glass wall)
- Height (H) = height from the top of the box to the ground (zero level)

THE POST STRUCTURE (width) IS **20mm** WIDER THAN THE SUNBLIND

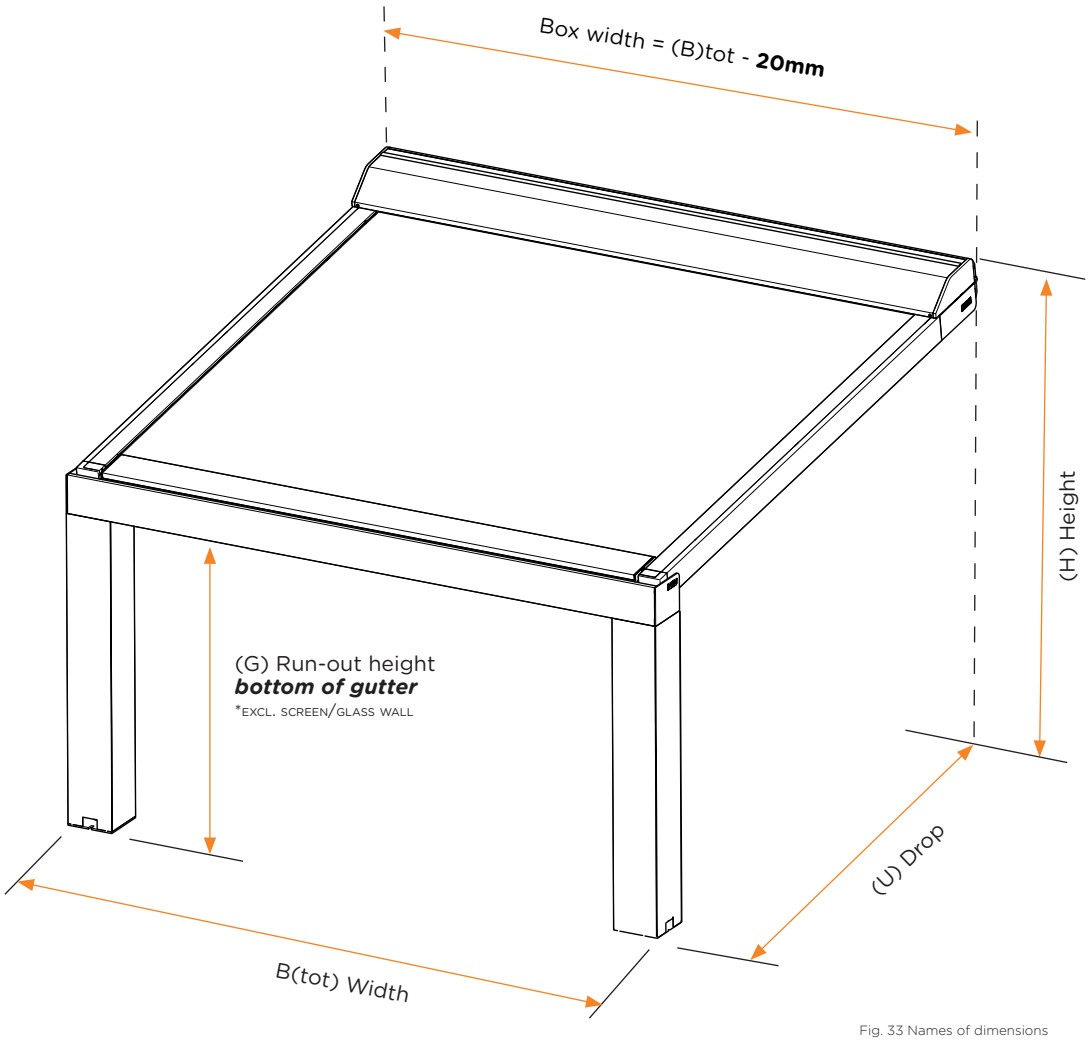


Fig. 33 Names of dimensions

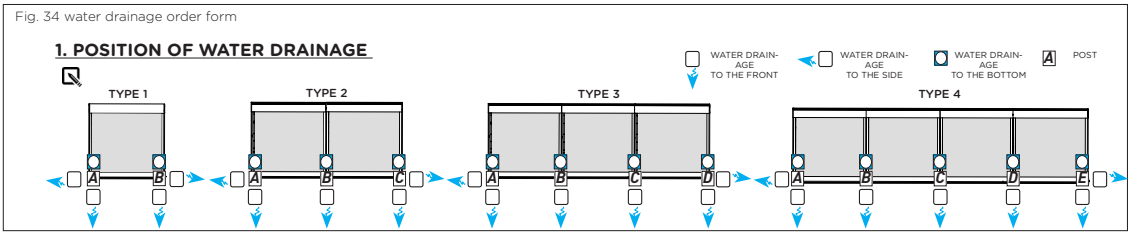
8.2. Position of water drainage

The rain water that is collected is led to the gutter via the lateral guides and then via the posts to the ground/ drain.

AS STANDARD FITTED ON EACH POST, FOR ALL FABRIC TYPES.

Indicate the chosen drainage positions on the order form.

Fig. 34 water drainage order form



WATER DRAINAGE TO THE FRONT

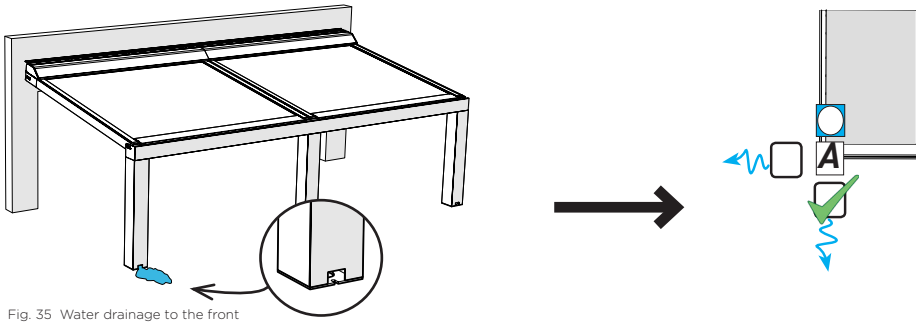


Fig. 35 Water drainage to the front

WATER DRAINAGE TO THE SIDE

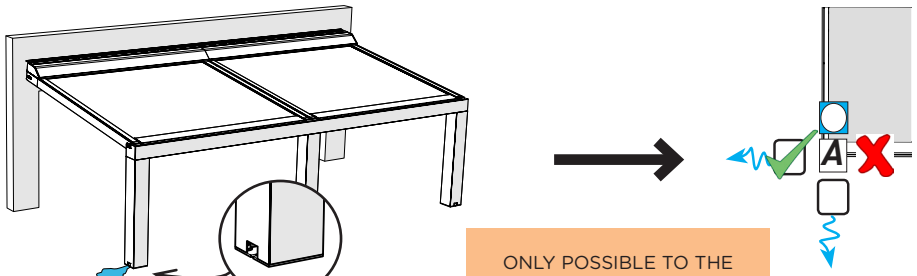
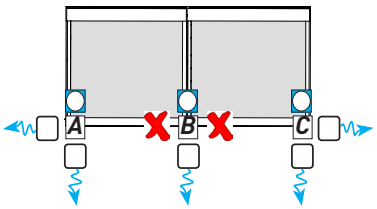


Fig. 36 Water drainage to the side

ONLY POSSIBLE TO THE OUTSIDE

SIDE OUTLET **NOT** POSSIBLE FOR THE CENTRAL POSTS



WATER DRAINAGE TO THE BOTTOM

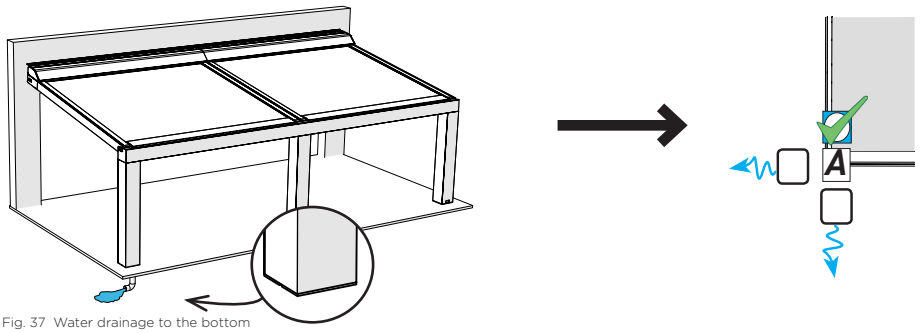


Fig. 37 Water drainage to the bottom

8.3. Fitting

– Please note: always ensure a right-angled fitting. If the fitting is not right-angled, this will greatly increase the risk of wrinkles in the fabric.

The wall bracket (standard)

– For fitting against a wall.
– Width: 90 mm, with three M12 slots.
– With a hook on the front to carry the rod in wall bracket part 1. (see fig. 23 p.7.)
– The number of wall brackets supplied always depends on the screen type.
– Two brackets per box section are supplied.
– Anchoring depends on how solid the surface is.

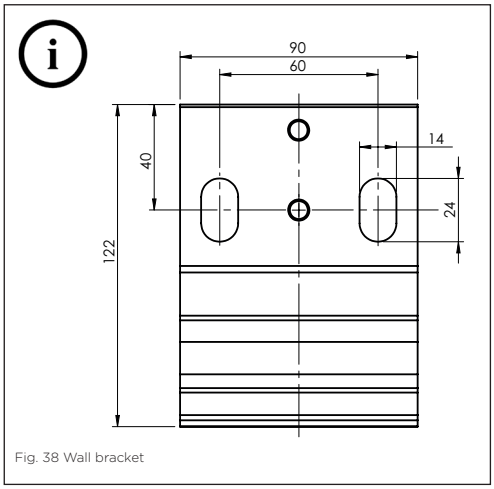


Fig. 38 Wall bracket

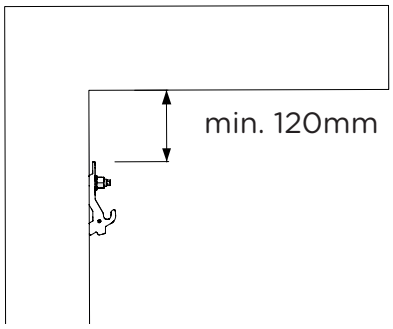


Fig. 40 Wall bracket position

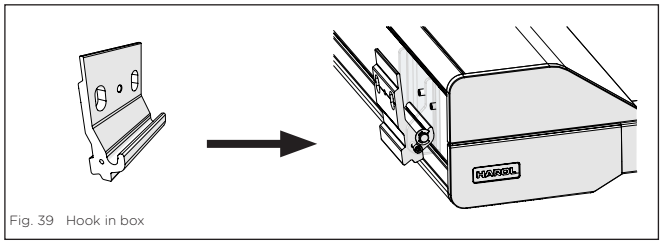
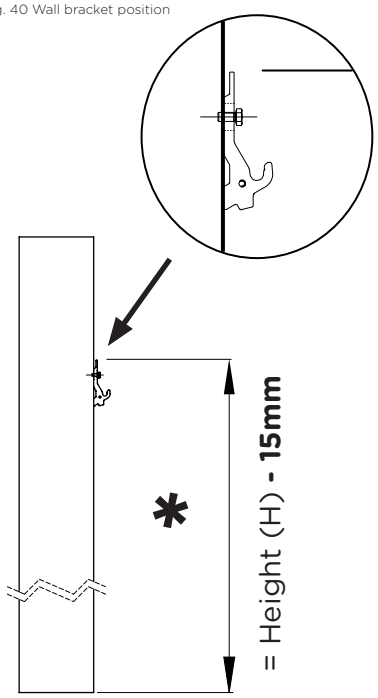


Fig. 39 Hook in box



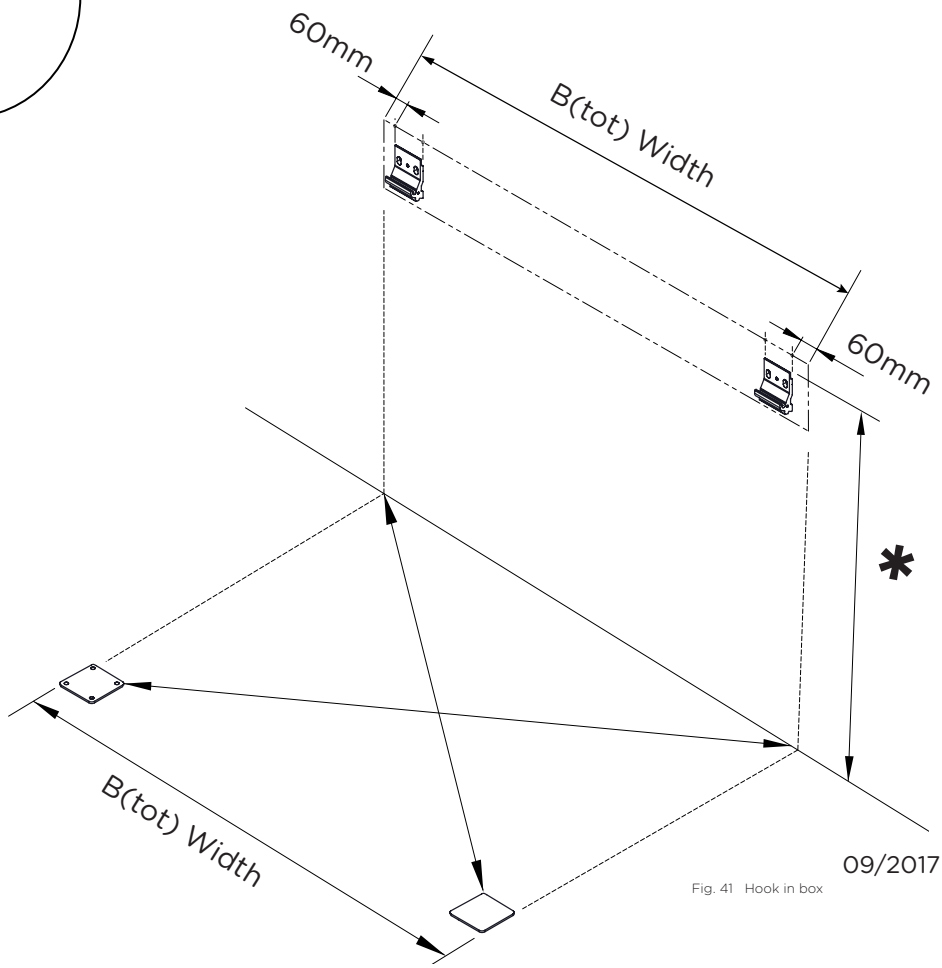


Fig. 41 Hook in box

9. FABRICS

	SOLTIS 86	SOLTIS 92	SUNWORKER	EXPANSION
basic material	Polyester	Polyester	Polyester	75% Acrylic 25% PVC
weight (g/m²)	approx. 380	approx. 420	approx. 440	approx. 420
thickness (mm)	approx. 0.43	approx. 0.45	approx. 0.48	approx. 0.60
fire class	M1	M1	M2	-
roll width (mm)	1770 / 2670	1770 / 2670	2960	3000
strip direction	Horizontal	Horizontal	Horizontal	Horizontal
opening factor	14%	3 to 4%	4%	0%
G_{tot}	0.12 - 0.22	0.05 - 0.15	0.10 - 0.18	0.08 - 0.14

A crackling sound may be heard when rolling up the blind, caused by the fabric being under tension.
(cause: the air being expelled between the layers of fabric on the fabric roll)
This does not affect operation and cannot be deemed a complaint. Crinkling may occur along the fabric on the welded zip side. This phenomenon is caused by the different thicknesses of the material and their expansion factors.

1. Soltis 86 and Soltis 92
- Transparent and refractive fabric.
- Woven from polyester thread, stretched under great tension and secured with a plastisol layer.
- Varnished on two sides -> excellent protection against UV radiation.
- High tear strength without additional reinforcement.
- Durable and dirt repellent.
- Exceptional dimensional stability when used between -30 °C and +70 °C.
- Sunblinds with a drop of -> 2670 mm are fitted with a horizontal weld seam!
- With two-tone fabrics, the aluminium side is always on the outside or on the garden side.
- Minimum angle of inclination 8°.

2. Sunworker Crystal
- Waterproof and translucent
- Fabric in high-strength polyester yarn.
- Stitches that secure the fabric layers but allow the threads to move independently of each other, thereby distributing the mechanical energy.
- Special coating that protects the colours from UV rays and inclement weather.
- Minimum angle of inclination 14°.
- Sunblinds with a drop of > 2960 mm have a horizontal weld seam!

3. Expansion
- The transparent membrane lends the EXPANSION fabric a matt, textile look.
- It is completely waterproof
- and is the first spun-dyed acrylic fabric with a naturally smooth surface to help fight dirt and stains.
- Minimum angle of inclination 14° (light rainfall)
- *Sunblinds with a drop of > 3000mm have a horizontal weld seam!*

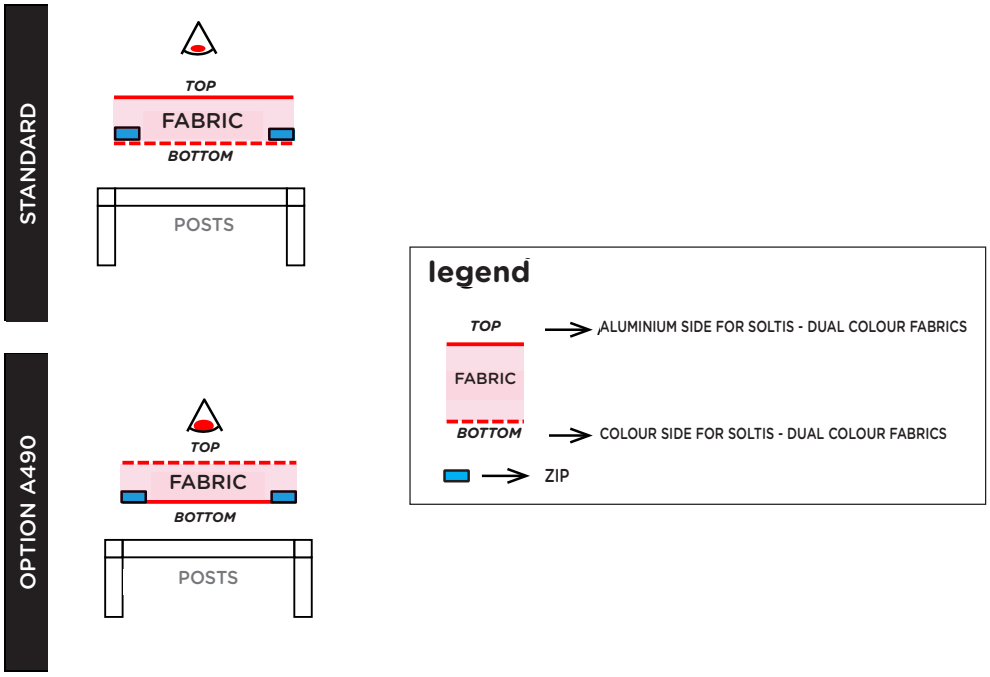
Finish

Zips are placed on the sides of each fabric, and with correctly fitted guide rails, the zips ensure that the fabric is taut in any height position of the extension pole, thanks to the tension between the zip and the guide rails.

With the Soltis 86/92 fabrics, the zips are always on the underside of the fabric.
In addition to the options for applying letters or logos to the fabric, there is also the option to invert the fabric colour or fabric side on the sunblind (A490) - see illustration.

Option A490 is not available for Expansion and Sunworker Crystal fabrics

Fig. 42 fabric direction



On Sunworker Crystal and Expansion fabrics, the zips are always on the top of the fabric, on the transparent membrane side.

10. WEIGHT

The approximate weight of the box, based on a fabric roll of Ø110, an IO-50motor and a Soltis fabric and the weight of two standard lateral guides, can be found in the table below

For an AIR with a width of 4 metres , a drop of 3 metres and a run-out height of 2 metres, the total weight is approx. 138 kg. (85+15+15.5+22.5)

AIR

AIR BOX		2 AIR LATERAL GUIDES		AIR COUPLING GUIDE		POSTS		GUTTER	
LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
1.0 m	Approx. 25 kg	1.0 m	Approx. 5 kg	1.0 m	Approx. 4 kg	1.0 m	-	1.0 m	-
1.5 m	Approx. 35 kg	1.5 m	Approx. 7 kg	1.5 m	Approx. 6 kg	1.5 m	Approx. 12 kg	1.5 m	-
2.0 m	Approx. 45 kg	2.0 m	Approx. 10 kg	2.0 m	Approx. 8 kg	2.0 m	Approx. 15.5 kg	2.0 m	Approx. 11.5 kg
2.5 m	Approx. 55 kg	2.5 m	Approx. 12.5 kg	2.5 m	Approx. 10 kg	2.5 m	Approx. 19 kg	2.5 m	Approx. 14 kg
3.0 m	Approx. 65 kg	3.0 m	Approx. 15 kg	3.0 m	Approx. 12 kg	3.0 m	Approx. 22.5 kg	3.0 m	Approx. 17 kg
3.5 m	Approx. 75 kg	3.5 m	Approx. 17.5 kg	3.5 m	Approx. 14 kg			3.5 m	Approx. 19 kg
4.0 m	Approx. 85 kg	4.0 m	Approx. 20 kg	4.0 m	Approx. 16 kg			4.0 m	Approx. 22.5 kg
4.5 m	Approx. 95 kg	4.5 m	Approx. 22.5 kg	4.5 m	Approx. 18 kg			4.5 m	Approx. 25 kg
5.0 m	Approx. 105 kg	5.0 m	Approx. 25 kg	5.0 m	Approx. 20 kg			5.0 m	Approx. 28 kg
5.5 m	Approx. 115 Kg							5.5 m	Approx. 30.5 kg
6.0 m	Approx. 130 kg							6.0 m	Approx. 33.5 kg

SC-AIR

SC-AIR BOX		2 SC-AIR LATERAL GUIDES	
LENGTH	WEIGHT	LENGTH	WEIGHT
1.0 m	Approx. 24 kg	1.0 m	-
1.5 m	Approx. 33 kg	1.5 m	-
2.0 m	Approx. 42 kg	2.0 m	Approx. 6 kg
2.5 m	Approx. 51 kg	2.5 m	Approx. 7.5 kg
3.0 m	Approx. 60 kg	3.0 m	Approx. 9 kg
3.5 m	Approx. 70 kg		
4.0 m	Approx. 79 kg		
4.5 m	Approx. 88 kg		
5.0 m	Approx. 97 kg		
5.5 m	Approx. 106 kg		
6.0 m	Approx. 120 kg		

AIR

TRIANGLE	
LENGTH	WEIGHT
-	
-	
2.0 m	
2.5 m	
3.0 m	
3.5 m	
4.0 m	
4.5 m	
5.0 m	

11. EXTENSION - WALL INSERT

OPTIONAL

If you wish, a wall insert can be fitted into the gap between box and the wall to create a waterproof seal. Two aluminium profiles are used combined with a cover plate at each side. A rubber strip is fitted to the profile in direct contact with the box.

- hinged: can easily be removed to gain access to the box.
- finished in the same colour as the rest.

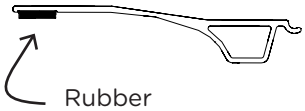
11.1 wall insert top profile 1
– Material: extruded aluminium with powder coating
– Wall thickness: 2mm

Fig. 43 top profile 1



11.2 wall insert top profile 2
– Material: extruded aluminium with powder coating
– Wall thickness: 2mm
– With rubber strip

Fig. 44 top profile 2



11.3 Wall-box cover plate
– Material: aluminium with powder coating
– Plate is sawn to the correct angle on site during installation

Fig. 45b Bracket cover plate



Fig. 45 cover plate



11.4 Bracket cover plate
– Material: stainless steel

Fig. 46 Standard

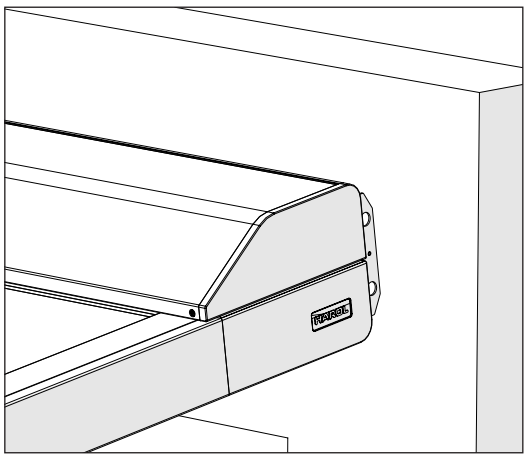
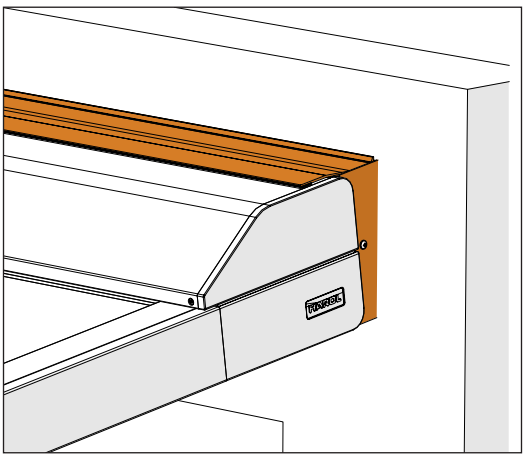


Fig. 47 with wall junction



**** If fitted against a wall: must be sealed***

12. EXTENSION - TRIANGLE

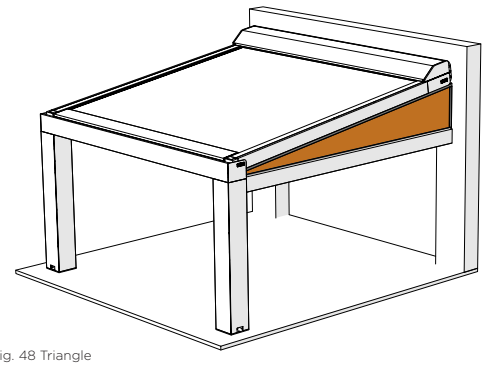
OPTIONAL

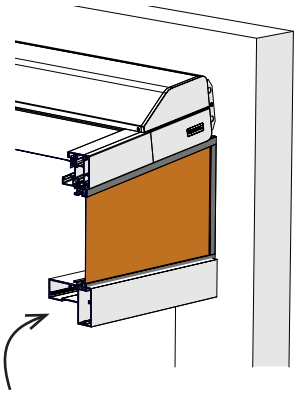
It is possible to finish the side with a triangle (frame with tensioned fabric) When combined with screens or glass walls, this can be used to create a protected space. The triangles comprise welded aluminium profiles to which a fabric is clamped with a plastic profile.
The whole structure is supplied already assembled.

- it is possible to use a different fabric quality from the upper fabric.

IN ORDER TO OBTAIN A CORRECT MEASUREMENT AND A GOOD FIT, WE ADVISE MEASURING AFTER FITTING THE TERRACE AWNING.

Only triangle, without screen (order OPTION A4302 / A4303)

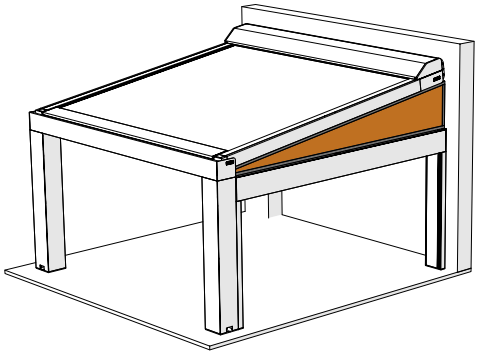


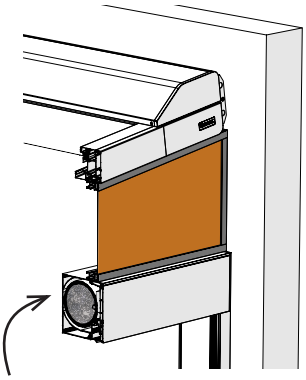


extra cross beam (OPTION AA4302 / A4303)

Fig. 48 Triangle

Combined with screen/glass wall



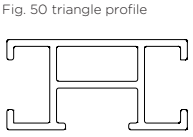


The triangle is supported on the screen/glass wall

Fig. 49 Triangle with screen

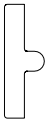
12.1 Triangle profile
- Material: extruded aluminium with powder coating
- Dimensions: 40mm x 20mm
- Wall thickness: 1.5mm

Fig. 50 triangle profile



12.2 Triangle cover profile
- Material: extruded aluminium with powder coating
- Dimensions: 20mm
- Wall thickness: 3.5mm

Fig. 51 triangle cover profile



12.3 Triangle clamp profile
- Material: PVC

Fig. 52 triangle clamp profile



13. EXTENSION - SC-AIR (SCREEN)

OPTIONAL

Integrate vertical sun protection into both sides and the front (under the gutter) of the system.

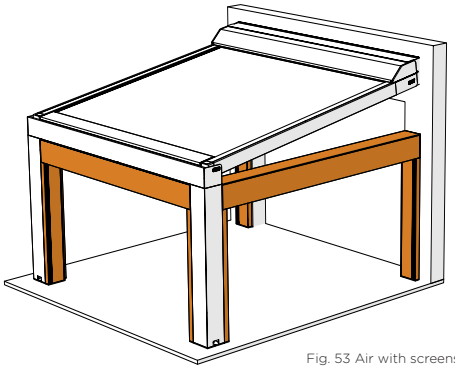


Fig. 53 Air with screens

The screens have a wind-proof zip system. When combined with a fabric triangle above the screens, the terrace system can be made wind-proof and rain-proof.

Colour: choice from RAL colour range

- Can be fitted on any side. (front, left and/or right)
- Can be combined with a glass wall and/or triangle.

The screen box can be accessed along the front and fitted with a sliding system for easy insertion and removal of the fabric roll (fig. 55).

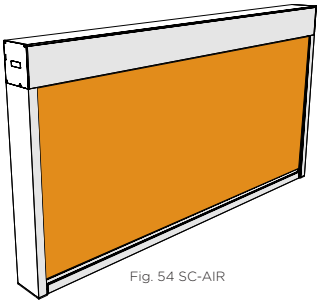


Fig. 54 SC-AIR

If you want to retrofit screens at a later date, the cabling must be included when the structure is ordered.
(OPTION A4103 - pre-cabling)
see p.25

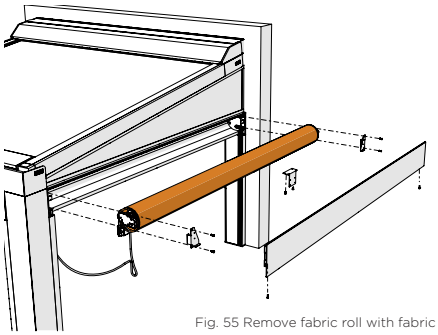


Fig. 55 Remove fabric roll with fabric

SC-AIR FABRICS

Various types of fabric can be used on the screens.
See roll-up tables (p. 26-27) for detailed dimensions per fabric type.

	SOLTIS 86	SOLTIS 92	SERGE 600	SUNWOR-KER	STAM 6002	SERGÉ 1%	LUNAR	CRYSTAL CLEAR
basic material	Polyester	Polyester	Glass fibre	Polyester	Polyester	Glass fibre	Glass fibre	Polyester
Weight (g/m²)	approx. 380	approx. 420	approx. 535	approx. 440	approx. 630	approx. 620	approx. 660	approx. 610
thickness (mm)	approx. 0.43	approx. 0.45	approx. 0.55	approx. 0.48	approx. 0.55	approx. 0.80	approx. 0.77	approx. 0.5
fire class	M1	M1	M1	M2	M2	M1	-	M2
roll width (mm)	1770 / 2670	1770 / 2670	2700 / 3200	2960	2600	2700	2100	1400
stripe direction	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
opening factor	14%	3 to 4%	5%	4%	0%	1 %	0 %	0%
G_{tot}	0,12 - 0,22	0,05 - 0,15	0,01 - 0,10	0,10 - 0,18	-	0,05 - 0,09	0,02 - 0,09	-

1. Soltis 86 and Soltis 92

- see p. 15 pt. 1 for more info

2. Serge 600

- Transparent and refractive fabric.
- Woven with glass fibre (pre-coated with a synthetic material based on polyvinyl chloride)
- Spun-dyed
- Fixed with a Plastisol layer
- The front or right-hand side of the fabric is on the outside or visible side
- Attention! For Serge 600 fabrics, screens with a height greater than 2430/2930 mm are fitted with a horizontal weld seam; for Serge 1% fabrics the same applies to heights greater than 2430 mm!

3. Sunworker Crystal
- see p. 15 pt. 3 for more info

4. Stam 6002
- Opaque, translucent fabricl.
- Made from mesh polyester fibres.
- Stretched under tension. (in accordance with Precontraint method)
- Supplied with a PVC coating on both sides
- Attention! Screens with a height greater than 2400 mm are fitted with a horizontal weld seam!

5. Lunar
- Opaque, black-out fabric consisting of woven glass fibres and a black-out film on the back.
- The glass fibres are coated with a synthetic material based on polyvinyl chloride, spun-dyed and fixed with a Plastisol layer.
- Fabric is suitable for both indoor and outdoor use.
- Black-out film is applied to the window side as standard with every fitting type.

6. Crystal clear
- Fully transparent, non-refractive fabric:
- Is a transparent PVC film
- Attention! Systems with a height greater than 1400 mm have a horizontal weld seam.

Note: only fabrics 2.4, and 7 are used when making window combinations with the SC-AIR screens

WINDOW FILMS

OPTIONS

- A2690 Crystal Clear window with all-round border in STAM fabric or Sergé 600 fabric of min. 300 mm
- A2691 Crystal Clear window over the entire width up to max. 4000 mm
- A2692 1 window insert 1000 x 1000 mm or 1240 x 1240 mm
- A2693 2 window inserts 1000 x 1000 mm or 1240 x 1240 mm
- A2695 Crystal Clear with side border 300 mm left and 300 mm right in (STAM 6002 or Sergé 600 fabric)

SCREEN OPERATION OPTIONS

- 2. ***IO*** operation (standard)
  The motor can be operated with all IO controls.
- 1. ***RTS*** operation
  The motor can be operated with all RTS controls.

NOTE!

THE RUN-OUT HEIGHT IS ALWAYS THE HEIGHT TO THE BOTTOM OF THE GUTTER.

IF THERE IS A SCREEN*/GLASS WALL, THE RUN-OUT HEIGHT (G) IS STILL TO THE BOTTOM OF THE GUTTER. (NOT TO THE BOTTOM OF THE SCREEN)

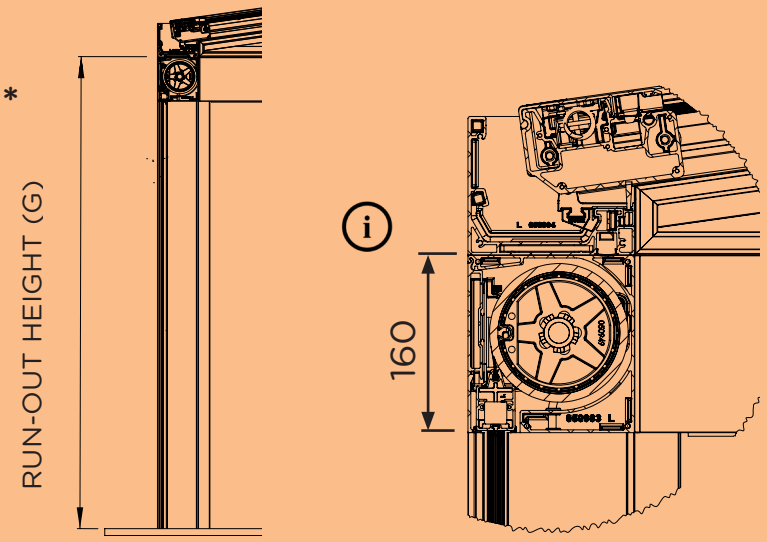
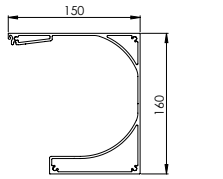


Fig. 56 Run-out height

SC-AIR parts

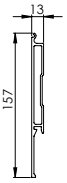
Box profile
- Material: extruded aluminium with powder coating
- Wall thickness: 2.5mm.
- Dimensions: 150mm x 160mm

Fig. 57 box profile



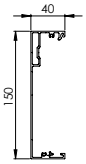
Cover (box)
- Material: extruded aluminium with powder coating
- Wall thickness: 2.5mm.
- Dimensions: 13mm x 158mm
- Screw-free fitting to the post with clips

Fig. 58 cover



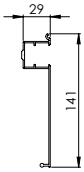
Guide rail base
- Material: extruded aluminium with powder coating
- Wall thickness: 1.75mm.
- Dimensions: 150mm x 40mm

Fig. 59 guide rail base



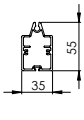
Guide rail cover
- Material: extruded aluminium with powder coating
- Wall thickness: 1.5mm.
- Dimensions: 141mm x 29mm

Fig. 60 guide rail cover



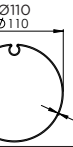
Bottom lath
- Material: extruded aluminium with powder coating
- Wall thickness: 1.5mm.
- Dimensions: 141mm x 29mm
- With VK20 mm strengthening strip.

Fig. 61. bottom slat



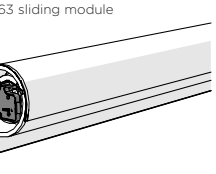
The fabric roll
- Material: circular tube made of galvanised steel, with a groove for attaching the fabric.
- Function: rolling the fabric up and down

Fig. 62 shafts



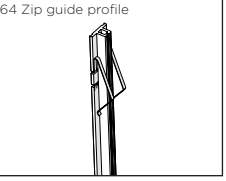
The sliding module
- Fabric roll with fabric, motor and bottom slat, fitted with slides for insertion into the box.

Fig. 63 sliding module



Zip guide profile
- Material: extruded PVC zip profile
- Function: Absorption of the zip profile to keep the fabric tensioned with the aid of stainless steel springs.

Fig. 64 Zip guide profile



14. EXTENSION - LED

OPTIONAL

Integration of LED lighting in the box, guide rails or gutter.

- The lighting consists of a LED strip, power supply (240 V AC - 24 V DC) and a receiver.
- The LED strip is built into a slot made in aluminium profiles and covered with a plastic profile.
- The power supply for the LED strip is installed in the post.
- The lighting can always be used with the awning in both open and closed positions.
- The LED strip is always fitted over the full width of the profiles.
  Depending on the length at which the LED strip is cut, there may be less light at either end.
- The LED strip operates on 24 V, 9.6 W/m.
- The lighting is intended to provide ambiance lighting (600 lumen/metre - 3000 (K) Kelvin)
- The remote control is not included with the LED lighting.
- When installing screens below the gutter, the LED lighting can only be fitted in the box and/or side guides.
- When installing triangles (laterally), the LED lighting can only be fitted in the box and/or gutter.
- No LED lighting can be installed in positions where there are screens with triangle or glass walls.

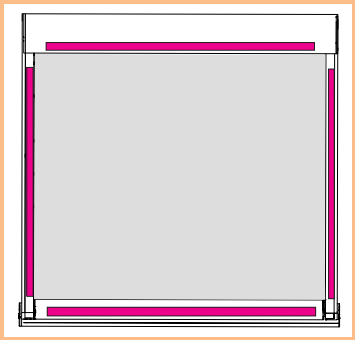
There are 2 possible options for operating the LED lighting:

- 2. **Dimmable IO controls:**
  The dimming lighting cannot be operated using Smoove IO controls
- 1. **RTS controls:**
  The lighting can be operated with all RTS controls/transmitters.

Fig. 66 Top view of LED positions

LED LIGHTING IS AVAILABLE IN VARIOUS POSITIONS, INTEGRATED INTO THE SYSTEM. (INDICATE DESIRED POSITIONS ON ORDER FORM)





LED profile

- Material: plastic.
- Colour: milk white

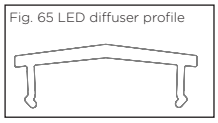


Fig. 65 LED diffuser profile

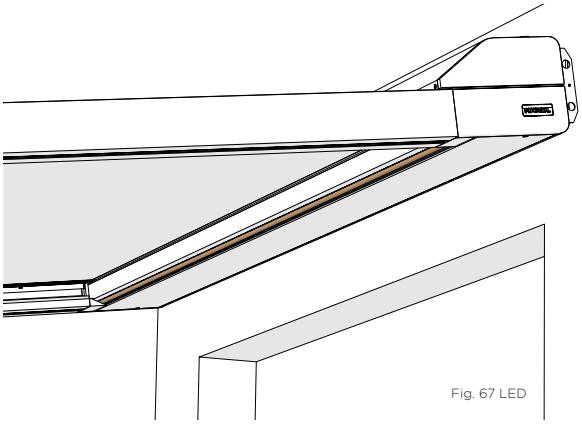


Fig. 67 LED

15. EXTENSION - GLASS WALL SF20

OPTIONAL

Integration of glass sliding wall on both sides and also on the front. A triangle is fitted above the glass wall in order to create an enclosed system (see chapter 12 - p. 20).

With the SF20 glass sliding wall, the individual glass sliding panels can be slid in one or two directions horizontally and parallel to one another.

When the first sliding panel is opened and/or closed, the built-in carrier ring opens and closes the other sliding panels automatically.

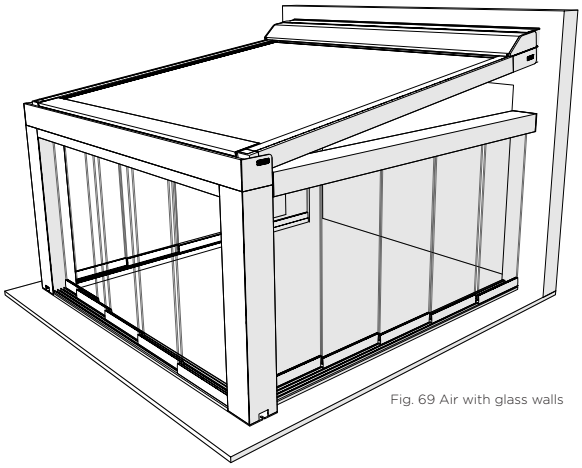


Fig. 69 Air with glass walls

A**n extra horizontal profile must be ordered as well (OPTION A4302/A4303)** to fix the glass wall and into which the guide rail for the sliding wall can be fully integrated. (Fig. 71).

IF THE GLASS WALL IS FITTED UNDER A SCREEN, OPTION A4302(left) / A4303(right) «CROSS BEAM» SHOULD NOT BE TAKEN.

SF20

- Material: aluminium with powder coating
- Can be fitted on any side. (front, left and/or right)
- Vertical full-glass sliding system in aluminium rails.
- Slides open to the left and/or right.
- Protection against wind and rain.
- Separate order form must be completed.
- Can be combined with a screen and/or triangle.

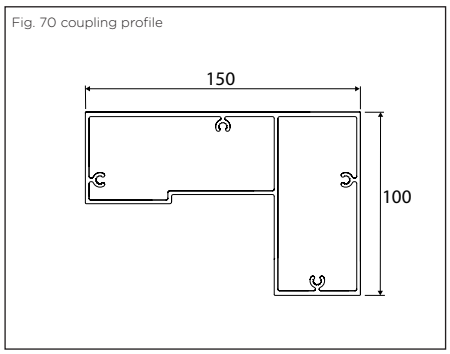
For more technical specifications, see technical data sheet SF20

16. OPTION A4302 HORIZONTAL CROSS BEAM LEFT A4303 HORIZONTAL CROSS BEAM RIGHT

Coupling profile

- Material: extruded aluminium with powder coating
- Dimensions: 150 x 100mm
- Wall thickness: 2mm

Fig. 70 coupling profile



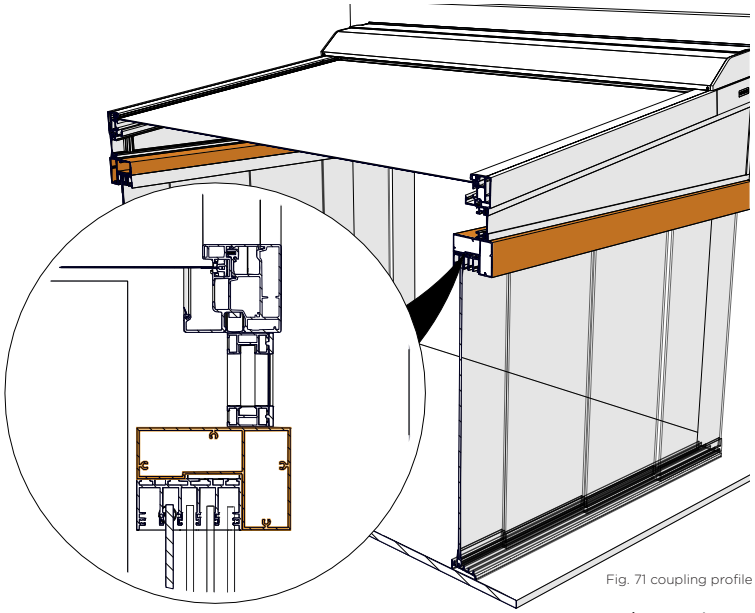


Fig. 71 coupling profile

17. OPTION A4301 - SCREEN PRE-CABLING

If you plan to retrofit screens at a later date, this should be indicated at the time of the initial order. By choosing this option, the cabling will be fitted in the structure so that a protected electrical connection is possible at a later date.

This option comprises:

- provision of a connection box with cabling in the post (always on the operating site) from where any possible screen position can be run invisibly.
- if this option is not taken initially, screens can still be retrofitted but the cabling itself should be installed by the fitter.

18. FRAME COLOUR

According to RAL colour range.

19. FASTENING MATERIALS

All fixing materials are in stainless steel and accessories are always included.
Fixing materials for fixing to the wall and floor are not included.

20. PACKAGING

All sunblinds are fully packed in solid cardboard boxes.

21. USE AND MAINTENANCE

Proper use and maintenance greatly increase the lifetime of the sunblind.

- When a waterproof fabric is used, water is drained in a controlled fashion at the sides of the extension pole. There is a water collection mechanism (gutter) underneath the cross beam.
- Regular maintenance prevents unnecessary wear and operational problems.
- Cleaning the frame: use soft water instead of aggressive substances, which may affect the coatings and protective layers.
- Cleaning the fabric: dry with a slightly stiffer brush.
- With stubborn stains: use warm soapy water, then rinse with plenty of clean water.
- Always let the fabric dry fully before rolling it up (even after an unexpected rain shower).
- It is recommended to offer the end customer a maintenance contract for this product.
- If the system is intended to be used as rain protection, the right materials/fabric should be chosen and everything must be professionally sealed.

22. SAFETY

For the safety of the end user, the sunblind must be installed strictly in accordance with the fitting instructions.

23. ROLL-UP TABLES - AIR

Below you will find the possible dimensions for an AIR Type 1 (single system). For AIR Type 2, Type 3 or Type 4 there are two or more fabrics, each of which can be found in the table below.

SOLTIS 86, 92

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										
3250										
3500										
3750										
4000										
4250										
4500										
4750										
5000										

EXPANSION

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										
3250										
3500										
3750										
4000										
4250										
4500										
4750										
5000										

SUNWORKER CRISTAL

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										
3250										
3500										
3750										
4000										
4250										
4500										
4750										
5000										

24. ROLL-UP TABLES - SC-AIR

Below you will find the possible dimensions for an SC-AIR.

SOLTIS 86, 92

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										

SERGE 600

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										

SUNWORKER CRISTAL

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										

SERGE 1%

Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										

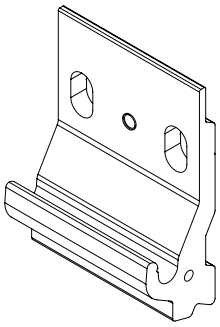
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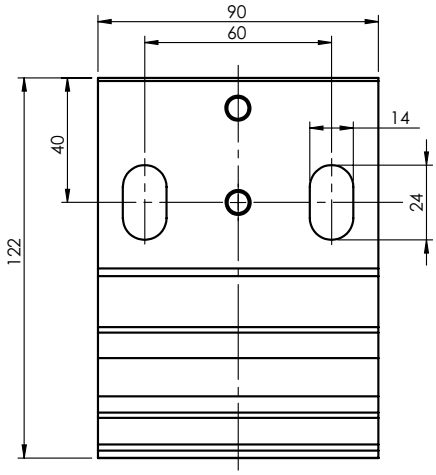
Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
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1250										
1500										
1750										
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2500										
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3000										

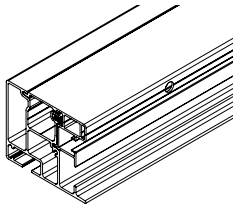
WINDOW FILM

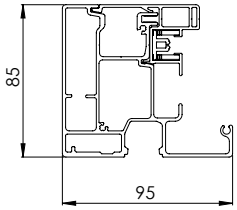
Drop \ Width	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
500										
750										
1000										
1250										
1500										
1750										
2000										
2250										
2500										
2750										
3000										

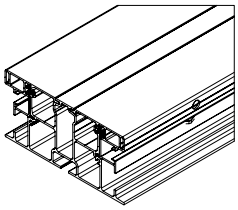
25. TECHNICAL DRAWINGS

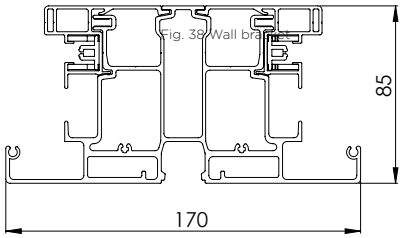


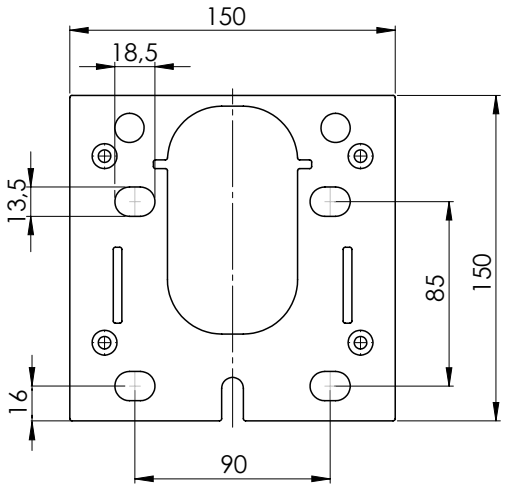


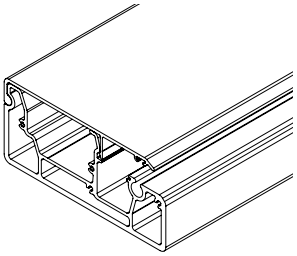


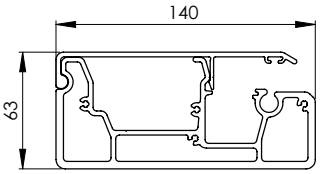


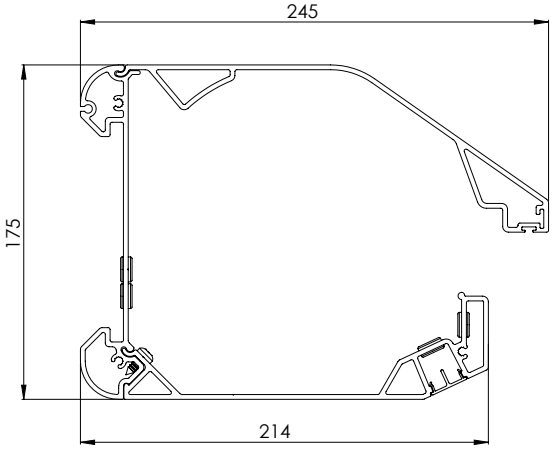


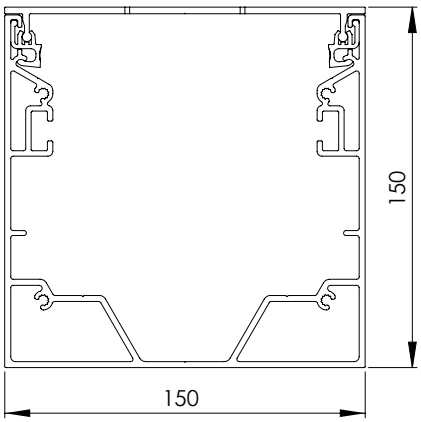












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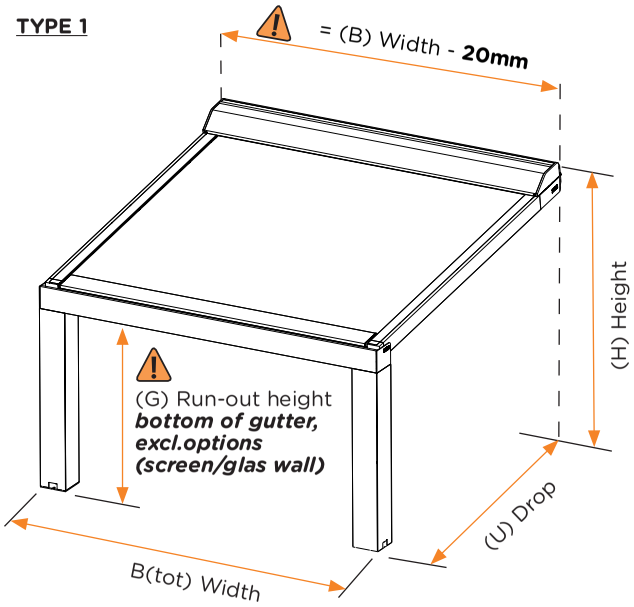
see Table 1, page 10

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Type 2	2 fields
Type 3	3 fields
Type 4	4 fields

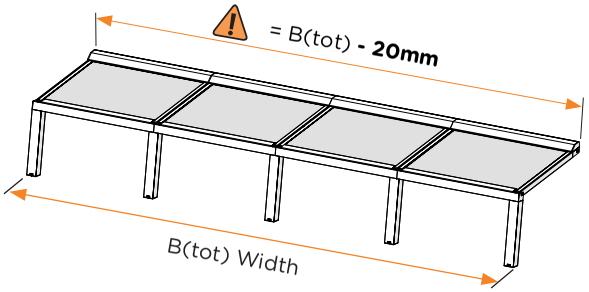
OPERATING SIDE :
DO NOT PLACE MOTORHEADS AGAINST EACH OTHER

2. DIMENSIONS

TYPE 1



TYPE 4



3. FRAME COLOUR

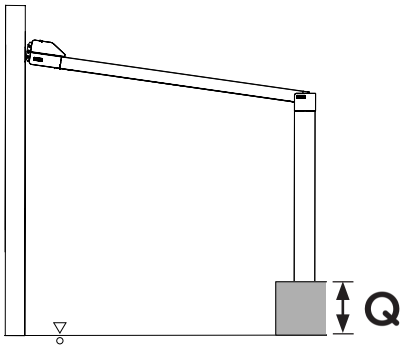
Choice from the RAL colour range
RAL colour (indicate number)

4. FABRIC

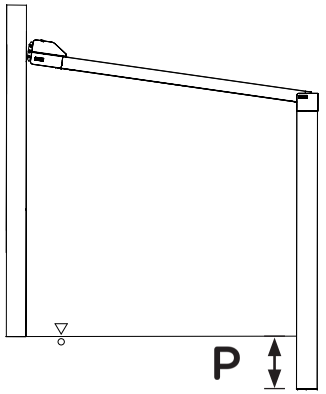
EXP	Expansion
SWC	Sunworker Crystal
S86	Soltis 86
S92	Soltis 92

INDICATE THE FABRIC COLOUR NUMBERS ACCORDING TO THE COLLECTION BOOK.

5. Option A1623 - SHORTEN POSTS



6. Option A1624 - EXTEND POSTS



7. SUPPLEMENTS AIR

A 1552	Wall insert TOP -incl. covers
A 88	Extend motor cable to 5m
A 289	Extend motor cable to 10m
A 2619	Motor Orea WT
A576	PLR touch-up pen for RAL colour
A 2372	Hirschmann plug (switch side)
A 2387	Hirschmann plug (motor side)
A 2660	RTS
A 4301	Pre-cabling for screen SC-AIR/LED
A 4302	Horizontal cross beam LEFT
A 4303	Horizontal cross beam RIGHT

8. SCREENS

See order form p2

9. SUPPLEMENTS SC-AIR

A 1285	Without Smoove Origin IO transmitter
A 1117	Without Smoove Origin RTS transmitter

10. LED TYPE

A 2662	IO dimmable
A 2660	RTS
A 1076	Motor Orea RTS

Order form terrace awning AIR

Order form terrace awning AIR p.1

Date: _____ HAROL reference: _____ Prepared by: _____

CUSTOMER/INVOICE	DELIVERY ADDRESS
Name: _____	Name: _____
Address: _____	Address: _____
Customer number: _____ VAT no: _____	Mobile/Tel.: _____ Fax: _____
Mobile/Tel.: _____ Fax: _____	Desired delivery date: _____

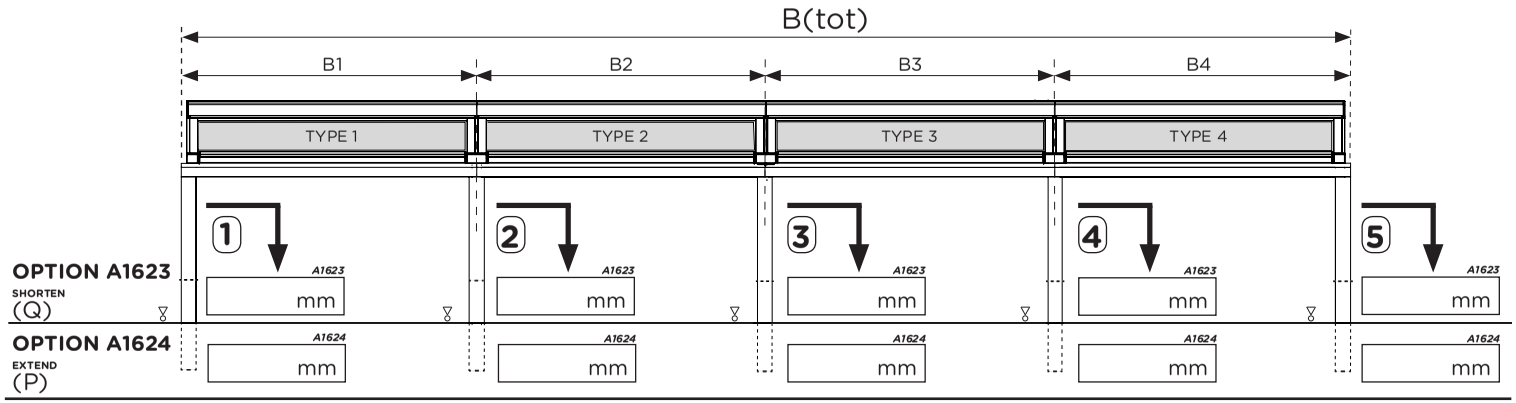
QUANTITY	TYPE NO (1)	FINISHED MEASUREMENTS (MM) (2)								FRAME COLOUR (3)	FABRIC (4)	
		B(tot)	B1	B2	B3	B4	H	G	U		QUALITY	COLOUR

CONTROLS SIDE				
	☐ LEFT ☐ RIGHT	☐ LEFT ☐ RIGHT	☐ LEFT ☐ RIGHT	☐ LEFT ☐ RIGHT

SUPPLEMENTS (7)				

☐ **WALL INSERT**
Option A1552

ATTENTION
If the inclination dimensions (A) are not observed, this may result in poor rain water drainage.
HAROL cannot be held responsible for any damage to the product or sagging to the fabric this causes. If the inclination is too small, the product can only be used as sun protection and not as rain protection!



I have taken note of the technical product descriptions and take full responsibility for the indications and sizes mentioned. Signature or stamp, stating "read & approved"

INFORMATION:

- The operating side is always viewed from the outside.
- Please indicate all the measures in mm!
- Each order is executed according to our terms and conditions of sale!

COMMENTS:

PRICE: _____

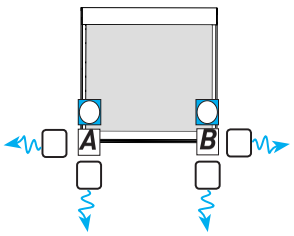
The Customer,

1. POSITION OF WATER DRAINAGE

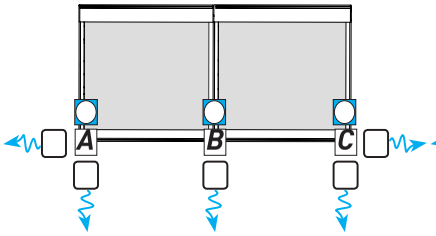
REQUIRED IN EVERY POST

WATER DRAINAGE TO THE FRONT | WATER DRAINAGE TO THE SIDE | WATER DRAINAGE TO THE BOTTOM | A POST

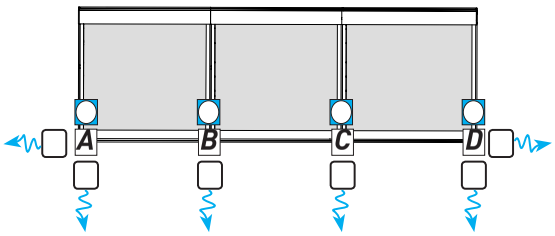
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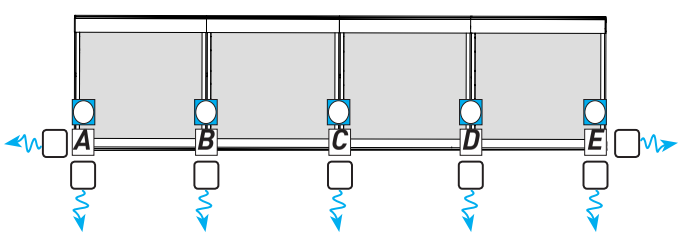
TYPE 2



TYPE 3



TYPE 4

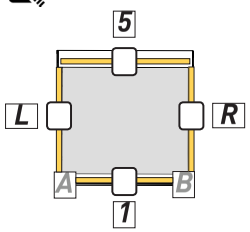


2. LED POSITION

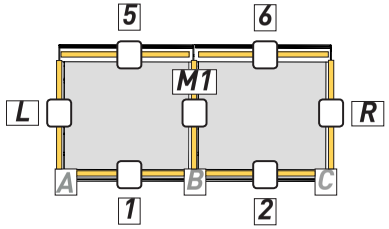
☐ IO dimmable control (A2662) ☐ RTS control (A2660) ☐ IO control (A2661)

LED STRIP | A POST

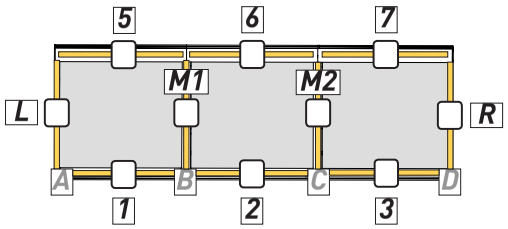
TYPE 1



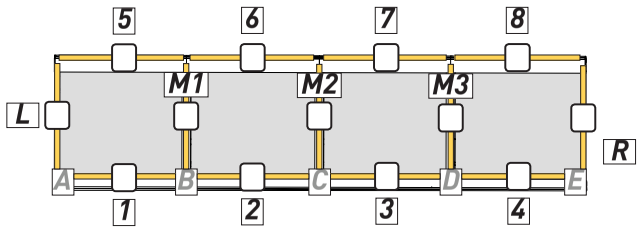
TYPE 2



TYPE 3



TYPE 4



3. POSITION OF "SC-AIR" SCREEN

SCREEN

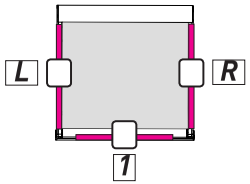
1. Check the desired screen(s) on the drawing
2. Complete the table with the desired fabric type & colour **for each screen**.

☐ IO controls
☐ RTS controls

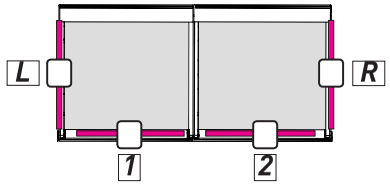
SCREEN	FABRIC QUALITY	FABRIC COLOUR
L		
R		

SCREEN	FABRIC QUALITY	FABRIC COLOUR
1		
2		
3		
4		

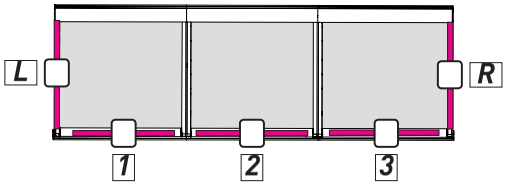
TYPE 1



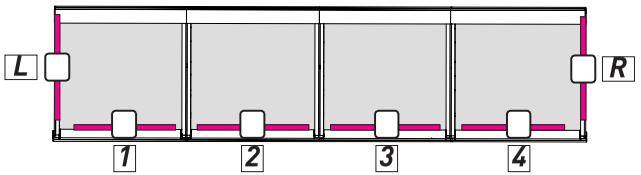
TYPE 2



TYPE 3



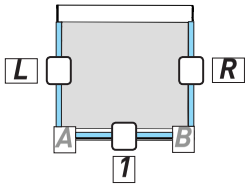
TYPE 4



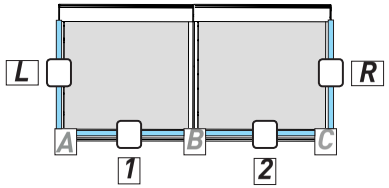
4. POSITION OF "SF20" GLASS WALL (NEED TO FILL IN A SEPARATE ORDER FORM)

GLASS WALL | A POST

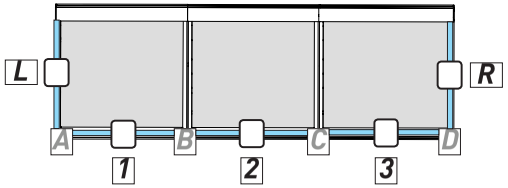
TYPE 1



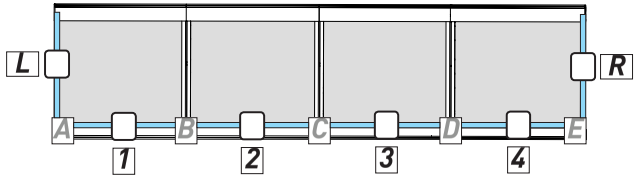
TYPE 2



TYPE 3



TYPE 4



Order form terrace awning AIR p.2