

Outdoor living

Terrace awnings

AIR

Article number 063644

SHUTTERS

SUN PROTECTION

HAROL

ALWAYS READ THE INSTALLATION INSTRUCTIONS BEFORE FITTING!!!

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

TABLE OF CONTENTS

1. GENERAL	4
2. FITTING TYPES	4
3. PROFILES & PARTS	5
4. CONTROLS	8
5. DIMENSIONS	9
6. TECHNICAL OPTIONS	10
7. OPTIONS	11
8. MEASUREMENT AND FITTING	12
9. FABRICS	15
10. WEIGHT	17
11. EXTENSION - WALL INSERT	18
12. EXTENSION - TRIANGLE	19
13. EXTENSION - SC-AIR (SCREEN)	19
14. EXTENSION - LED	23
15. FABRIC SUPPORT	24
16. EXTENSION - GLASS WALL	25
17. OPTION HORIZONTAL CROSS BEAM	25
18. OPTION PRE-CABLING	26
19. FRAME COLOUR	26
20. FASTENING MATERIALS	26
21. PACKAGING	26
22. USE AND MAINTENANCE	26
23. SAFETY	26
24. ROLL-UP TABLES - AIR	27
25. ROLL-UP TABLES - SC-AIR	28
26. ORDER FORM	28
27. TECHNICAL DRAWINGS	29

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

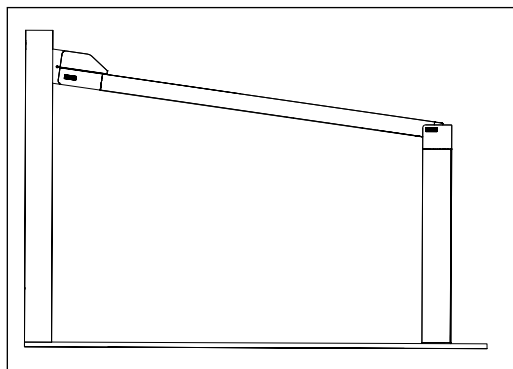
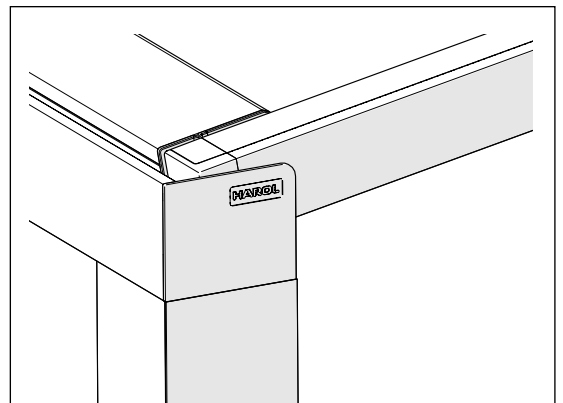
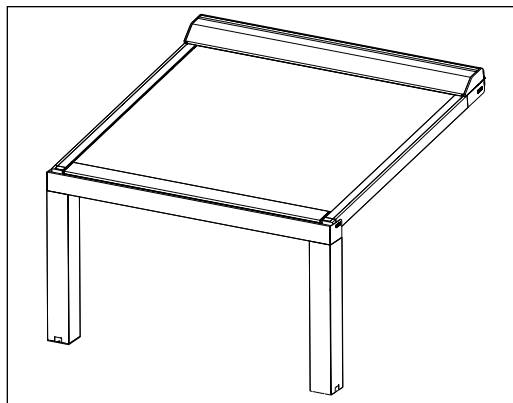
1. GENERAL

- 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 drain-pipe.



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.

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

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.

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.

3.5. LED finishing profile

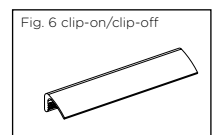
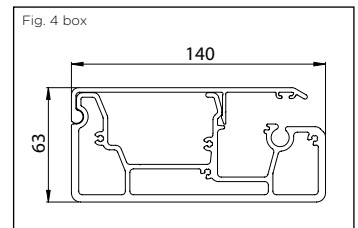
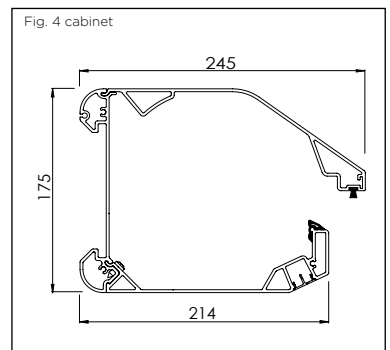
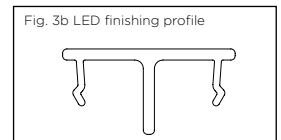
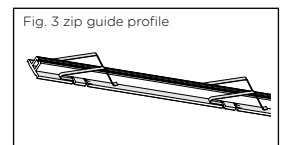
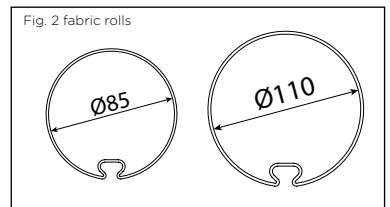
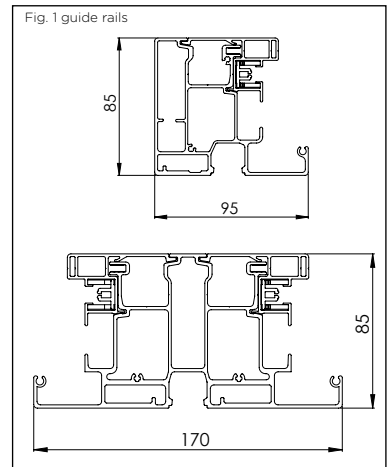
- Material: aluminium with powder coating

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.

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.



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.

3.7.2 Cover

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

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
- optional : 220 x 220
- optional : 220 x 185

3.7.4 Drainpipe

- Material: plastic PVC pipe diameter 50mm.

3.7.5 Elbow fitting 45°

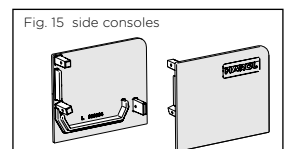
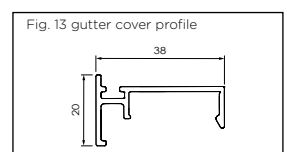
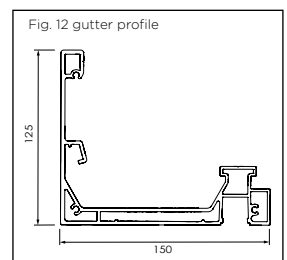
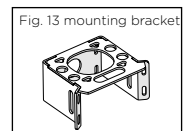
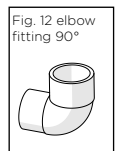
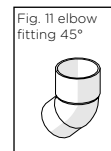
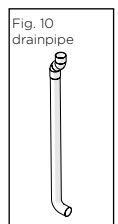
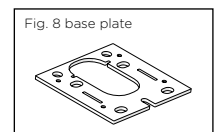
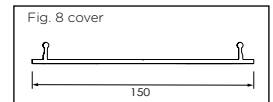
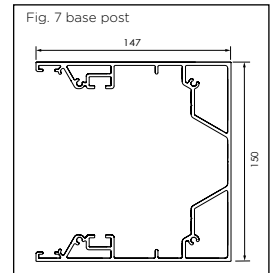
- Material: plastic PVC pipe diameter 50mm.

3.7.6 Elbow fitting 90°

- Material: plastic PVC pipe diameter 50mm.

3.7.7 Mounting bracket

- Material: stainless steel



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

3.8.2 Gutter cover profile

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

3.8.3 Gutter side consoles

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

3.8.4. Gutter connecting plate

- Material: aluminium.

3.8.5. Water drainage

- Material: plastic.

3.9 The side consoles

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

3.10 The coupling consoles

- as the side 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.

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.

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

3.14 Hinges

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

3.15 Wall bracket part 2

- Material: extruded aluminium with powder coating

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. 14 coupling plate

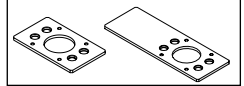


Fig. 16 water drainage

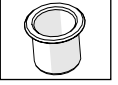


Fig. 17 side consoles

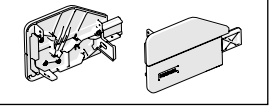


Fig. 18 coupling consoles

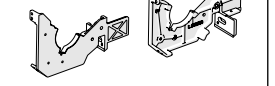


Fig. 19 carriage

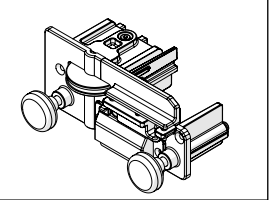


Fig. 20 coupling guide cover

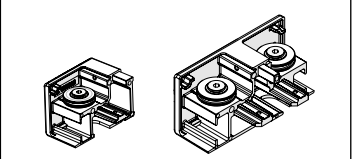


Fig. 21 hinge

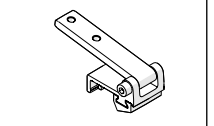


Fig. 22 wall bracket part 2

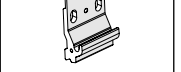


Fig. 23 wall bracket part 1

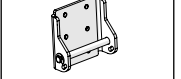


Fig. 24 console filler section position

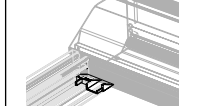
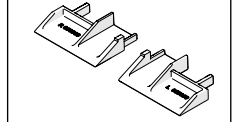


Fig. 25 console filler section



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.

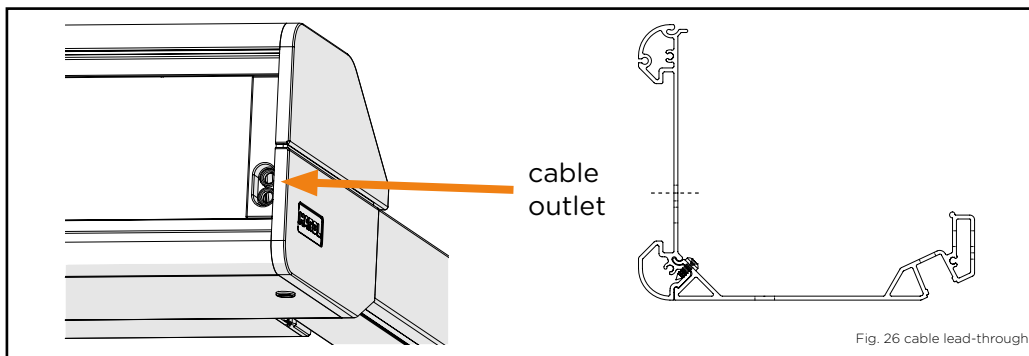
• **Standard:**

- 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:**

- 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

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



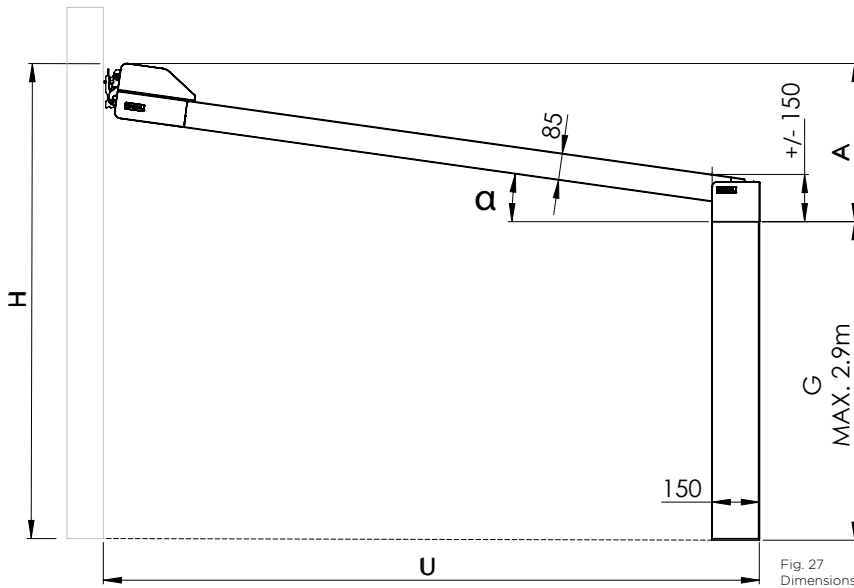
One motor per field for linked systems. Motors cannot be positioned 'head-to-head'.

4.2. Automation

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

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

5. 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*

Fig. 27
Dimensions

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

angle of inclination (α) Drop (U)	8°	10°	14°
1500	420	468	568
2000	490	558	692
2500	561	645	816
3000	631	735	941
3500	701	825	1065
4000	771	910	1190
4500	841	1000	1315
5000	911	1090	1440

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!*

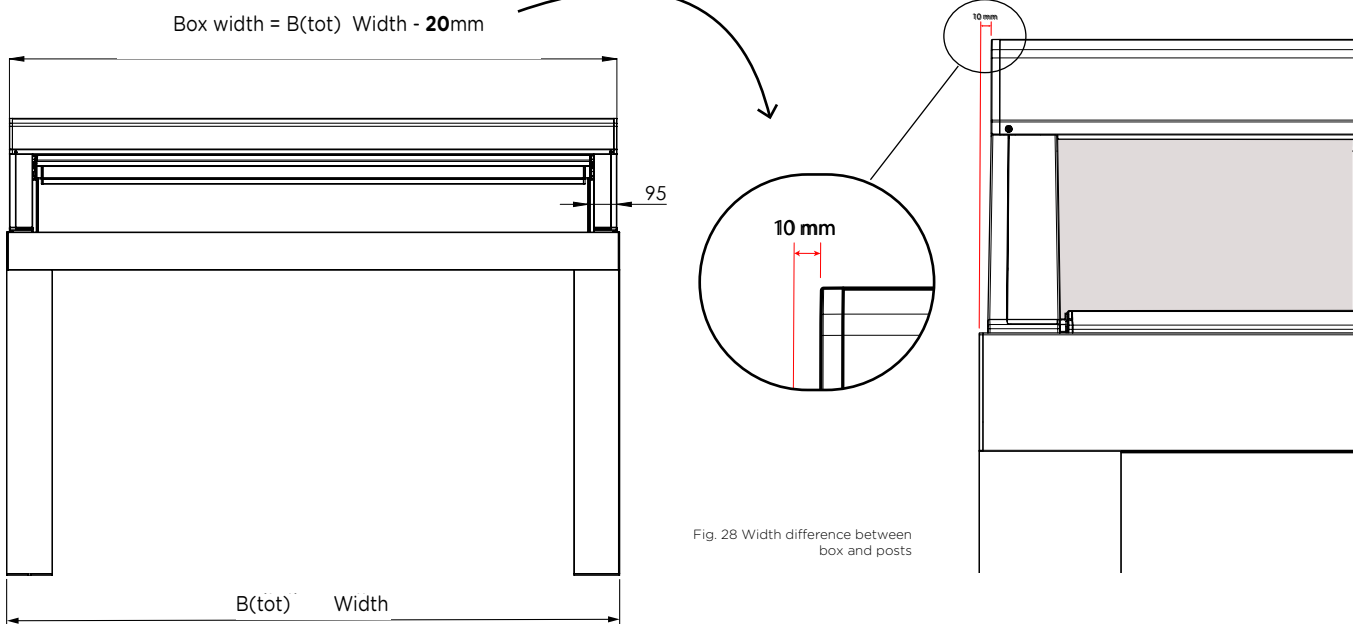


Fig. 28 Width difference between box and posts

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

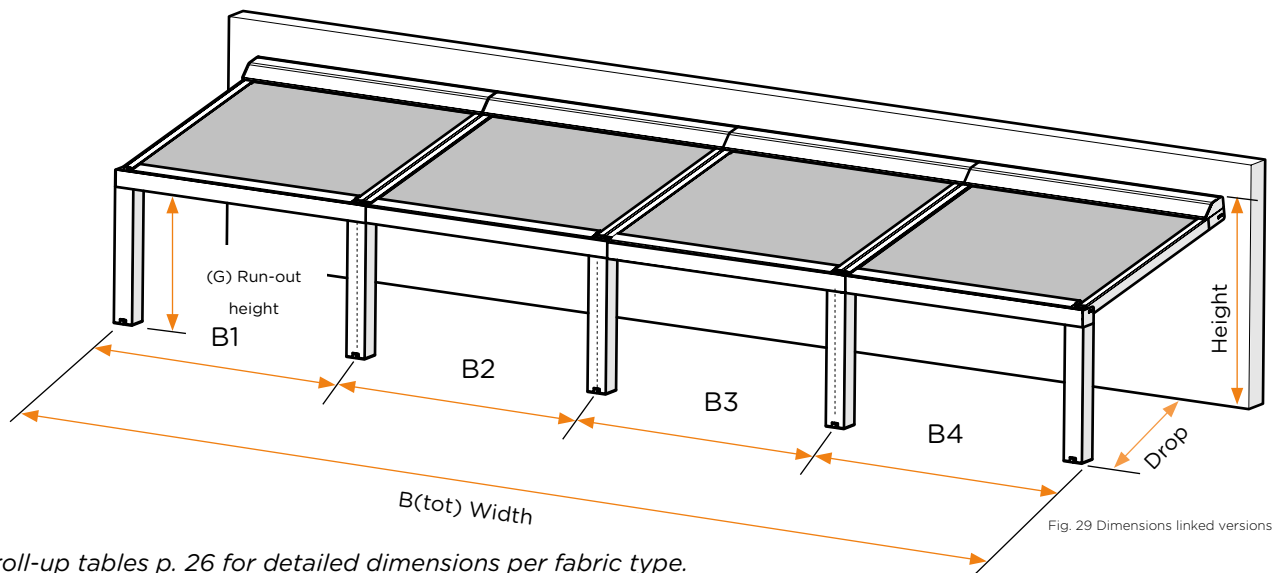
6. TECHNICAL OPTIONS

- 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 width in meters							Maximum surface	Number of elements	Number of motors
	1,5	3	4,5	6	12	18	24			
Type 1		1 part						25 m ²	1	1
Type 2			2 parts					50 m ²	2	2
Type 3				3 parts				75 m ²	3	3
Type 4					4 parts			100 m ²	4	4

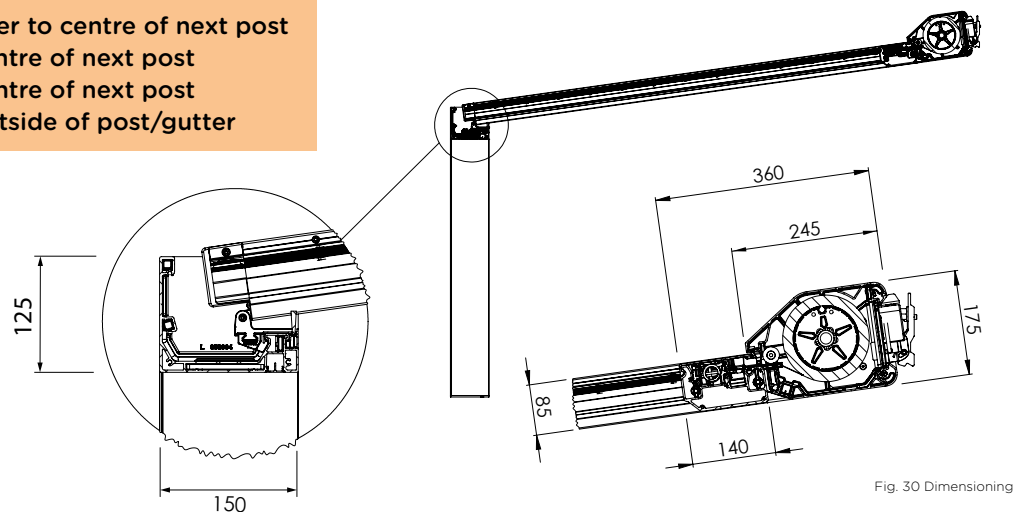
*From a width of 5001mm: Only possible in the fabric qualities Soltis 86, Soltis 92 and Infinity

Table 1: Technical options



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



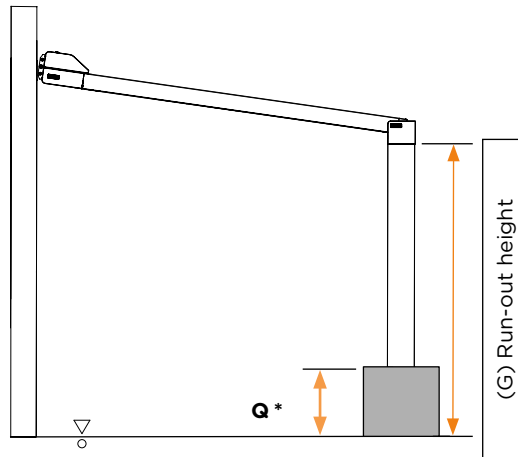
IN LINKED SYSTEMS, THE INTERIM POSTS ARE ALWAYS IN A FIXED POSITION JUST UNDER THE CENTRE GUIDE RAIL

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

7. OPTIONS

OPTION A1623 shorten post

Fig. 31 Shortening option



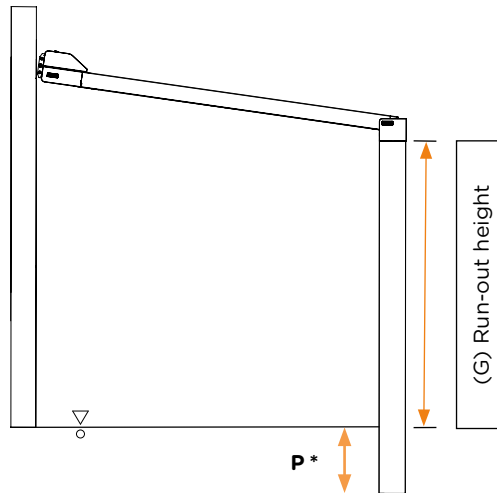
Max. extension of screens/glass walls:
MAXIMUM HEIGHT OF SCREEN/GLASS WALL
= HEIGHT SHORTEST POST

→ $Q \text{ MAX.} = (G) - 100\text{mm}$

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

OPTION A1624 extend post

Fig. 32 Extension option



→ $P = \text{MAXIMUM} + 1000\text{mm}$

**Indicated/indicated 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

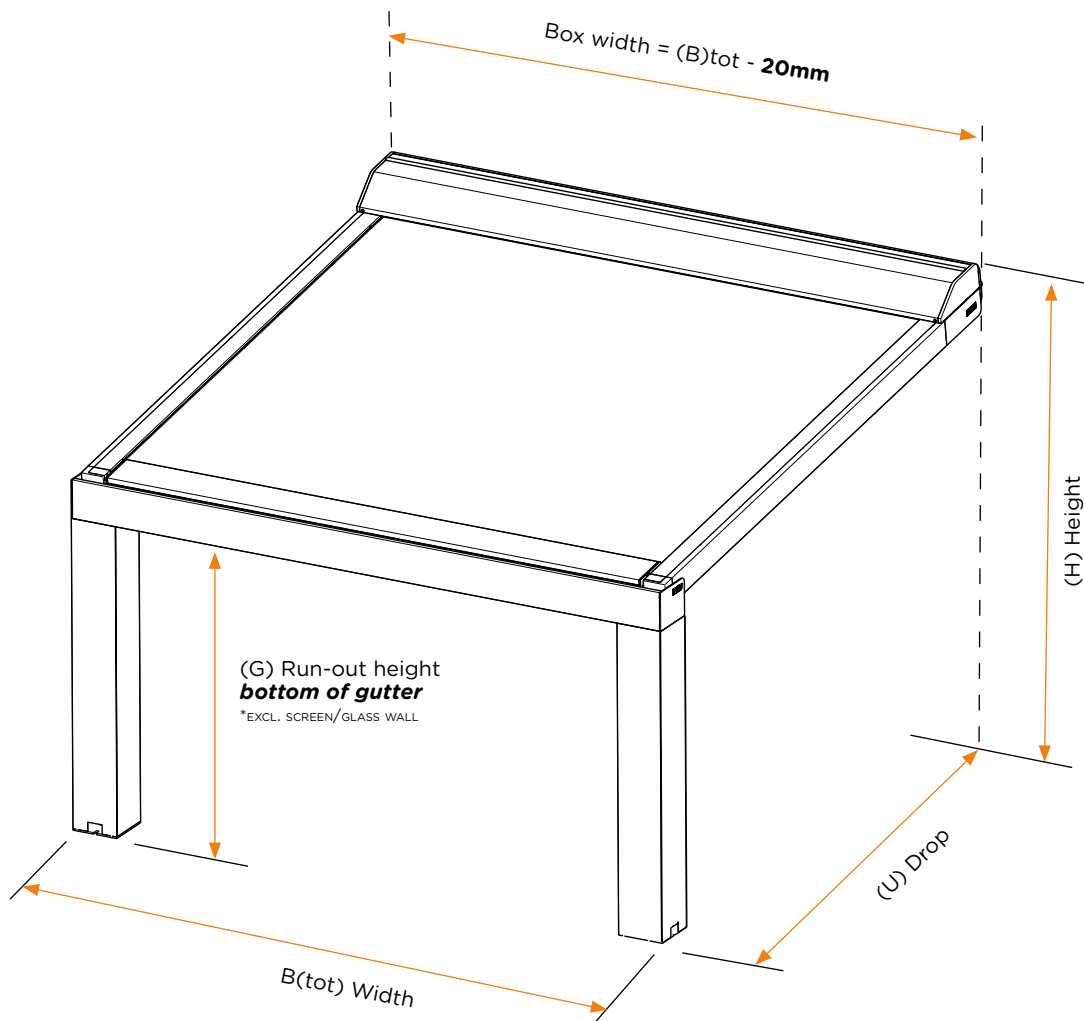


Fig. 33 Names of dimensions

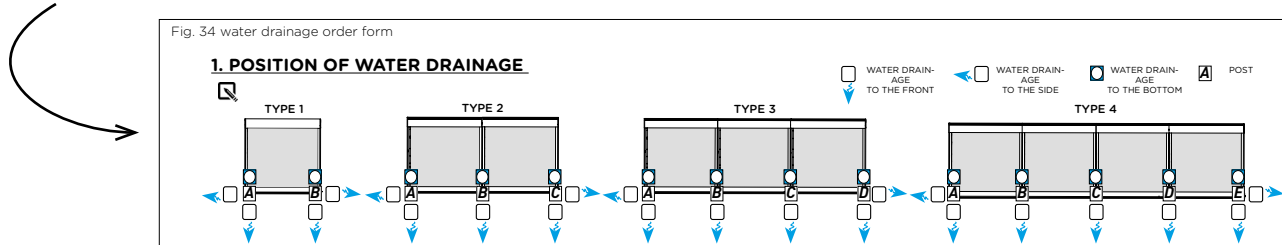
AIR TERRACE SYSTEM TECHNICAL DATA SHEET

8.2. Position of water drainage

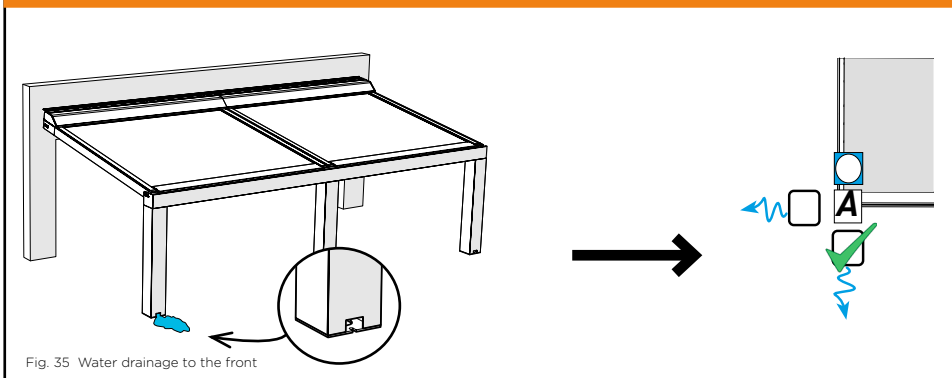
The rain water that is collected is led to the gutter via the lateral guides and then via the posts to the ground/ drain.

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

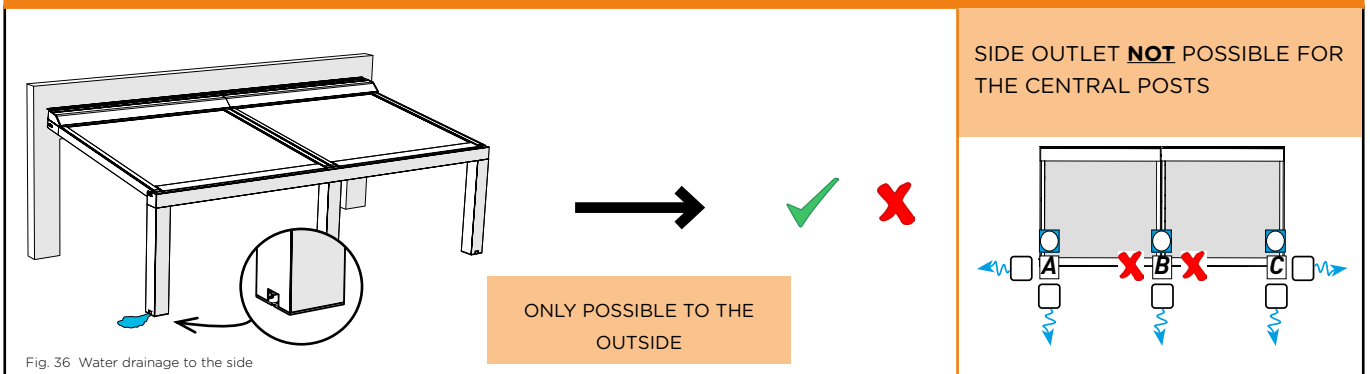
Indicate the chosen drainage positions on the order form.



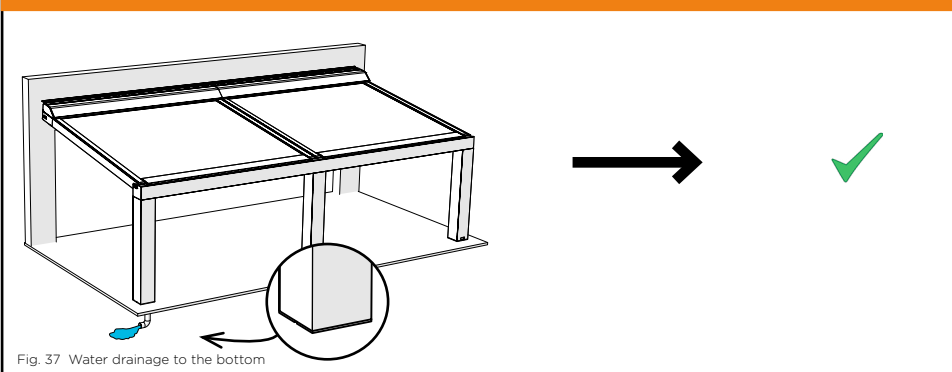
WATER DRAINAGE TO THE FRONT



WATER DRAINAGE TO THE SIDE



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.
- OPTION A4269 : Extra wall bracket on the box.

For larger box widths, an additional wall bracket can be added between the box and the wall.

Please note: quantity to be specified when ordering the AIR. It is not possible to retrofit additional wall brackets to the back of the box.

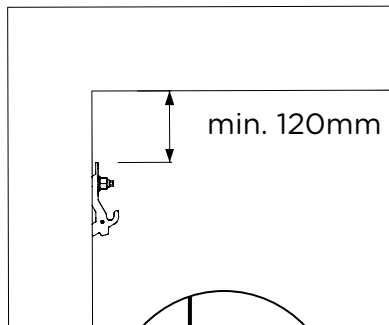
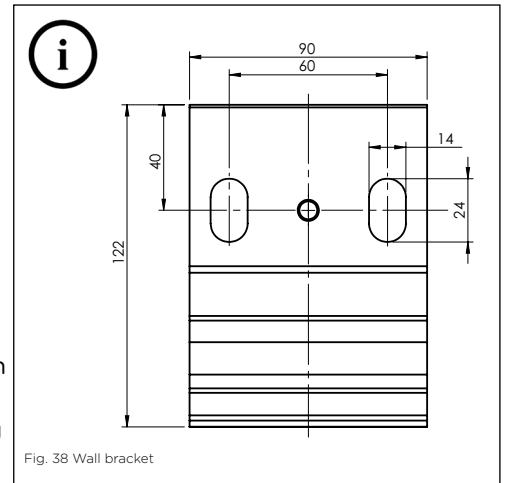
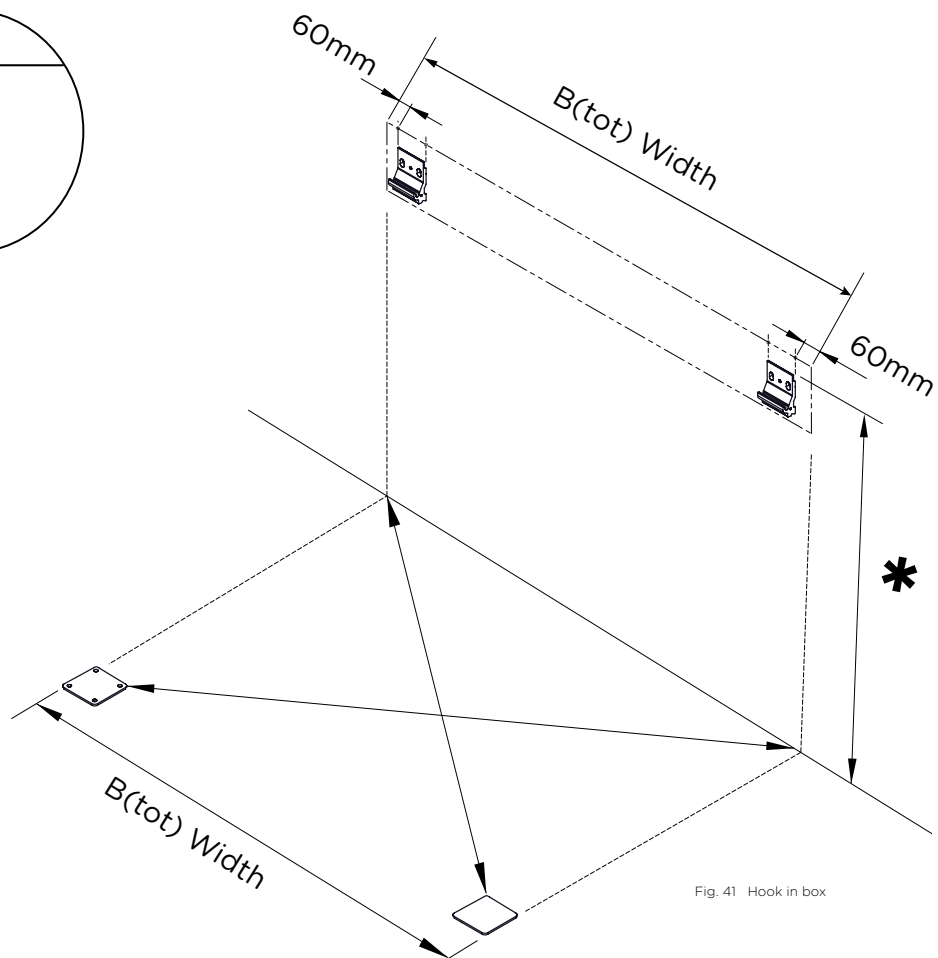
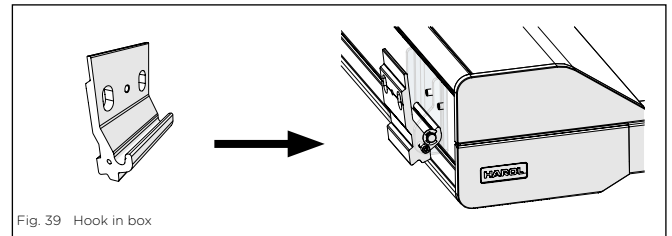
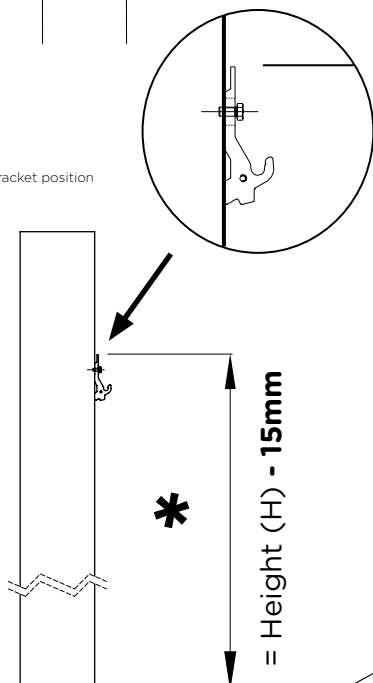


Fig. 40 Wall bracket position



AIR TERRACE SYSTEM TECHNICAL DATA SHEET

9. FABRICS

	SOLTIS 86	SOLTIS 92	SUNVAS PERLA	INFINITY	VALORA
basic material	Polyester	Polyester	Polyester	Acryl	Acryl
weight (g/m ²)	approx. 380	approx. 420	± 340	± 290	± 275
thickness (mm)	approx. 0.43	approx. 0.45	0,45	± 0,64	± 0,47
fire class	M1	M1	-	-	-
roll width (mm)	1770 / 2670	1770 / 2670	3000	3200	2600
strip direction	Horizontal	Horizontal	Horizontaal	Horizontal	Horizontal
opening factor	14%	3 to 4%	0 %	0%	0%
G _{tot}	0.12 - 0.22	0.05 - 0.15	0,10 - 0,22	0.08 - 0.14	0,02 - 0,19

Due to the tension on the fabric, a cracking sound may be emitted during extending and retracting the awning.

Causes:

1. air being squeezed out from between the layers of fabric
2. the cord jumping on the pulley

1. Valora

- 100% solution-dyed acrylic sunacrylic
- Colour: fantasy and uni-colours according to collection books.
- Fabrics are treated against rotting, are mold resistant and dirt-repellent.
- Manufacturing :
 - vertical strips of 1200 mm.
 - Double step stitch with polyester yarn.

2. 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°.

3. Infinity

- 100% acrylic fabric
- 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 > 3200 mm have a horizontal weld seam!*

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

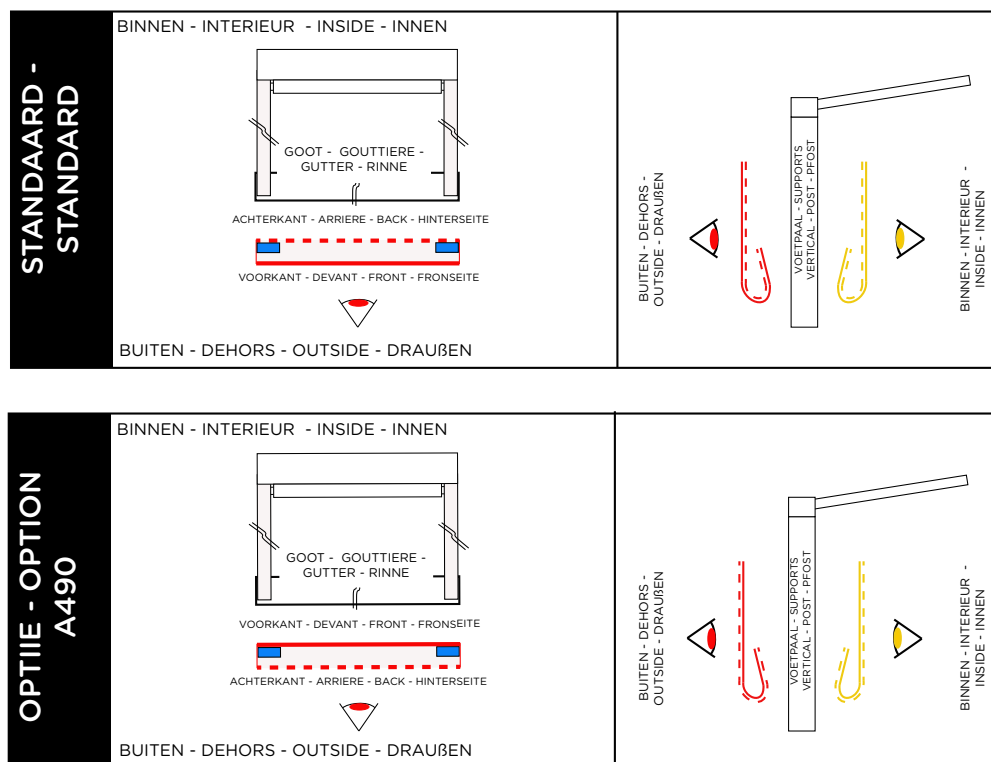
4. Finish

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.

The extent to which the fabric may sag can vary depending on the type of fabric, the area, the pitch and the weather conditions. The fabric will sag because, when the fabric is stretched, the forces are not distributed evenly, but are instead distributed locally between the extension pole and the zip guides. This results in up to 20 cm of sagging in the middle.

With the Soltis 86/92 fabrics, Infinity en Sunvas Perla, 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 "Infinity" en Sunvas Perla.



LEGENDE - LEGEND

VOORKANT - DEVANT - FRONT - FRONSEITE



ACHTERKANT - ARRIERE - BACK - HINTERSEITE



VOORKANT BIJ / A L'AVANT POUR / FRONT FOR / VORDERSEITE BEI
 SERGE-ZIJDE BIJ / COTE SERGE POUR / SERGE-SIDE FOR / SERGE-SEITE BEI
 SOLTISZIJDE BIJ / COTE SOLTIS POUR / SOLTIS-SIDE FOR / SOLTIS-SEITE BEI
 ALU-ZIJDE BIJ 2-KLEURIGE DOEKEN / COTE ALU POUR TOILES BICOLOR / ALU-SIDE FOR DUAL COLOUR FABRICS /
 ALU-SEITE BEI 2-FARBIGEN TUCHEN

SERGE 600 / SERGE 1%

BLOCKOUT LUNAR

BLACK-OUT

ACHTERKANT BIJ / A L'ARRIERE POUR / BACK FOR / RUCKSEITE BEI
 FOLIE_ZIJDE BIJ / COTE FILM POUR / FILM-SIDE FOR / FOLIENSEITE BEI
 FOLIE_ZIJDE BIJ / COTE FILM POUR / FILM-SIDE FOR / FOLIENSEITE BEI
 KLEURENZIJDE BIJ 2-KLEURIGE DOEKEN / COTE COLORE POUR TOILES BICOLOR / COLOUR-SIDE FOR DUAL COLOUR
 FABRICS / FARBIGE SEITE BEI 2-FARBIGEN TUCHEN

SERGE 600 / SERGE 1%

BLOCKOUT LUNAR

BLACK-OUT

VERSTERKINGSBAND / RITS
 BANDE DE RENFORCEMENT / FERMETURE ECLAIR
 REINFORCEMENT BAND / ZIPPER
 VERSTÄRKUNGSBAND / REISSVERSCHLUSS

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

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

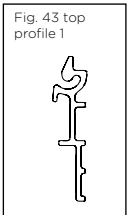
OPTIONAL

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.

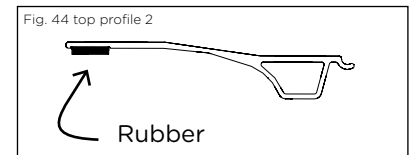
11.1 wall insert top profile 1

- Material: extruded aluminium with powder coating
- Wall thickness: 2mm



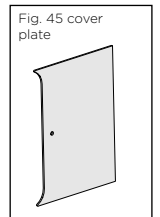
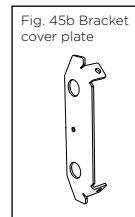
11.2 wall insert top profile 2

- Material: extruded aluminium with powder coating
- Wall thickness: 2mm
- With rubber strip



11.3 Wall-box cover plate

- Material: aluminium with powder coating
- Plate is sawn to the correct angle on site during installation



11.4 Bracket cover plate

- Material: stainless steel

Fig. 46 Standard

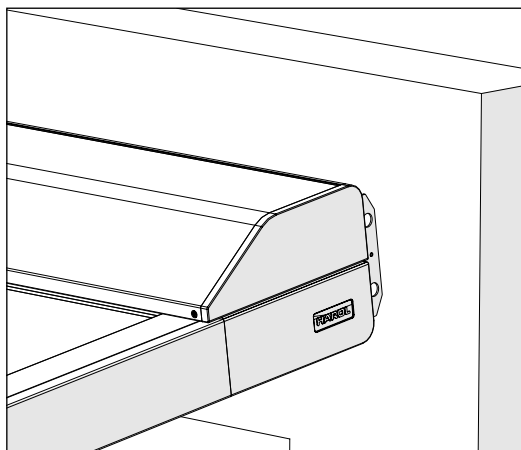
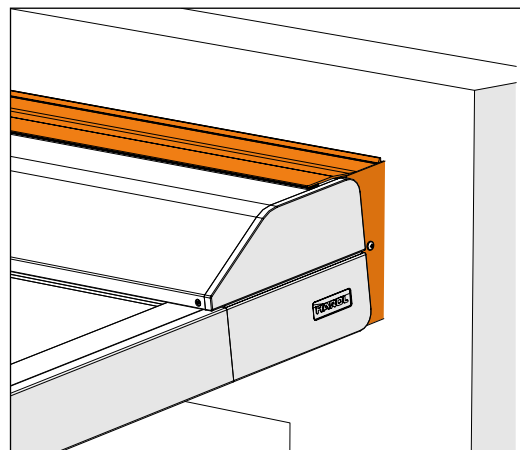


Fig. 47 with wall junction



*** 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**)

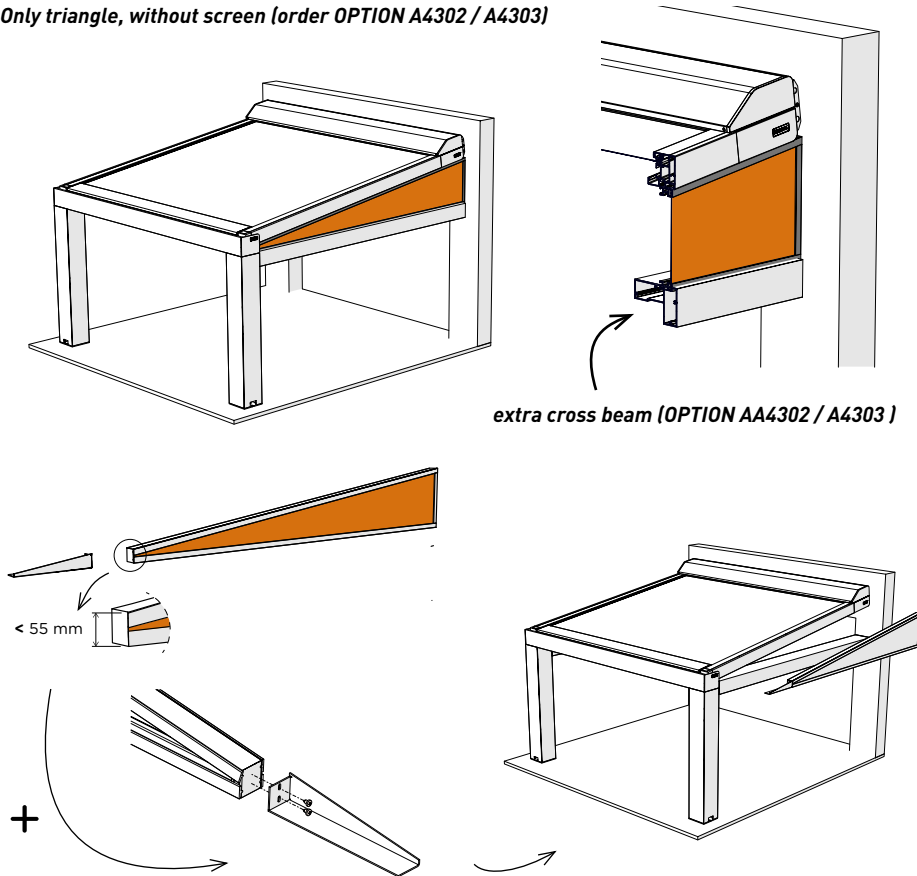
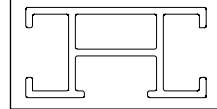


Fig. 48 Triangle

12.1 Triangle profile

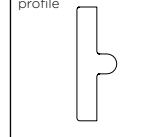
Fig. 50 triangle profile



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

12.2 Triangle cover profile

Fig. 51 triangle cover profile



- Material: extruded aluminium with powder coating
- Dimensions: 20mm
- Wall thickness: 3.5mm

13. EXTENSION - SC-AIR (SCREEN)

Combined with screen/glass wall

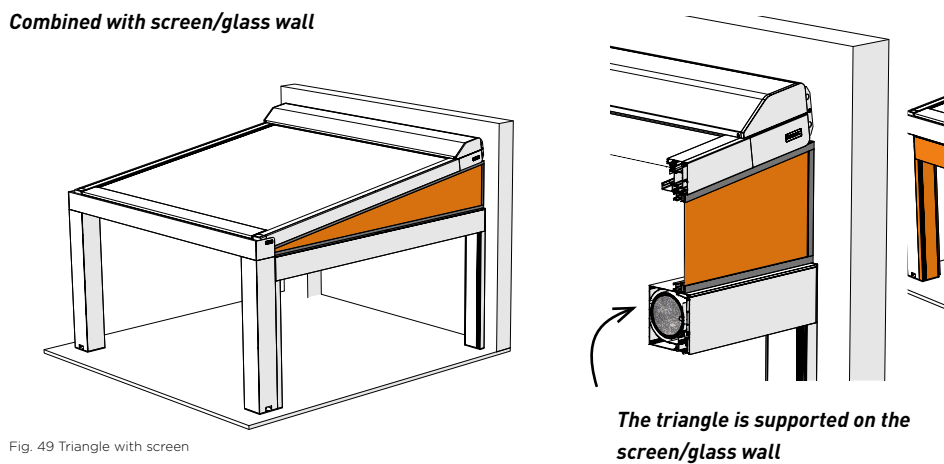
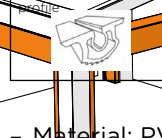


Fig. 49 Triangle with screen

The triangle is supported on the screen/glass wall

12.3 Triangle clamp profile

Fig. 52 triangle clamp profile



- Material: PVC

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

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

OPTIONAL

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).

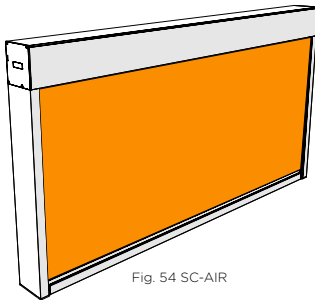


Fig. 54 SC-AIR

If you want to retrofit screens at a later date, the cabling must be included when the structure is

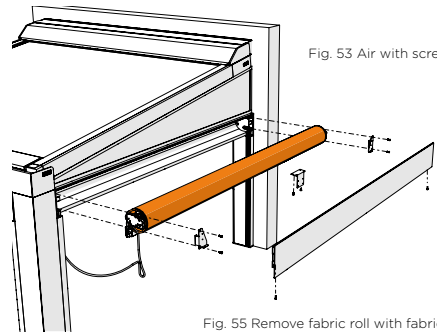


Fig. 53 Air with screens

Fig. 55 Remove fabric roll with fabric

TO MAKE THE SCREEN FIT AND/OR TO OBTAIN A GOOD CONNECTION BETWEEN THE SCREEN BOX AND THE WALL IT IS POSSIBLE TO ADD AN EXTRA SPACE TO THE TOTAL WIDTH OF THE SCREEN BOX. (OPTIONAL pre-cabling) BE SURE TO TAKE THIS INTO ACCOUNT WITH UNEVEN WALLS SO THAT THE SCREEN BOX CAN ALWAYS FIT BETWEEN THEM! see p.25

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	STAM 6002	SERGÉ 1%	LUNAR	CRYSTAL CLEAR
basic material	Polyester	Polyester	Glass fibre	Polyester	Glass fibre	Glass fibre	Polyester
Weight (g/m ²)	approx. 380	approx. 420	approx. 535	approx. 630	approx. 620	approx. 660	approx. 610
thickness (mm)	approx. 0.43	approx. 0.45	approx. 0.55	approx. 0.55	approx. 0.80	approx. 0.77	approx. 0.5
fire class	M1	M1	M1	M2	M1	-	M2
roll width (mm)	1770 / 2670	1770 / 2670	2700 / 3200	2600	2700	2100	1400
stripe direction	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
opening factor	14%	3 to 4%	5%	0%	1%	0%	0%
G _{tot}	0,12 - 0,22	0,05 - 0,15	0,01 - 0,10	-	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. Stam 6002

- Opaque, translucent fabricl.
- Made from mesh polyester fibres.
- Stretched under tension. (in accordance with Precontraint method)

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

- Supplied with a PVC coating on both sides
- Attention! Screens with a height greater than 2400 mm are fitted with a horizontal weld seam!

4. 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.

5. Crystal clear

- Fully transparent, non-refractive fabric:

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

- Is a transparent PVC film
- Attention! Systems with a height greater than 1400 mm have a horizontal weld seam.

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

- **IO** operation (standard)
The motor can be operated with all IO 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)

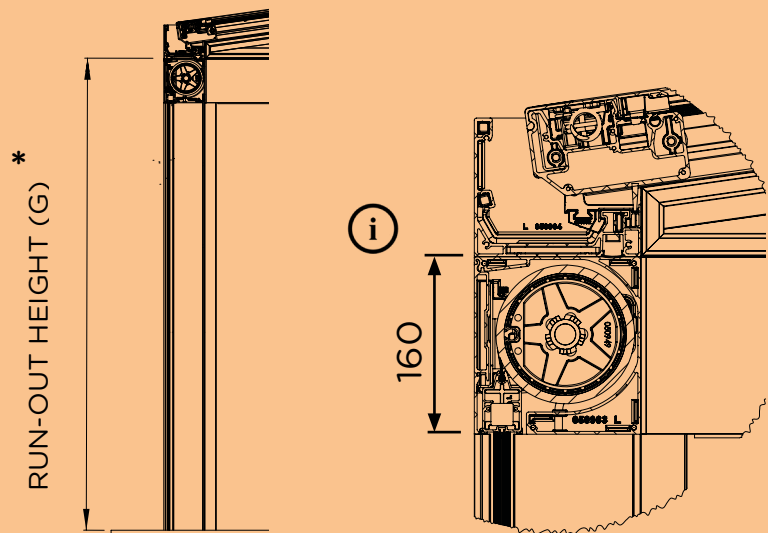


Fig. 56 Run-out height

N.B. !

The height H of the SC-AIR is the distance from the bottom of the gutter to the ground. Run-out height G - minimum Q or run-out height G + maximum P.

The longest guide rail can then be cut to the desired custom length on site. This applies both to the front of the SC-AIR and to the side of the AIR.

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

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

Cover (box)

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

Guide rail base

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

Guide rail cover

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

Bottom lath

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

The fabric roll

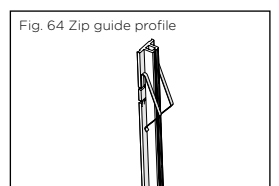
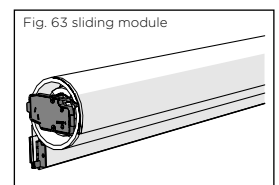
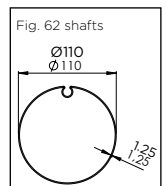
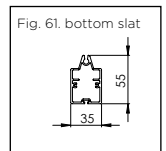
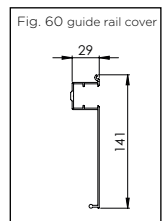
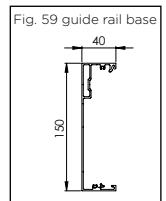
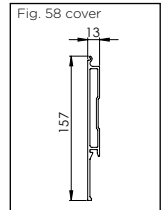
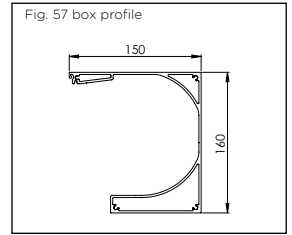
- Material: circular tube made of galvanised steel, with a groove for attaching the fabric.
- Function: rolling the fabric up and down

The sliding module

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

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.



14. EXTENSION - LED

OPTIONAL

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

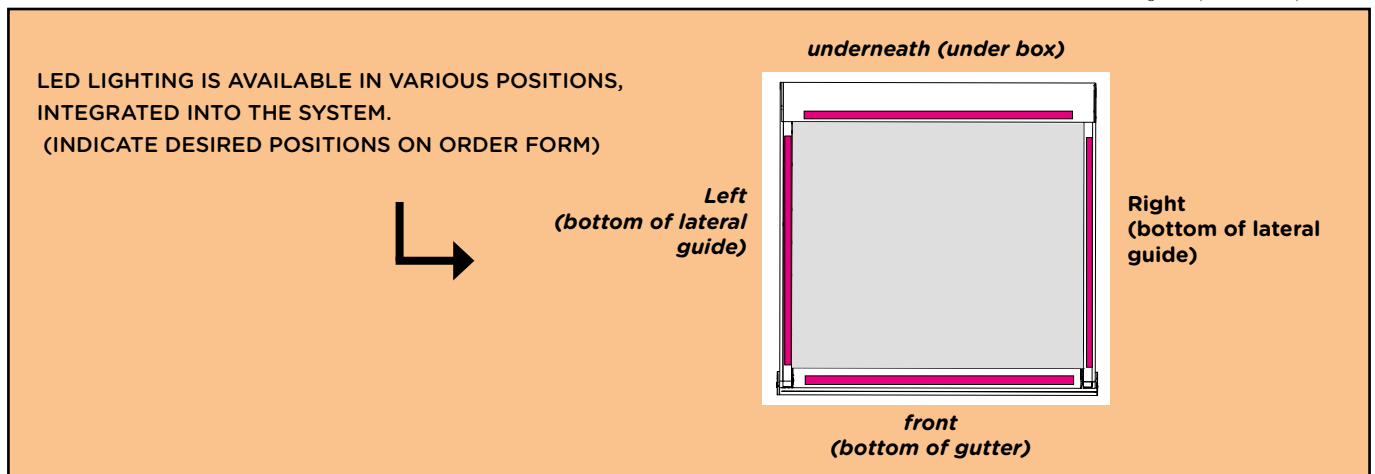
- The lighting consists of a LED strip, power supply (240 V AC - 24 V DC) and a receiver.
- The LED strip is built into a slot made in aluminium profiles and covered with a plastic profile.
- The power supply for the LED strip is installed in the post.
- The lighting can always be used with the awning 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/meter - 3000 (K) Kelvin)
- The remote control is not included with the LED lighting.
- When installing screens, the LED lighting can only be fitted in the screen box.
- When installing triangles (laterally), the LED lighting can not be fitted in the guides.
- No LED lighting can be installed in positions where there are glass walls with triangle.
- When installing screens, without triangles, the LED lighting can not be fitted in the guide rails.

Operating the LED lighting:

Dimmable IO controls:

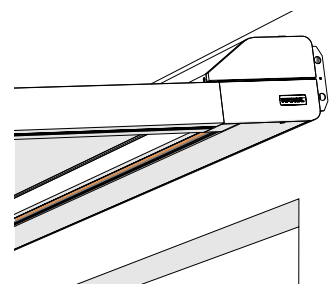
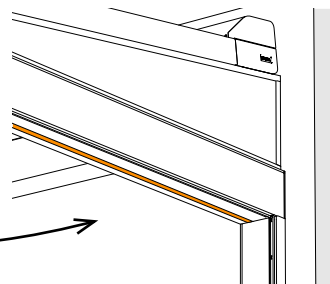
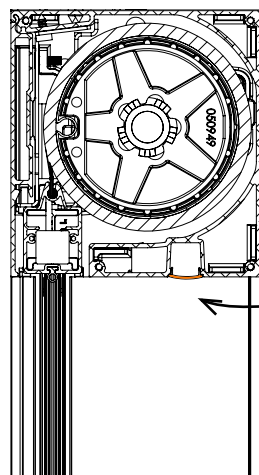
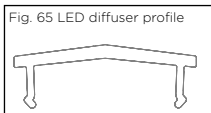
The dimming lighting cannot be operated using Smoove IO controls

Fig. 66 Top view of LED positions



LED profile

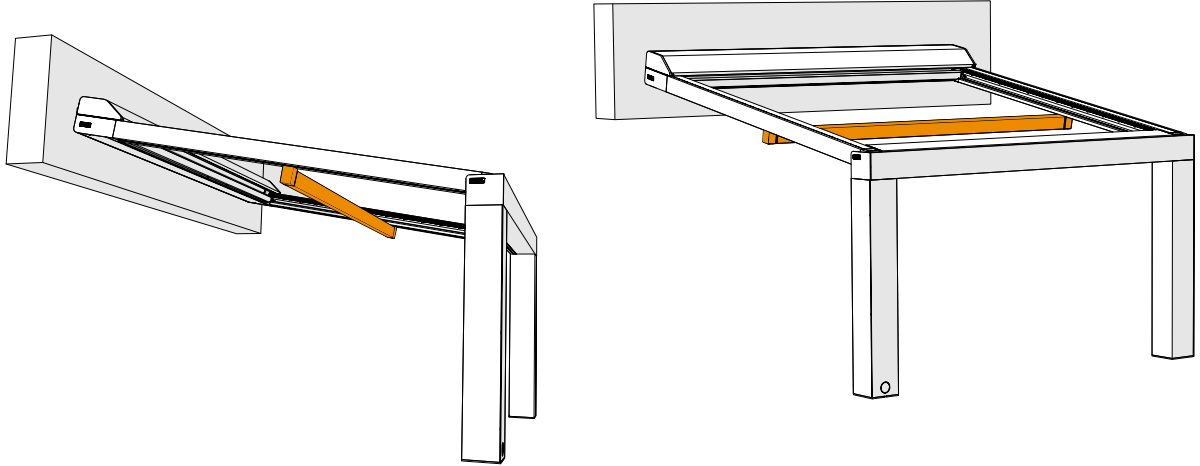
- Material: plastic.
- Colour: milk white



15. FABRIC SUPPORT

OPTIONAL

If required, a fabric support can be fitted to reduce sagging. This fabric support is always in a fixed position, halfway down the side channels.

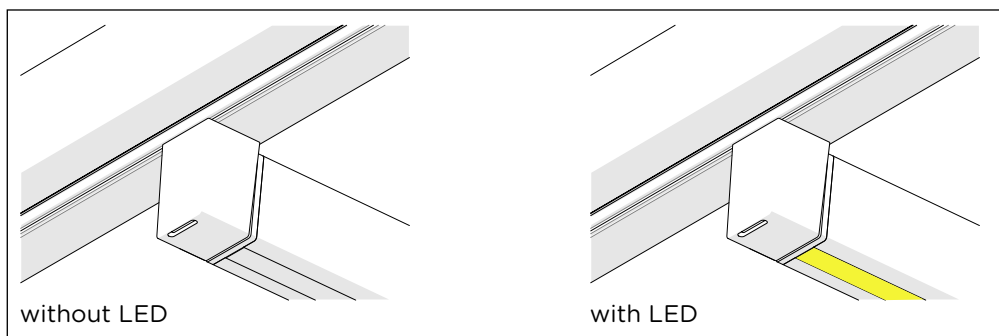
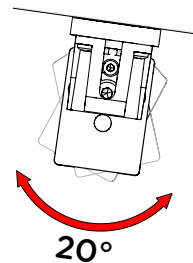


- LED is possible in the profile

- The Alu clip profile is removed at the bottom-front side of the box.
- In the remaining opening, a LED strip is adhered, and covered by a small diffuser profile.
- Required power supply 230V AC/24V DC.
- Each box section is fitted with an LED strip, a diffuser, each with its own external power supply, to be fitted outside the box. IO or with a switch (switch is not included).
- The LED strip is always installed across the entire width of the sun screen.
At the ends, there may be a little less light, depending on the cut length of the LED strip.
- The LED strip operates on 24V DC, 9.6 W/m.
- The lighting is suitable for ambience lighting only.
The LED colour is white (3000K - 600 lm/m).
- The profile can be adjusted to an angle of 20°.
- One support can be supplied per fabric.

- Operation:

1. Dimmable IO controls:
 - The LED lighting can be operated with all IO controls.
2. Without controls:
 - A power cable which can be connected to a switch is included (switch is not included).



16. EXTENSION - GLASS WALL

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 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.

An 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).

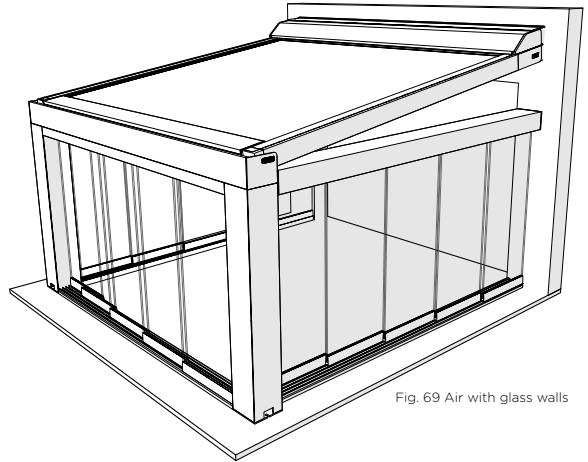


Fig. 69 Air with glass walls

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

- 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

17. OPTION HORIZONTAL CROSS BEAM

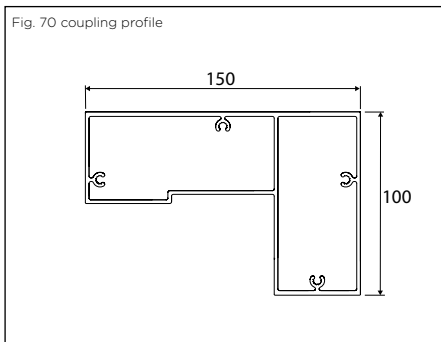
A4302 horizontal cross beam left

A4303 horizontal cross beam right

Coupling profile

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

Fig. 70 coupling profile



Wall thickness: 2mm

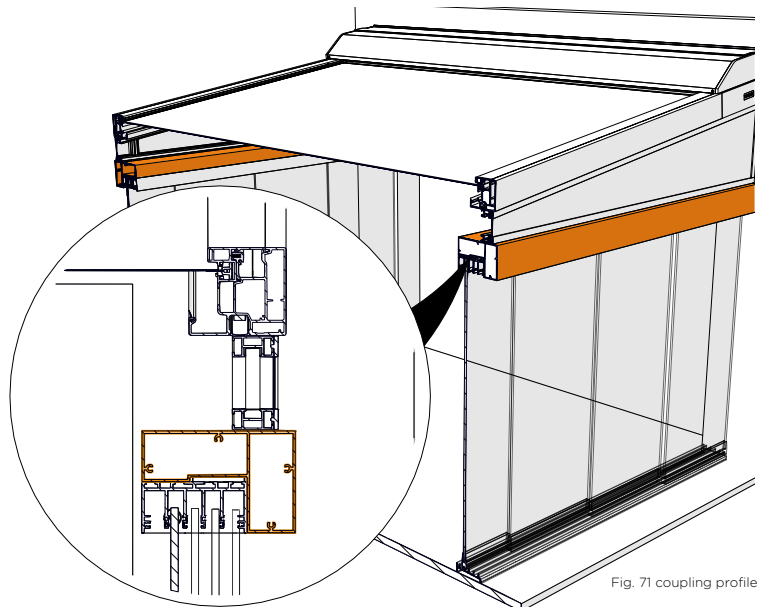


Fig. 71 coupling profile

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

18. OPTION PRE-CABLING

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 (Coolscreen, SC800) can still be retrofitted but the cabling itself should be installed by the fitter.

19. FRAME COLOUR

According to RAL colour range.

20. 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.

21. PACKAGING

All sunblinds are fully packed in solid cardboard boxes.

22. 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.

23. SAFETY

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

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

24. 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.

		Width										
		1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	
SOLTIS 86, 92	Drop	500										
		750										
		1000										
		1250										
		1500										
		1750										
		2000										
		2250										
		2500										
		2750										
		3000										
		3250										
		3500										
		3750										
		4000										
		4250										
4500												
4750												
5000												

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

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

AIR TERRACE SYSTEM TECHNICAL DATA SHEET

25. ROLL-UP TABLES - SC-AIR

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

SOLTIS 86, 92	Width											
												1500
												2000
												2500
												3000
												3500
												4000
												4500
												5000
												5500
												6000
Drop	500											
	750											
	1000											
	1250											
	1500											
	1750											
	2000											
	2250											
	2500											
	2750											
	3000											
SERGE 600	Width											
												1500
												2000
												2500
												3000
												3500
												4000
												4500
												5000
												5500
												6000
Drop	500											
	750											
	1000											
	1250											
	1500											
	1750											
	2000											
	2250											
	2500											
	2750											
	3000											
LUNAR	Width											
												1500
												2000
												2500
												3000
												3500
												4000
												4500
												5000
												5500
												6000
Drop	500											
	750											
	1000											
	1250											
	1500											
	1750											
	2000											
	2250											
	2500											
	2750											
	3000											
SERGE 1%	Width											
												1500
												2000
												2500
												3000
												3500
												4000
												4500
												5000
												5500
												6000
Drop	500											
	750											
	1000											
	1250											
	1500											
	1750											
	2000											
	2250											
	2500											
	2750											
	3000											
WINDOW FILM	Width											
												1500
												2000
												2500
												3000
												3500
												4000
												4500
												5000
												5500
												6000
Drop	500											
	750											
	1000											
	1250											
	1500											
	1750											
	2000											
	2250											
	2500											
	2750											
	3000											

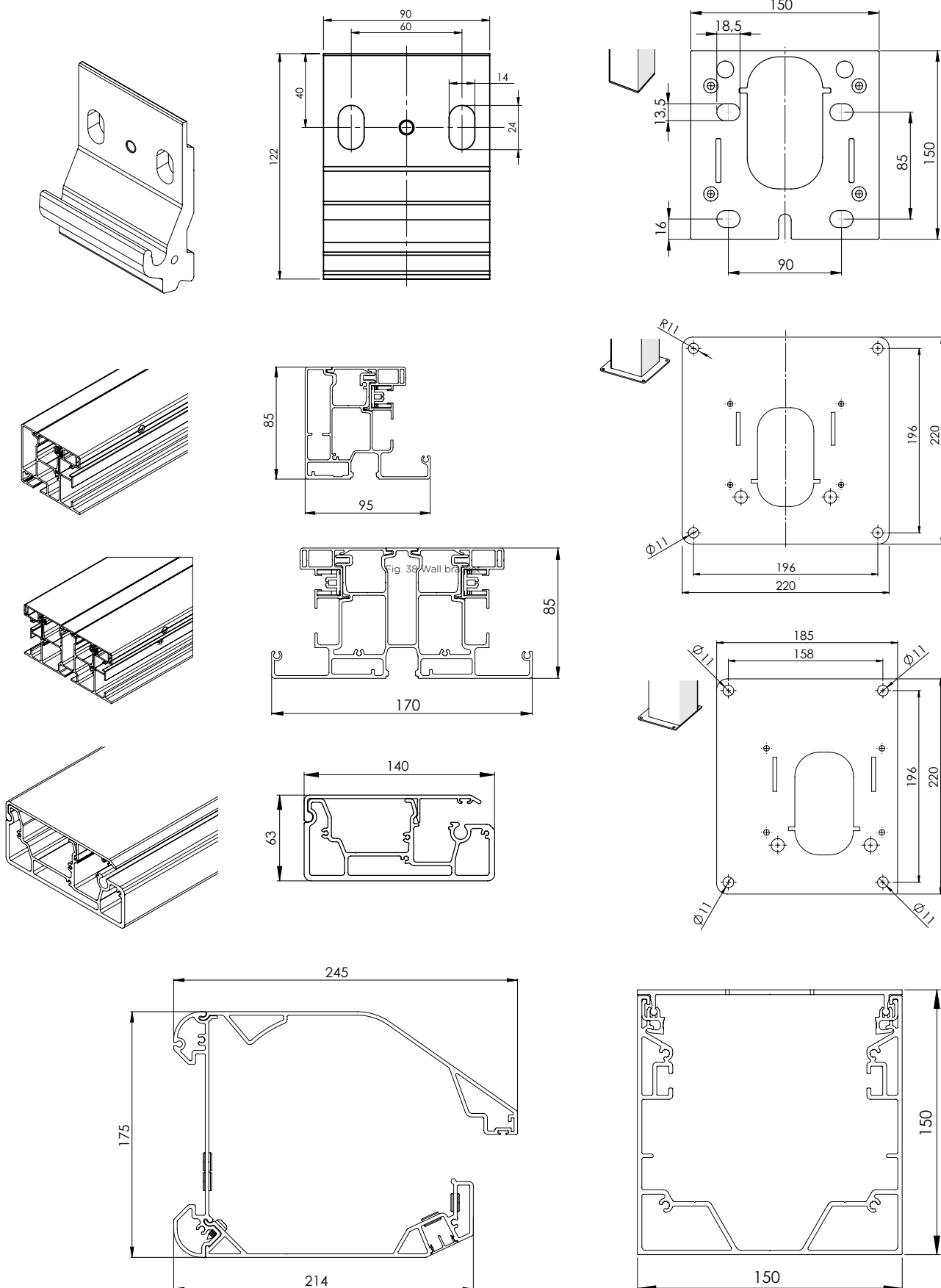
26. ORDER FORM

Click on the link below:



AIR TERRACE SYSTEM TECHNICAL DATA SHEET

27. TECHNICAL DRAWINGS



INCLINATION UNIFORM DOCUMENT

FROM - (customer name / contact) :

SUBJECT - (order no.) :

REFERENCE :

We confirm that we are waiving the recommended minimum inclination as stated in the Harol price list and technical documentation. The recommended inclination guarantees proper water drainage. Failure to comply with the recommended guideline can lead to poor drainage of rain water and potential damage to or sagging of the fabric.

We will inform the end user that this solution can only be used as sun protection and not as a rain barrier.

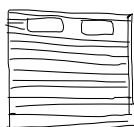
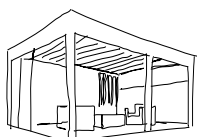
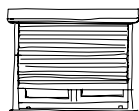
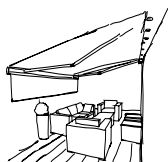
Harol accepts no liability for damage resulting from failure to comply with the recommended inclination.

Date

Name

Signature

.....



HAROL®

