



Technical data

***Terrace awning
TR850***

HAROL®

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

1. General

The terrace awning is a sun shading system with a large drop, consisting of a fixed tube construction over which fabric unrolls by means of an electric motor.

A spring system built into the drop tubing ensures that the fabric is sufficiently taut, both moving as well as stationary. The construction is of such strength that it can remain permanently erected.

If the profiles are provided with a sufficient angle of slope, more than 20°, such a construction can also be used as protection against moderate rainfall.

The terrace awning has been specially designed for placement above terraces of cafes, restaurants and residences.

2. The profiles

2.1. The guides

- Material: extruded aluminium, powdercoated
- Colour: as standard coated in the chosen colour
- Dimension: 55 x 110 mm
- The profiles have grooves:
 - to the side, for the attachment of the intermediate rollers
 - on the upper side, for the carriage
 - on the bottom, for the fixation of a gutter and couplings
- The guides can easily bear the heaviest of strains up to a length of 6 m

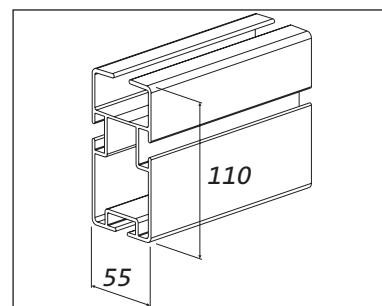


Fig. 1 : Guide

2.2. The roller tube

- Material: a welded tube, formed from a steel strip Sendzimir-galvanised, with a groove for attaching the fabric
- Function: rolling the blind fabric up and down
- Diameter: Ø78 x 1,25 mm

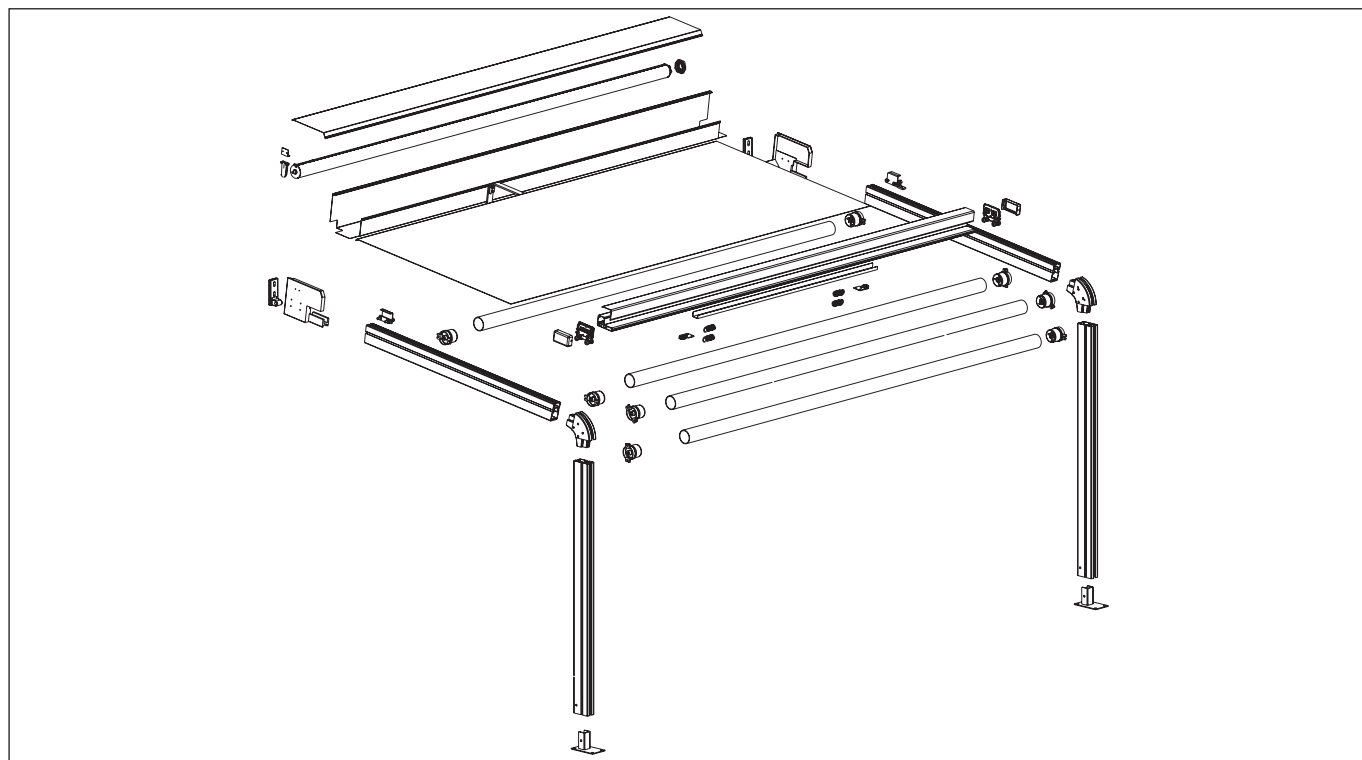


Fig. 2 : Exploded view TR850

2.3. The Clip-on Clip-off profile

- Material: consists of extruded PVC clips
- 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 off sideways
- Diameter of the PVC fabric retainer: $\varnothing$ 3 mm
- Advantage: quick and easy fabric changing

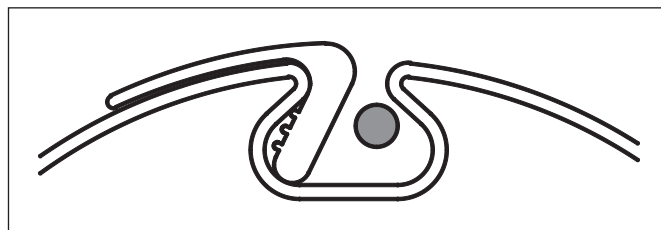


Fig. 3 : "Clip On - Clip Off" profile

2.4. The box

- Material: press formed from 1,2 mm-thick aluminium strip
- Colour: as standard coated in the chosen colour
- Dimension: 285 x 225 mm
- The standard colours are provided with a protective foil liner
- Consists of two sections:
 - a fix lower section
 - a removable chamfered upper section or cover
- From 3 m width, provided with an extra reinforcement support

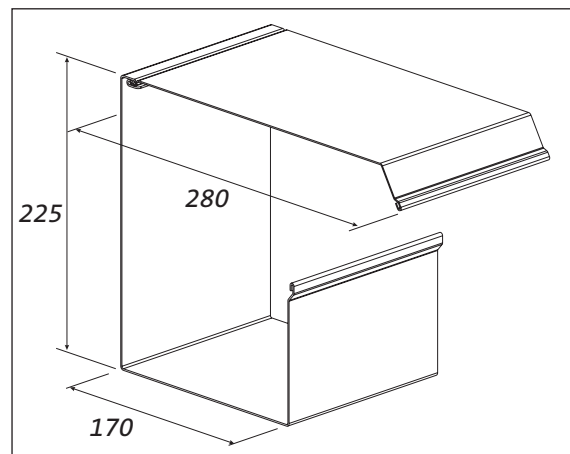


Fig. 4 : Box

2.5. The front rail

- Material: extruded aluminium, powdercoated
- Colour: as standard coated in the chosen colour
- Dimension: 120 x 65 mm
- Consists of two sections: a lower section and a closing section
- Function:
 - the lower section, provided with a groove for the attachment of the fabric
 - the two sections form a sort of case in which the spring mechanism for the fabric tautness is concealed
- The front rail runs in the grooves of the guide rails by means of the carriages

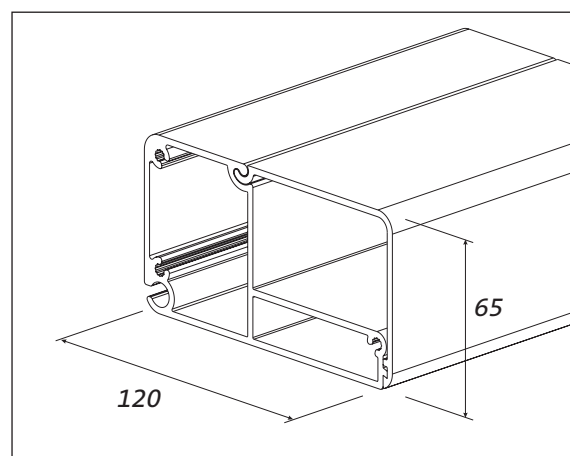


Fig. 5 : Front rail

2.6. The intermediate rolls

- Material: extruded aluminium, powdercoated
- Colour: as standard coated in the chosen colour
- Function:
 - supporting the fabric in the bend
 - supporting the fabric on longer projections
- Dimension: $\varnothing$ 80 x 3 mm
- The rolls traverse on nylon bearings and rustproof steel shafts
- As a standard: 3 intermediate rolls in the bend
- As option:
 - auxiliary rolls for the inclined part
 - recommended number of rolls: see table
 - Option A3553 - Steel intermediate rollers must be used for bends if the TR850 is installed in a windy environment

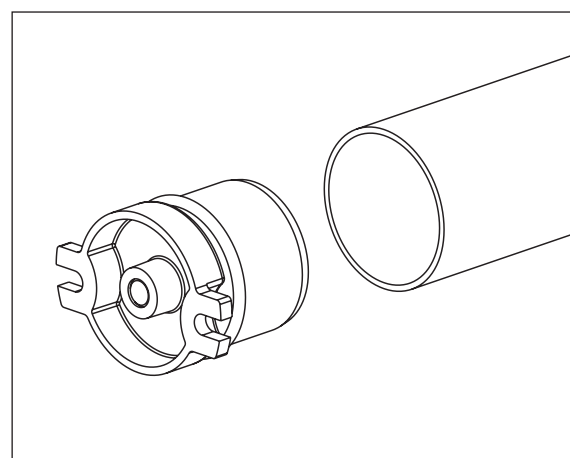


Fig. 6 : Intermediate roll

<i>Fabric S</i>	<i>Extension (in mm)</i>	<i>Quantity</i>
<i>Standard</i>	<i>0 - 3000</i>	<i>0</i>
	<i>3001 - 5000</i>	<i>1</i>
	<i>5001 - 6000</i>	<i>2</i>
<i>Fabric E</i>	<i>Extension (in mm)</i>	<i>Quantity</i>
<i>Extra impregnated</i>	<i>0 - 2000</i>	<i>0</i>
	<i>2001 - 3500</i>	<i>1</i>
	<i>3501 - 5000</i>	<i>2</i>
	<i>5001 - 6000</i>	<i>3</i>

Table 1 : Advice extra intermediate rolls in the angled surface

2.7. The storm profile

- Material: extruded aluminium, powdercoated
- Colour: as standard in the chosen colour
- Function: prevents vertical flapping of the fabric with wind gusts
- Dimension: 55 x 55 x 2,5 mm
- It can only be used with an angle of 20°
- Maximum 2 storm profiles can be used
- Certainly recommended for use at windy locations

2.8. The gutter profiles

- Material: press formed from 1,2 mm-thick aluminium strip
- Colour: as standard in the chosen colour
- Function: carrying off the water that seeps through between the fabric and the guide rails
- Dimensions: side gutter 65 mm and central gutter 180 mm

2.9. Profile for the attachment of a side flap

- Material: extruded aluminium, powdercoated
- Colour: as standard in the chosen colour
- Can be fixed to the lateral guiding rail
- Provided with a rail slit in which a side flap can be slid
- The connection of the side flap to the wall is to be provided by the customer

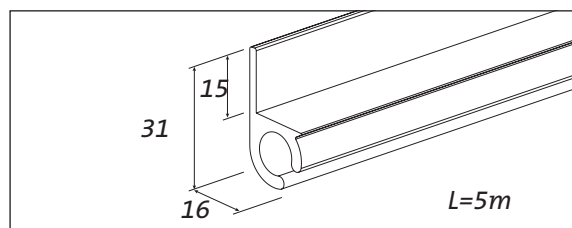


Fig. 9 : Profile for the attachment of a side flap

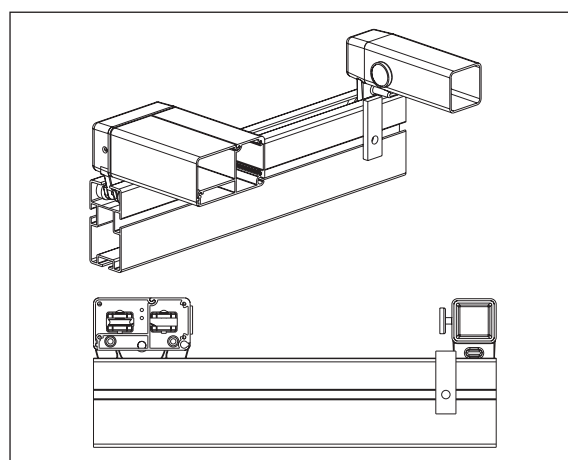


Fig. 7 : Storm profile

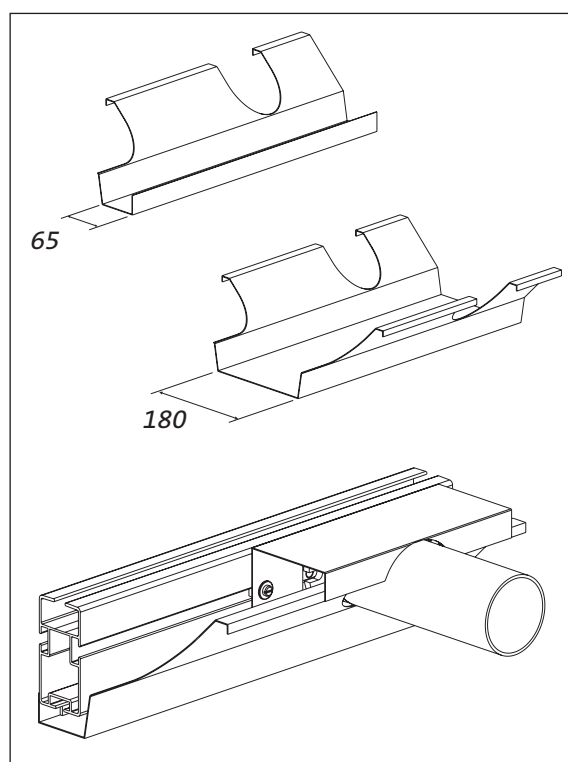


Fig. 8 : Gutter profiles with cutouts for the intermediate rolls

3. The other components

3.1. The consoles

- Material: cast aluminium
- Colour: as standard in the chosen colour
- Provided with hinged brackets for assembly at any angle

3.2. The bend

- Material: cast aluminium
- Colour: as standard in the chosen colour
- Function: the bend system brings the fabric passed the bend and the intermediate rolls to the vertical front

3.3. The carriages

- Material: cast aluminium
- Colour: as standard in the chosen colour
- Function:
 - connection of front rail and side guides
 - are mounted to the end of the front rail
- Fitted with 4 conical PVC wheels

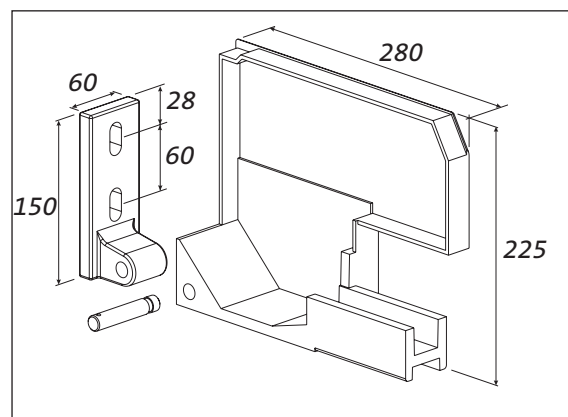


Fig. 10 : Console and bracket

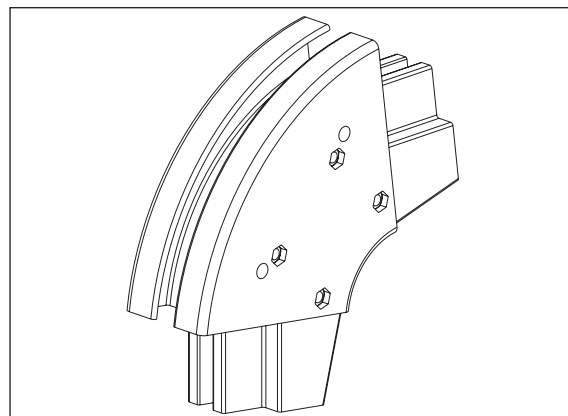


Fig. 11 : Bend

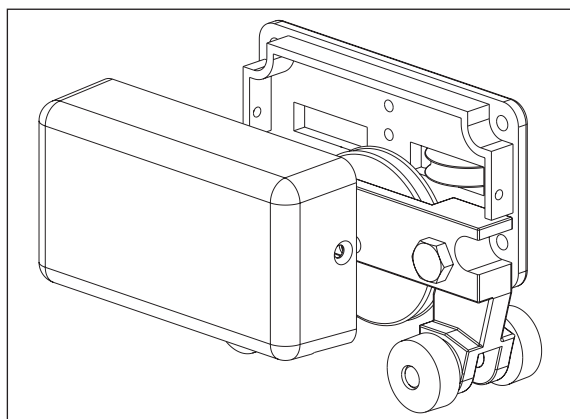


Fig. 13 : Carriage

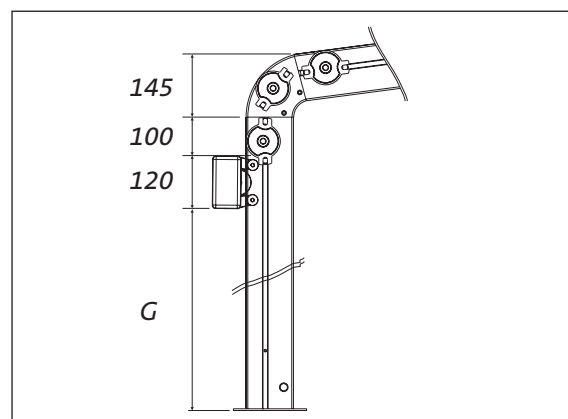


Fig. 12 : Pass through height (G)

3.4. The tension system

The springs:

- Material: high-quality spring steel and after that galvanised
- Function: the springs provide permanent tautness for the fabric
- They are concealed in the extension pole
- A synthetic U-profile is added to the springs as protection

The cables:

- Material: stainless steel
- Function: pull the fabric in and out
- Dimensions: $\varnothing$ 2,5 mm
- The cables run at the inside of the guide rails
- They run over nylon wheels
- The lower wheels are always in the bottom of the vertical guiding rails

The other components:

- Material: the wheels, axles, etc. are made of non-corroding materials
- Function: guiding the cables through the guide rails
- As option: fastener to tighten the springs during the assembly, (a single expense)

Remark: the fabric is at most tensed when it is completely unrolled

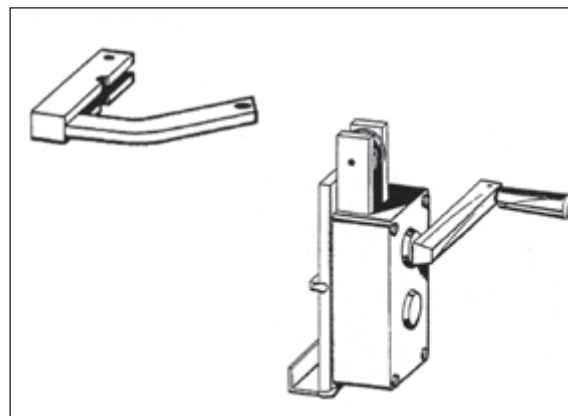


Fig. 14 : Cable fastener

3.5. The ground plates

- Material: galvanised steel
- Function: to enable simple attachment at the bottom
- Dimensions: 105 x 160 mm
- To be placed on a concrete foundation, minimum 30 x 30 x 60 cm
- The ground plates slide into the guides

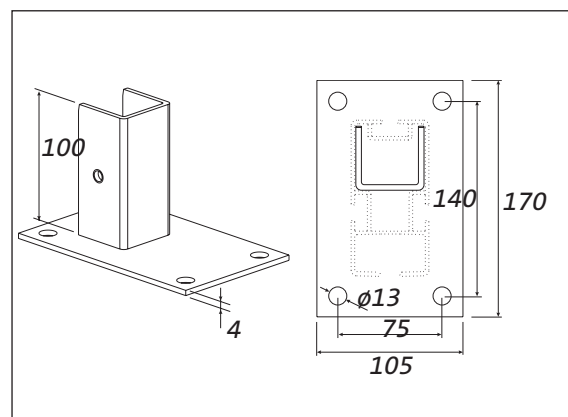


Fig. 15 : Ground plate

3.6. The outlet baskets for the guttering profiles

- Material: synthetic
- Function: to collect the rainwater from the guttering profiles and drain it off through a PVC pipe of $\varnothing$ 32x1,8mm
- the PVC pipe is not delivered

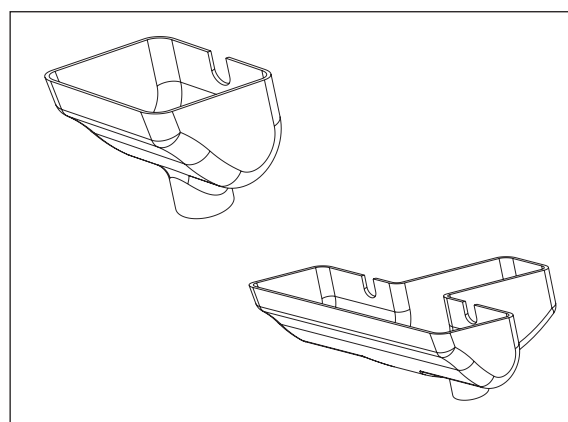


Fig. 16 : Outlet baskets for the guttering profiles

4. The operation

4.1 Motor

- Asynchronous built-in tube motor: 230 V (50 Hz)
- Fitted with automatic post-regulation, which makes the box close in the correct manner and subsequent regulation is not required
- Cable: - as standard: 3 m
- as option: 5 or 10 m
- As standard, a single-pole surface-mounted switch and plug are supplied
 - As option: RTS-motors

4.2 Automation

- Accessories:
 - key-switches
 - relay boxes
 - wind- and solar control
 - time switches,
 -

(For this, see the Harol-Domotics-map)

5. The fabric

- Material: spun dyed Acrylic fibre, coloured in the mass
- Colours: patterns and colours from the standard collection
- Weight: +/- 300 gr/m²
- Thickness: +/- 0.5 mm
- Confection: patterned in vertical rows of 1200 mm, 200 mm side hems, and double step stitch with polyester thread
- The fabrics are treated for rot and mould, and have waterproof and dirt-repelling qualities
- As option: extra impregnated fabric
- Lettering on demand

6. Technical possibilities

- Minimum width B: 2 m
- Maximum width B: 5 m
 - The TR850 cannot be coupled, but several awnings can be placed side to side
- Maximum drop U: 6 m
- Maximum fabric rollout D: 8,5 m
- Maximum surface area per fabric: 40 m²
- Minimum run-out height G: 120mm
- Minimum slope with standard fabric: 0°
- Minimum slope with extra-impregnated fabric: 20°
- Maximum slope: 30°

ATTENTION:

- Harol recommends a minimum slope of 20°, this is to ensure the draining off the water in case of moderate rainfall. If the slope is less than 20°, penetration of water, sagging or permanent deformation of the fabric is possible.

REMARK:

- The TR850 is also available in straight-line design (without bend):
- The ends of the guide rails are then covered with a cap
- There are no fixing brackets delivered (to provide by the customer)

7. Measuring and assembling

- Take care that the system is perfectly parallel and square. A precise measurement ensures a quicker and easier assembly.
- Take care of an exact level measurement.
- do not use a level, but a hosepipe, which is more precise
- the highest point of the floor, behind against the floor, is called the zero-level and is the reference point for the other measures
- the levels, which are equal or lower, are 0 or negative, and correspond to an extension of the vertical profiles
- the levels which are higher (a little wall and suchlike) are than positive, and correspond with the shortening of the vertical profiles
- the heights H and h , indicated on the order form, are measured in relation to the zero-level
- Make sure that the foundation is sufficiently solid for the assembly of the foot supports
- Pay attention to the quality of the walls: the standard fastening material consists of plugs and woodscrews

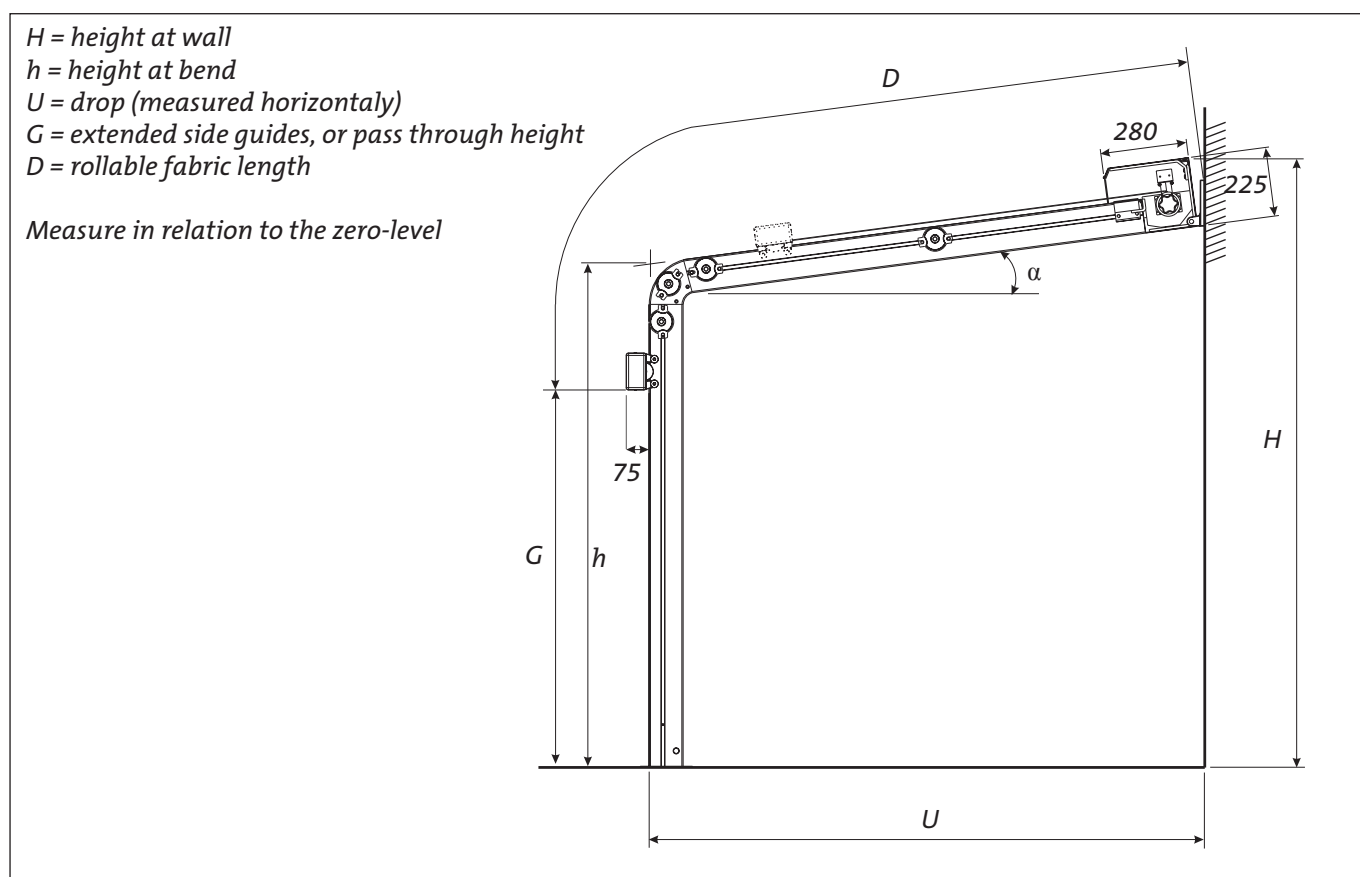


Fig. 17 : Measuring

8. The colours

- See price list

9. The fastening materials

All fastening materials are of stainless steel and always included

B = Width (incl. box)
 H = height of wall
 h = front height to the intersection with the guide rails

Choose for the 0-point, the highest point at the back against the wall. The other levels who are lower, are indicated by a - symbol. If one level is actually higher, it can be indicated by a + symbol.

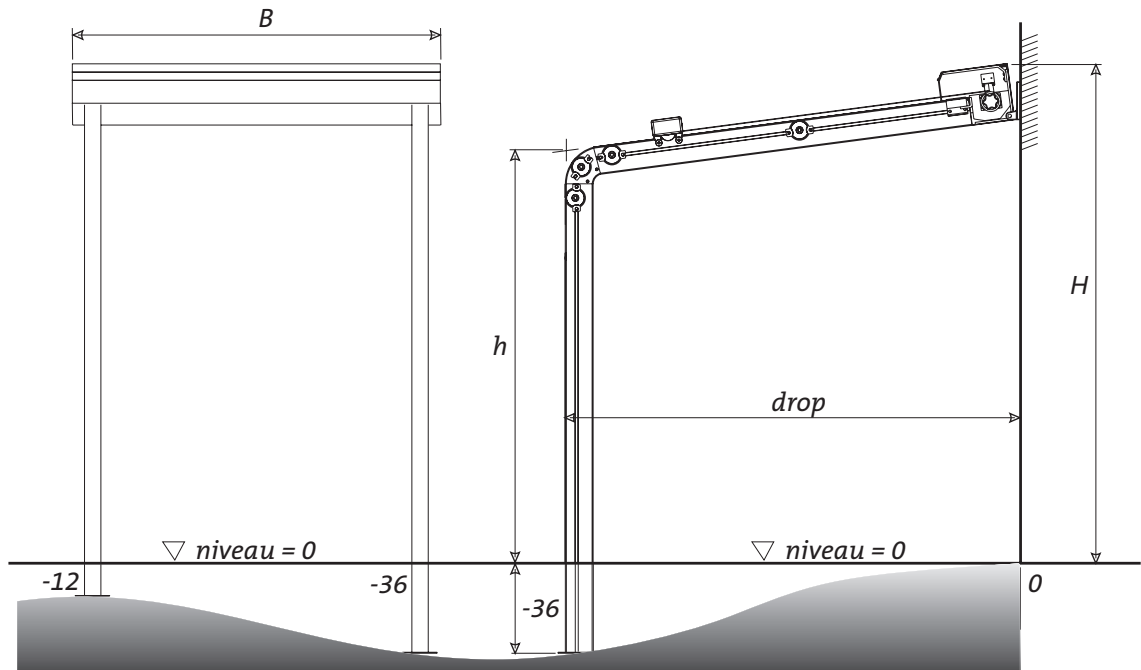


Fig. 18 : Levels

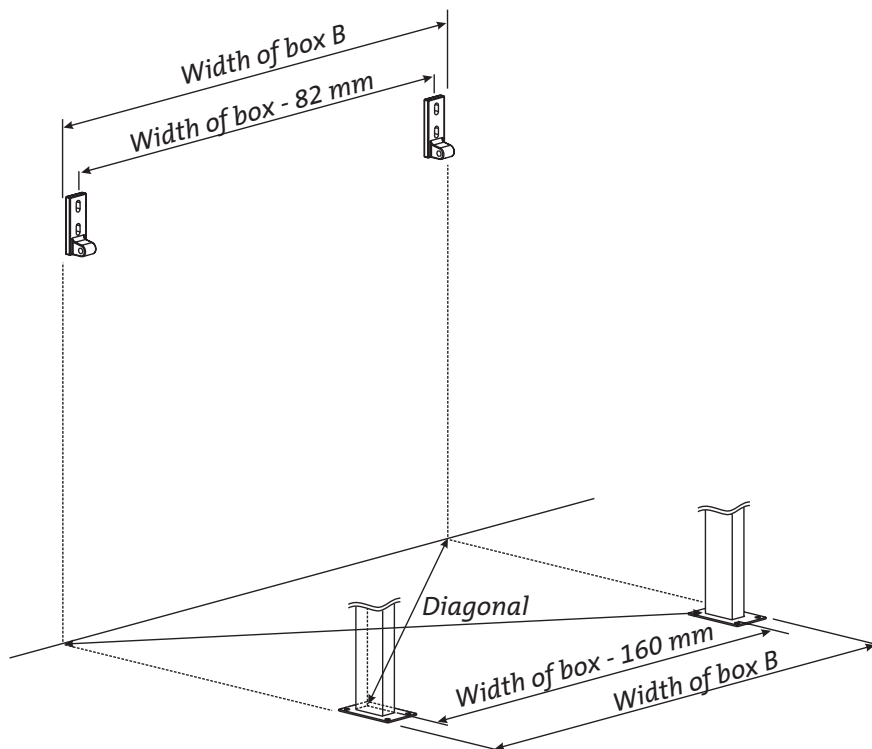


Fig. 19 : Alignment

Technical data terrace awning TR850

<i>Inclination (in °)</i>	<i>Gradient / meter (mm)</i>	<i>Elongation factor</i>
5	90	1,004
10	100	1,016
15	270	1,036
20	360	1,065
25	470	1,104
30	580	1,155
<i>Sloping dropout = horizontal dropout U x elongation factor</i>		
<i>F.e. Gradient : 270 mm / m , a inclination of 15°, Dropout U : 5000 mm —> Sloping dropout = 5180 mm (5000 x 1,036)</i>		

Table 2 : Conversion table to determinate the sloping dropout

10. The packaging

The sunblinds are totally wrapped in solid carton

The approaching weight = width x 35 à 40 kg/m

11. Use and maintenance

Regular use and maintenance greatly increase the life of the sun awning

- Regular maintenance of the awning prevents unnecessary wear or problems with the function
- Very important is the regular cleaning of the wheels of the carriages
- Cleaning of the frame: use warm water with a light detergent instead of abrasive substances (to prevent damage to the coatings and protective layers)
- Cleaning of the fabric:
 - dry with a stiff brush
 - stubborn stains, with a warm water and light detergent solution, rinse with copious amounts of clean water
 - let the awning dry fully before rolling it up (even after an unforeseen rain shower)

12. Security

For a secure installation it is recommended to mount the awning in accordance with the fitting instructions

Order form for separate gutter TR850

DATE: REFERENCE :

CLIENT / INVOICE

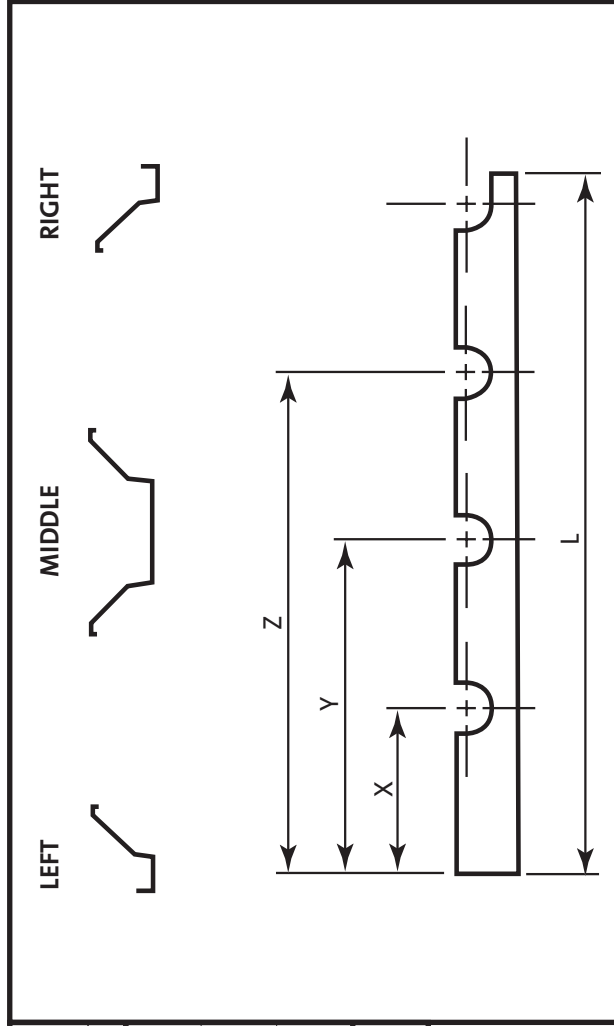
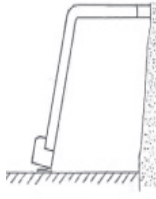
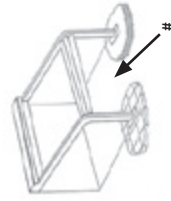
Name:
 Address:
 Client NR: VAT:
 Tel: Fax:

DELIVERY ADDRESS

Naam:
 Address:
 Tel: Fax:
 Delivery time:

DESCRIPTION	NUMBER	COLOUR	LENGTH *	POSITION (mm)		
				X	Y	Z
GUTTER LEFT						
GUTTER RIGHT						
MIDDLE GUTTER						

*L= saw measure of the gutter (or saw measure of the sloping guide).
 Option A374 = no saw out (for the intermediate rolls).



- # The gutters are always seen from the outside.
- The measures x, y, z, are measured from the top downwards and that way indicated on this order form.
- Indicate all the measures in mm.
- Each order is executed according to our terms and conditions of sale.

I have taken note of the technical description of the product, and take full responsibility for the given measures and indications.

PRICE: REMARKS:

The

Order form terrace awning TR850

1. Number:

Number of identical terrace awning

2. Measures:

see page 10

Width (box incl.) (min. 2,5 m - max. 5 m)

Height at wall

Height at bend

Dropout measured horizontally (max. 6 m)

Extended side guides, or pass through height

3. Level:

see page 11

Choose for the 0-point, the highest point at the back against the wall. The other levels who are lower, are indicated by a - symbol. If one level is actually higher, it can be indicated by a + symbol.

v.b. LW = 0

RW = 0

LF = - 12

RF = - 36

4. Control:

Always seen from the outside. Always with electrical motor. 1 motor per unit

1 left

2 right

5. Colour frame

1 White

Harol white

4 Brown

Harol brown

40 RAL-colour

(indicate the number)

Note: There is an extra cost for RAL-colours

6. Fabric:

Quality:

S Standard

E Extra impregnated (limited choice)

Colour: mention number - see collection book

7. Extra intermediate roll (in the slope surface):

see table 1 page 6

Note: Standard we don't deliver intermediate rolls. Please mention quantity

8. Tracking profile:

Y Yes

N No

9. Conveying through (for extra impregnated awnings):

Number to be indicated

65 mm for the sides

180 mm in the middle

10. Letterpainting on the fabric:

Y Yes

N No

Please add drawing on an additional paper.

Mentionning :

Text

Exact measures for the text

Where? On which height?

Type of letter

Colour of letter

11. Supplements:

A1076

motor Somfy Orea RTS

A288

extend motor cable up to 5 m

A289

extend motor cable up to 10 m

A1117

without Centralis RTS transmitter

A374

no saw out for the intermediate rolls

A640

cable tightening machine (a single expense)

A1285

without sender Situo IO Pure

A1281

Sunea IO motor

A3553

Steel intermediate rollers for windy

environment

Order form terrace awning TR850

DATE: REFERENCE :

CLIENT / INVOICE

Name:
Address:

DELIVERY ADDRESS

Naam:
Address:

Client NR: VAT:
Tel: Fax:

Tel: Fax:
Delivery time:

POSITION	NUMBER	MEASURES (MM)				LEVEL (MM)				CONTROL	COLOUR FRAME	FABRIC		EXTRA INTERME- DIA TE ROLL Ø80	TRACKING PROFILE	RAIN CONVEYING				LETTER PAINTING	SUPPLEMENTS	REFERENCE
		WIDTH	HEIGHT BOX	HEIGHT CURVE	DROPOUT	PASS THROUGH HEIGHT	LEFT WALL	RIGHT WALL	LEFT FRONT	RIGHT FRONT		QUALITY	COLOUR			GUTTER 65 MM	GUTTER 180 MM	CONVEYING 65 MM	CONVEYING 180 MM			
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
	1			2				3			4	5	6	7	8		9		10		11	

- The operation is always seen from the outside.

- Please indicate all sizes in mm.

- Each order is executed according to our terms and conditions of sale.

PRICE:

REMARKS:

.....

I have taken note of the technical product descriptions and take full responsibility for the indi-
cations and sizes mentioned.

The client,

.....

.....

