

LATERAL-ARM AWNING

LUX

Item number: 065880

SHUTTERS

SUN PROTECTION

HAROL

TECHNICAL SPECIFICATIONS

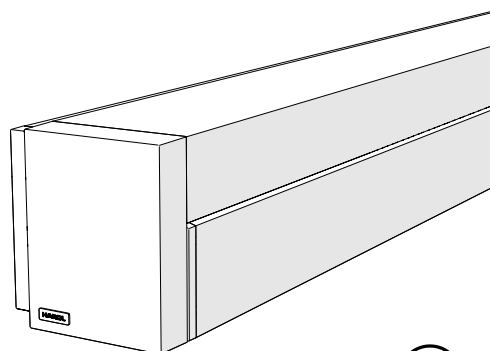
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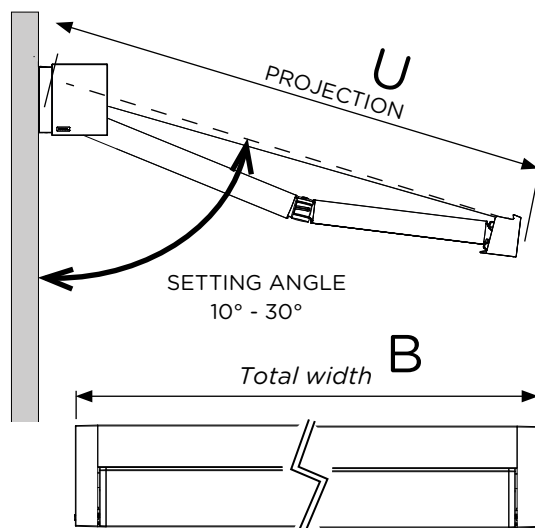
Technical specifications LUX lateral-arm awning

1. GENERAL

- The Harol LUX is a three-tube cassette lateral-arm awning.
- Its construction is characterised by a support pole to which the consoles, arms and roll-up shaft are attached.
- A standard bottom panel and an optional rear panel completely close off the awning.
- Colour of the aluminium parts and profiles: in the chosen frame colour as standard (see colour chart).



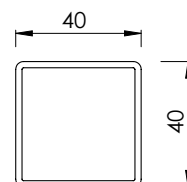
ELECTRIC OPERATION



2. DE PROFIELEN

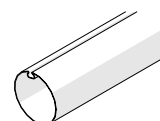
2.1. The support pole

- Material: square, welded steel tube 40 x 40 mm, made from a 2 mm thick Sendzimir-galvanised steel strip.
- Function: load-bearing awning base profile to which the other components are attached.



2.2. The roll-up shaft

- Material: round, welded tube made from a Sendzimir-galvanised steel strip
- Function: rolling up and unrolling the fabric.
- Equipped with a groove for attachment of the fabric
- Diameter: Ø85 x 1,25 mm.



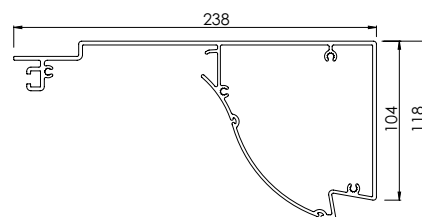
2.3. The Clip-On/Clip-off profile

- Material: extruded PVC clip profile.
- Function: screwless attachment of the fabric to the roll-up shaft
- Makes it possible to quickly and easily attach and detach the fabric



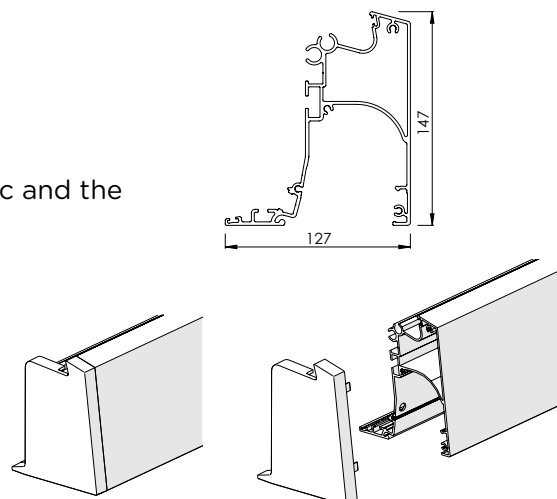
2.4. The cap profile

- Material: extruded aluminium
- Function: covers the entire width of the top of the fabric.
- There is a plastic sliding strip on the inside, to protect and guide the fabric.
- There is a rubber at the rear (not possible if rear panel), insufficient to serve as a complete seal.



2.5. The front frame

- Material: extruded aluminium
- Function: closing the front of the awning.
- Equipped with:
 - on the top: two grooves for attaching the awning fabric and the fabric to cover the gap.
- The ends are covered with aluminium caps:
 - coated in the same colour as the front frame.
- Completely hides the arms.
- Optional:
 - Variovolant: see point 10.2.



2.6. Front frame fitting piece

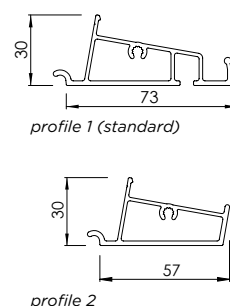
- Material: extruded aluminium
- Function: to close the front frame

profile 1 (standard)

- groove for attaching a fixed valence.

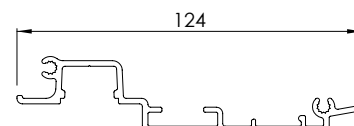
profile 2 (option)

- groove for attaching a vario-valence.



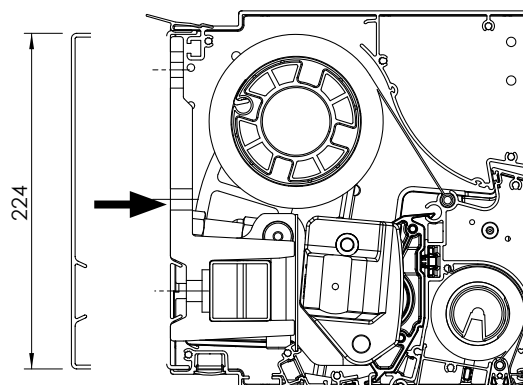
2.7. The bottom panel

- Material: extruded aluminium
- Colour: in the chosen frame colour as standard(see colour chart).
- Function : covers the entire width of the bottom of the awning.
- It is suspended from the bottom of the square support pole using plastic clamping brackets.



2.8. The rear panel

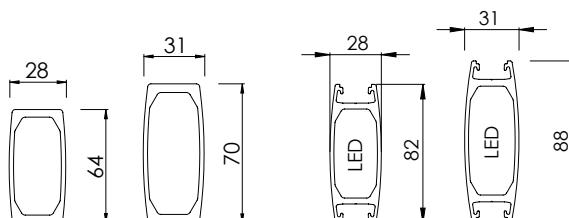
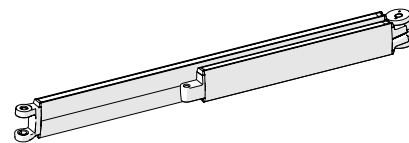
- optional (option A610).
- Material: extruded aluminium
- Colour : in the chosen frame colour as standard (see colour chart).
- Function : covers the entire width of the rear of the awning.
- Connects to the cap profile and the rear of the bottom panel.
- Is desirable for assembly when the rear is visible (e.g. under a balcony).
- Does not come with holes for assembly. These holes must be drilled on site, depending on the position of the assembly consoles.
- Rear panel centres itself in relation to the wall consoles.



3. OTHER PARTS

3.1. The lateral arms

- Push the front frame outwards and generate the tension on the awning fabric when opening.
- Connect the box to the front frame
- Available with the following projections: 1500, 2000, 2500, 3000, 3500 and 4000mm.
- Up to a width of 6000 mm, install 2 arms; from 6001 mm to 7000 mm, install 3 arms.
- Available with integrated LED lighting(optional)

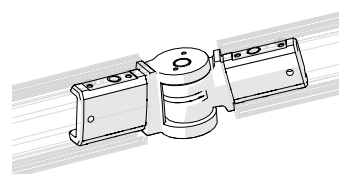


3.2. The arm profiles:

- Material: extruded aluminium.

3.3. De scharnieren:

- Material: from a cast aluminium alloy.
- Hinges on slide bearings made from sintered bronze with a PTFE sliding layer.
- The parts subject to the heaviest loads are thermally treated.

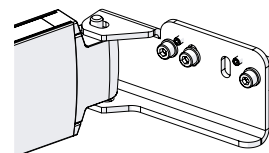
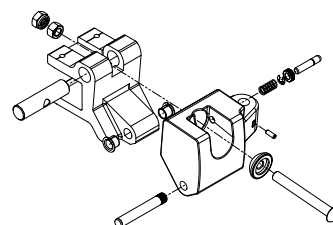
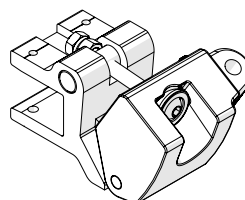


3.4. The springs and the steel cables:

- Material: pre-galvanised, high-quality steel
- The diameter of the cables is proportional to the forces they are subject to.
- The force exerted by both springs is distributed over 2 steel cables:
 - distribution of the forces
 - notable increase in service life.

3.5. The angle adjustment

- Material: extruded aluminium
- Function : connects the lateral arms to the support pole
- enables adjustment of the sunshade incline.
- The range of angle adjustment is between 10° and 30°.
- Safeguards the arms from being blown upwards and sagging downwards.

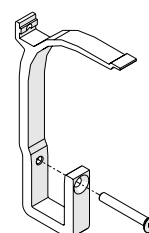


3.6. The front frame attachment

- Material: plaatwerk.
- Function: adjusts the front frame to the correct position after setting the sunshade incline.

3.7. The cap support

- Material: extruded aluminium with powder-coating finish.
- Function: connect the cap to the support pole at regular intervals.



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3.8. The attachment consoles

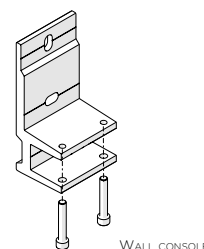
There are a number of special attachment consoles available for attaching the awning to the desired base:

<i>Awning width</i>	<i>Minimum number of consoles</i>
<i>2000 - 3500mm</i>	<i>2</i>
<i>3501 - 6000mm</i>	<i>3</i>
<i>6001 - 7000mm</i>	<i>4</i>

Table 1 : Number of consoles

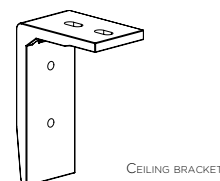
- Wall consoles: (standard).

- For normal mounting against a wall
- Material: extruded aluminium with powder-coating finish.
- Width: 100 mm and fitted with three mounting holes for M12.
- The front side is fitted with an opening through which the supporting pole slides.
- Must always be positioned as close as possible along the lateral arm.
- The number of wall consoles supplied always corresponds with the awning width.
- Additional consoles available(option).
- In case of an unstable base, it is best to install additional wall consoles in order to distribute the weight of the awning over more points.
- Packing panels 100x200x3: (optional).
- For better alignment of the wall consoles on the wall.



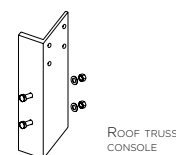
- Ceiling brackets: (optional A212)

- For mounting on a ceiling, under a balcony, etc.
- Material: cast aluminium (thermally treated), powder-coating finish.
- Width: 100 mm with two mounting holes with grooves.
- The standard wall consoles are retained.
- an additional ceiling and wall bracket when:
 - Extension 3500mm: for awnings from 5000 mm to 6000 mm wide.
 - Extension 4000mm: for awnings from 4000 mm to 7000 mm wide.
- Use of reinforced back plate (A1654) recommended.



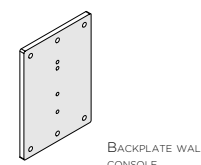
- **Roof truss consoles: (optional A2400)**

- For assembly on a roof truss.
- Material: extruded aluminium with powder-coating finish.
- Always used in combination with the wall consoles



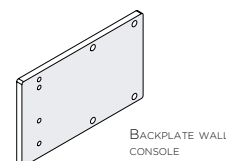
- Reinforced backplate wall console: (optional A1654)

- For mounting on a ceiling, under a balcony, etc.
- Material: cast aluminium (thermally treated), powder-coating finish.
- Width: 250 mm with two mounting holes with grooves.
- Thickness : 15mm



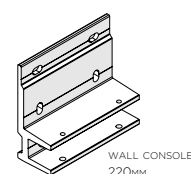
- Side plate wall console: (optional A2746)

- Side plates are recommended when an awning needs to be mounted close to a corner or at the end of a wall. The wide side plate ensures that we can still anchor on a solid surface e.g. the internal wall.
- Material: cast aluminium (thermally treated), powder-coating finish.
- Width: 350 mm and fitted with 4 mounting holes for M12.
- Thickness : 12mm



- Wall consoles 220mm: (optional A2745).

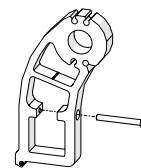
- For normal mounting against a wall
- Material: extruded aluminium with powder-coating finish.
- Width: 220 mm and fitted with three mounting holes for M12.
- The front side is fitted with an opening through which the supporting pole slides.
- Must always be positioned as close as possible along the lateral arm.



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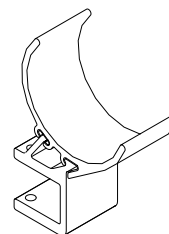
3.9. The bearing supports

- Material: extruded aluminium with powder-coating finish.
- Function: Provide bearing support for the roll-up shaft with fabric. Also to provide bearing support for the two roll-up shafts where they are connected to the awning



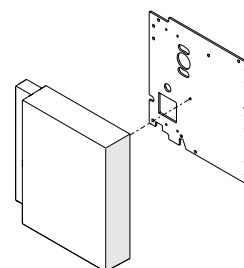
3.10. Fabric roll support

- Function: prevents the fabric roll from sagging and maintains the fabric tension
- Installed at widths >5 m as standard.
- Always installed on a double seam in the centre of the awning.
- Configuration in accordance with the projection.
- Consists of two sections for easy assembly and disassembly:
- The support that slides over the support pole is painted in the chosen frame colour as standard.
- The shell-shaped section is always grey.
- Not possible in combination with «Infinity» fabric.



3.11. The side covers and side panels for the box

- Material:
 - side covers : cast aluminium with powder-coating finish.
 - side panels : aluminium cut-out panel with powder-coating finish.
- Function : to close off the awning from the sides
- Attached to the box on both sides



3.13. Attachment materials

Lateral-arm awnings exert immense forces on the foundation on which they are mounted. It is therefore recommended that the awning is attached using chemical anchors (Hilti, Würth, etc.) or other attachment materials.

4. MINIMUM AND MAXIMUM FORMATS

Width:

- Maximum:
 - 6 m in 1 section with 2 arms.
 - 7 m in 1 section with 3 arms. (3 arms = minimum 6001mm)
 - 12 m in 2 sections with 4 arms.
- Minimum:
 - Depends on the chosen projection
 - Awnings with 2 arms ► projection + 665 mm
 - Awnings with 3 arms ► (projection x 1,5) + 900mm

For the linked awnings : see point 5.

Projection:

- Maximum: 4,0m
- Minimum: 1,5m

There is a chance that the fabric will hit the arms when opening and closing the screen, especially at 3.5 and 4m extension. The fabric will only be fully tensioned at full opening.

Projection	Min. Width
1500	2165
2000	2665
2500	3165
3000	3665
3500	4165
4000	4665

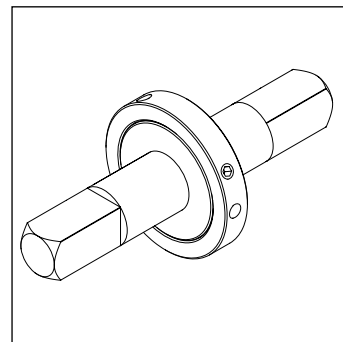
5. LINKED SUNSHADES

5.1. Linking with one continuous fabric

- Front frame, cap, support pole and roll-up shaft are joined together using connectors to form continuous profiles.
- The fabric is one continuous piece and must be installed on-site by the installer.
- W_{min} (per awning section) = projection + 750 mm.

5.2. Linking with a universal joint

- The two sections are connected together at the roll-up shaft using two stainless steel coupling discs.
- The front frame, cap and support pole are joined together using connectors to form continuous profiles.
- The fabric used is two separate sheets, always installed on both sections of the awning.
- W_{min} (per awning section) = Projection + 750mm.



Coupling discs

5.3. Linking with universal joint and fabric gap cover

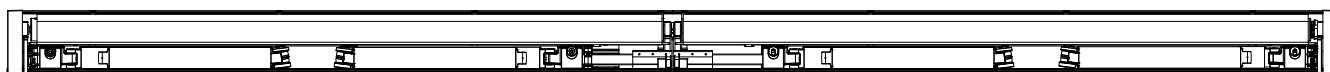
- Also for link with universal joint (see 5.2.)
- The gap between the two fabrics is covered with a fabric gap cover.
- W_{min} (per awning section) = Projection + 890mm.

Linking options

Linking with one continuous fabric



Linking with a universal joint

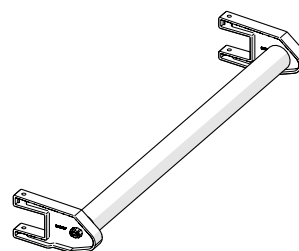


Linking with universal joint and fabric gap cover



5.4. Fabric gap cover

- A spring shaft is positioned under the fabrics at the gap.
- The spring shaft is attached to two supports made from transparent plastic.
- The fabric is attached to the shaft using double-sided adhesive tape.
- At the front, the fabric slides into the fabric groove on the front frame.
- The fabric gap cover is 63 cm wide.
- When unrolling the awning, the front frame pulls the fabric with it and unwinds the fabric from the spring shaft. This fills the gap in the fabric.



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6. WEIGHT

- The approximate weight is :
 - with variovolant ± 30 kg per metre (width)
 - without variovolant $\pm 27,5$ kg per metre (width)

7. OPERATION

Single control system:

- Electric operation.

The standard motor used in the Sunea IO motor, without push buttons and operated using an IO transmitter.

- IO transmitter.
- Cable length 5 m.

- Optional:

- without IO wall transmitter..
- Cable length 10m instead of. 5m.
- other types of motors : Orea WT - CSI - CSI IO

PROD. TYPE	MOTOR TYPE	OPTION	EXTRA CHARGE	CABLE LENGTHS		
				3m	5m	10m
LUX	Sunea IO	S	-	-	S	X
	Orea WT	A2619	Minprijs	S	X	X**
	CSI	A1004	Extra charge	S (Only right)	-	-
	CSI IO***	A1611	Extra charge	S (Only right)	-	-

S: standard X: option

**.: Without surface-mounted switch

***: Max. width off the awning : 6m.

- » For group controls and automation: see the Harol home automation catalogue.
 - » Note: The upper and lower positions of the motor have already been adjusted in the factory.
- Rod control not possible.

8. FABRICS

- Acrylic:

- Composition: Acrylic fibres coloured in the mass.
- Colour: Patterns and monochrome, based on the collection book.
- Weight: $\pm 290 - 300$ gr/m².
- Thickness: $\pm 0,5$ mm.
- Finish:
 - vertical bands of 1200 mm.
 - side hems 50 mm.
 - For a 4000 mm projection → side seams 100 mm
 - double fill stitch with polyester thread.
- Treated to resist rotting and mould, and dirt-repellent.

- Wide width canvas:

- Infinity with a max. roll width of 3200 mm
- Colour: uni-colours only
- Fabric confectioning:
 - 1 horizontal strip
 - no side hems
 - always "Closed-edges" confectioning
 - max. width of 5000 mm

9. MEASURING AND ASSEMBLY

Width:

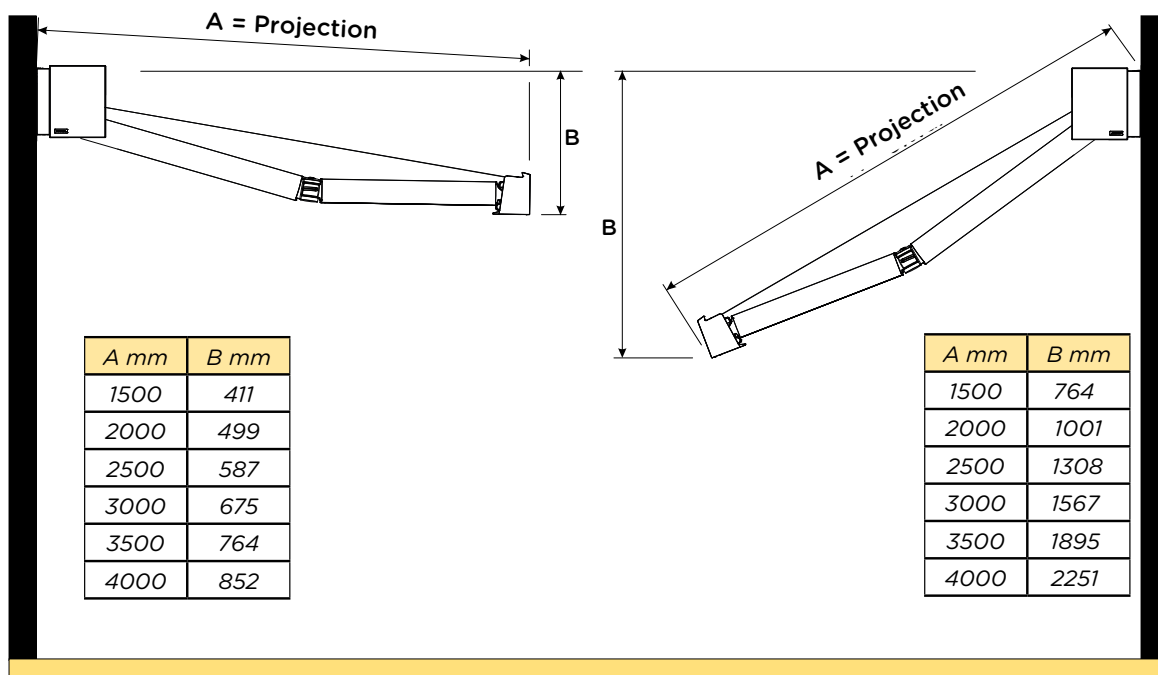
-
- Diagram illustrating the total width B of a beam with a central notch. The notch width is indicated by a dimension line labeled a .

- measured from the rear of box (on the top) to the front of the front frame
- A mounted sunshade always projects out further (relative to the wall) than the stated projection.

9.2. Assembly

- Take into account the quality of base that the awning is mounted on:
- In the case of poor-quality walls, walls made of aerated concrete or soft or hollow stones:
 - use specially adapted attachment materials.
 - install extra wall consoles.
- Install the awning sufficiently high (min. 2500mm).
- Set the incline at an angle of minimum **10° and maximum 30°** :
 - ensure there is sufficient headroom when the awning is open.
 - ensure there's sufficient room between front frame and any obstacles.

Uitval	1500	2000	2500	3000	3500	4000
Helling	20°	22°	24°	26°	28°	30°



Minimum and maximum adjustments

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9.3. wind resistance class and forces on screws

– This folding arm awning has been tested for use up to max. wind resistance class 2, with correct mounting (materials).

With wind resistance class 2, the following forces occur on screws:

LUX (Acryl) with standard extension pole

Tensile strength at each upper fixing point, per standard wallbracket [N].

U \ B	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000
1500	968	1065	1161	1258	1354	1450	1547	1643	1740	1836	1933	2029	2125	2222	2318	2415	1720	1784	1849	1913
2000			1779	1928	2076	2225	2373	2522	2670	2819	2968	3116	3265	3413	3562	3710	2643	2742	2841	2940
2500					2934	3145	3356	3566	3777	3988	4198	4409	4620	4830	5041	5252	3742	3882	4022	4163
3000							4493	4776	5059	5342	5625	5907	6190	6473	6756	7038	5015	5203	5392	5581
3500									6517	6882	7246	7611	7976	8341	8706	9071	6464	6707	6950	7193
4000											9064	9521	9978	10434	10891	11348				9001

For wall console 220 mm, the forces are halved.

LUX (Acryl) with variovolant

Tensile strength at each upper fixing point, per standard wallbracket [N].

U \ B	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000
1500	1026	1144	1263	1381	1499	1617	1735	1854	1972	2090	2208	2327	2445	2563	2681	2799	2083	2162	2240	2319
2000			1887	2064	2242	2419	2597	2775	2952	3130	3307	3485	3663	3840	4018	4195	3127	3245	3364	3482
2500					3106	3353	3600	3847	4094	4341	4588	4835	5082	5329	5576	5823	4346	4511	4675	4840
3000							4744	5070	5396	5723	6049	6375	6702	7028	7354	7681	5741	5958	6176	6393
3500									6860	7276	7691	8107	8523	8938	9354	9770	7310	7587	7864	8141
4000											9515	10030	10545	11060	11575	12090				10084

For wall console 220 mm, the forces are halved.

LUX (Acryl) with ceiling console

Tensile strength at each upper fixing point, per standard wallbracket [N].

U \ B	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000
1500	1940	2127	2315	2502	2690	2878	3065	3253	3440	3628	3816	4003	4191	4378	4566	4754	3369	3494	3619	3744
2000			3312	3584	3855	4127	4398	4670	4941	5213	5484	5756	6027	6299	6570	6842	4856	5037	5218	5399
2500					5239	5610	5982	6353	6725	7096	7468	7839	8211	8582	8954	9325	6626	6874	7121	7369
3000							7816	8303	8791	9278	9766	10253	10741	11228	11716	12203	8677	9002	9327	9652
3500									11140	11760	12379	12999	13618	14238	14857	15477	11011	11424	11837	12250
4000											15307	16075	16842	17610	18378	19146				15161

LUX (Acryl) with backplate

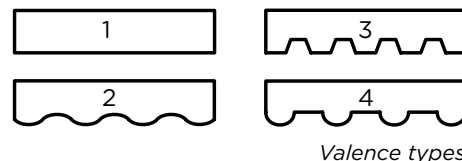
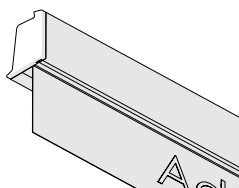
Tensile strength at each upper fixing point, per standard wallbracket [N].

U \ B	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	7000
1500	192	214	236	258	280	302	324	346	368	391	413	435	457	479	501	523	388	403	418	432
2000			348	381	413	446	479	511	544	577	610	642	675	708	741	773	575	597	619	641
2500					568	613	658	704	749	794	839	884	929	975	1020	1065	794	824	854	884
3000							863	923	982	1042	1101	1160	1220	1279	1338	1398	1044	1083	1123	1163
3500									1244	1320	1395	1471	1546	1621	1697	1772	1325	1375	1425	1476
4000											1722	1815	1908	2001	2094	2187				1824

10. ACCESSORIES

10.1. Volant (optional)

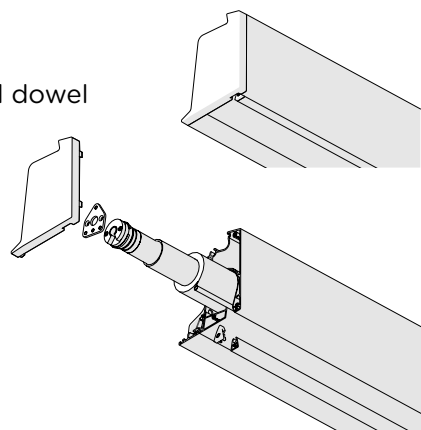
- Possible to choose one of the other styles of valence.
- Standard height, 250 mm; other heights possible



Valence types

10.2. Variovalant (optional)

- electrically controlled
 - IO
- Rolls in and out vertically
- The standard closing profile is replaced by a recess for the fabric and dowel to pass through.
- Maximum width 7000mm for Acrylic fabric.
- Maximum roll-out height 1400mm for Acrylic fabric :
 - Patterned/striped fabrics - vertical stitching.
- Maximum roll-out height 1000mm for Rhythm + Harmony fabrics (Opera, Symphonie, Sunbrella, Jacquard) :
 - Patterned/striped fabrics - vertical stitching.
- Maximum roll-out height 2000mm for Soltis96 fabric - horizontal welding
- Maximum roll-out height 1800mm for Acrylic single-width fabric - horizontal stitching
- The underside of the vario-valence is finished with an open, straight hem into which a dowel can be inserted to weigh down the fabric.
- With linked awnings, each section can be fitted with a vario-valence with its own controls (far left & far right).
- Do not use the vario-valence in moderate to heavy winds (leave rolled out or roll up)
- The combination of variovalant with volant is not possible.



10.3. Side flaps

- Optional
- Are mounted on the sides of the awning, between the box and the front frame.
- Available in two standard models or customised according to the customer's design.
- Can only be mounted on the open awning and must be removed before closing the awning.



10.4. Lettering

- Possible on valence and/or fabric (option).
- When using lettering, the valence is 300 mm high as standard.

Note : Text on striped fabrics and valences is often difficult to read. In this case, please choose a monochrome fabric.

Technical specifications LUX lateral-arm awning

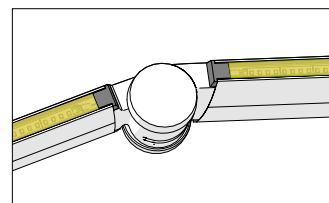
11. LED

- Optional
 - options :
 - on the underside of the arms
 - under the box.
 - in the box and in the front frame (indirect light)
- a power supply unit is mounted on the support pole with each option.

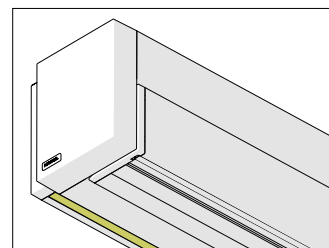
- The lighting consists of an LED profile, an LED strip, a power supply (230 V AC - 24 V DC) and a receiver, if applicable.
- The LED strip is inserted in the arm profiles..
- The power supply and IO receiver, if applicable, are mounted on the support pole.
- The ends of both arm profiles may be less strongly lit, depending on the cutting length of the LED.
- The LED strip works at 24V, 9,6W/m.
- The lighting is intended for use as atmospheric lighting. LED colour is warm white (600 Lumen/metre - 3000 (K) kelvin)

Operation

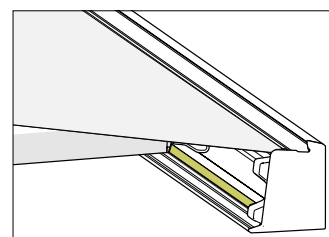
- There are 2 possible options for operating the LED lighting: Power supply and receiver integrated into the awning:
 - 1. Dimmable IO control**
The lighting cannot be operated using Smooove IO controllers.
 - 2. without receiver**
A power supply cable is provided which can be connected to a control button.
- The remote control units are not included with the LED lighting.
- 3-metre electric cable.



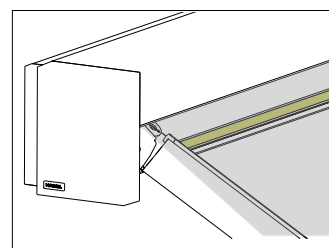
arms (direct light)



external box (direct light)

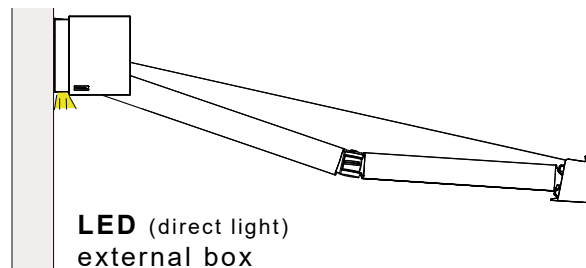
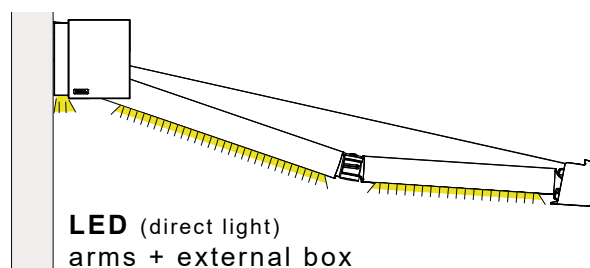
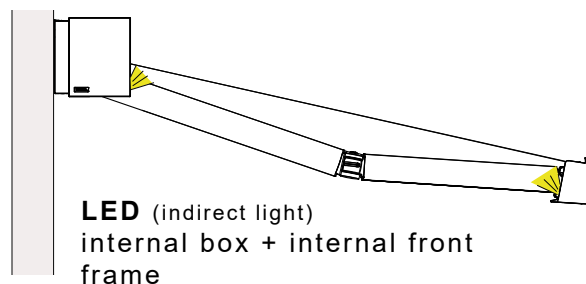
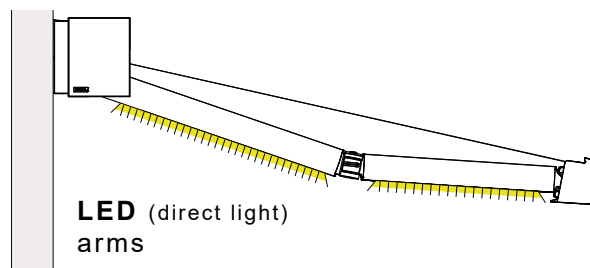


internal front frame (indirect light)



internal box (indirect light)

Mogelijke posities



Technical specifications LUX lateral-arm awning

12. DELIVERY

- Without attachment materials.
- Protected with plastic film and fully packaged in sturdy cardboard.

13. USE AND MAINTENANCE

- Using and caring for the awning in accordance with the instructions significantly extends the service life of the sunshade.
- The LUX is a sunblind and not an 'all-weather shield' .
Do not use the awning as a rain or wind shield.
- Regular maintenance prevents wear and operational problems.
 - cleaning frame:
 - use soft water as opposed to aggressive products (corrosion of the paint and protective layers).
 - cleaning the fabric:
 - use a sturdy brush and lukewarm soft soap solution to remove stubborn stains
 - rinse thoroughly with clean water
- Allow the fabric to dry completely before rolling it back up again (also after an unexpected rain shower).

14. SAFETY

For safety reasons, the sunshade must be installed in accordance with professional installation standards.

15. ORDER FORM

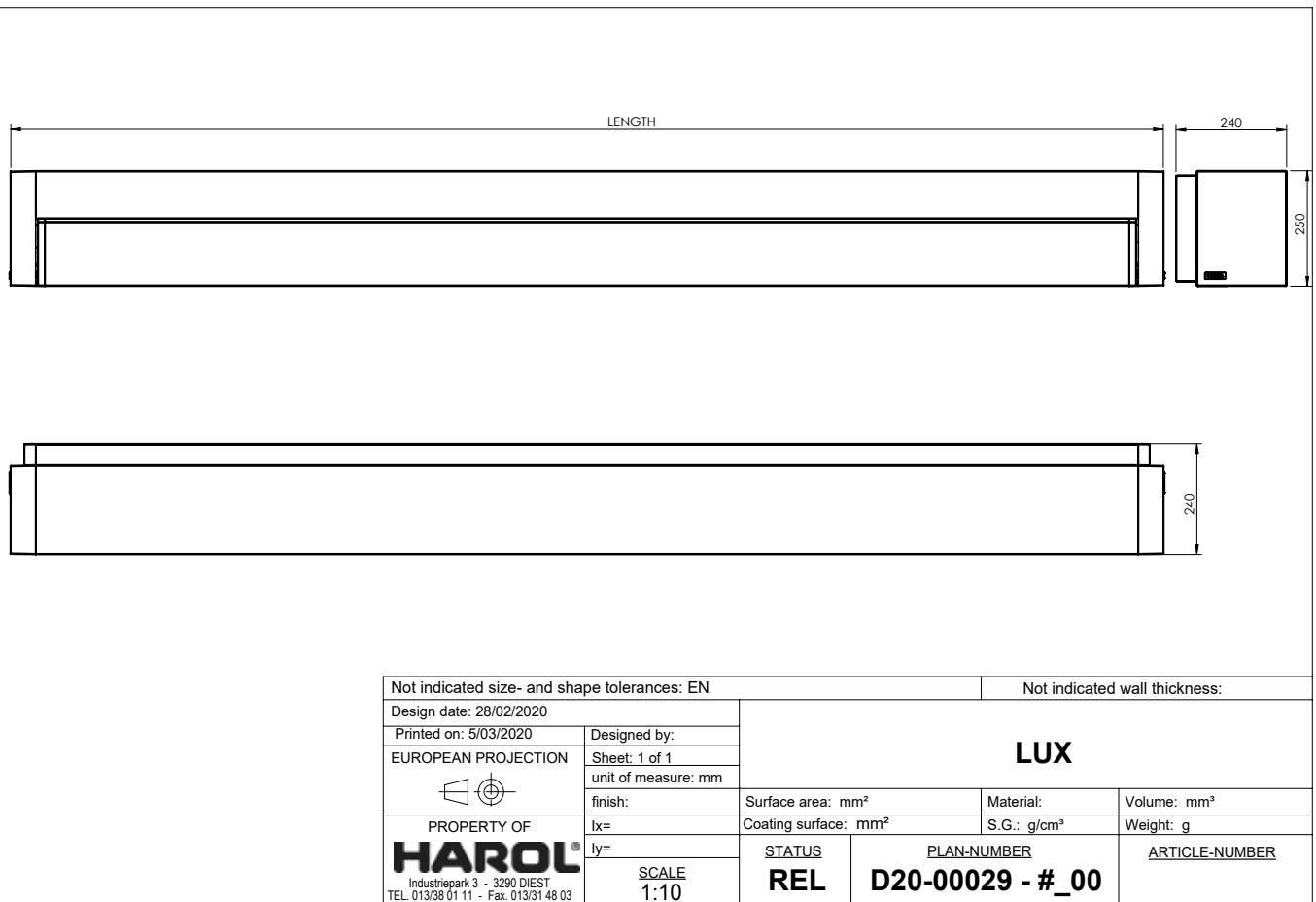
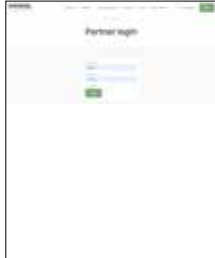
Click on link below :



Technical specifications LUX lateral-arm awning

16. TECHNICAL DRAWINGS

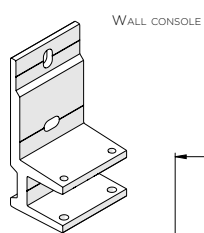
FOR DIGITAL DRAWINGS OR FOR MORE TECHNICAL INFORMATION, PLEASE CONSULT THE 'HAROL PORTAL'.»
contact our marketing department for login details, or register online via the website **www.harol.com**



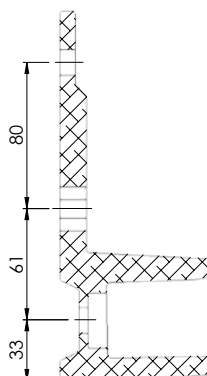
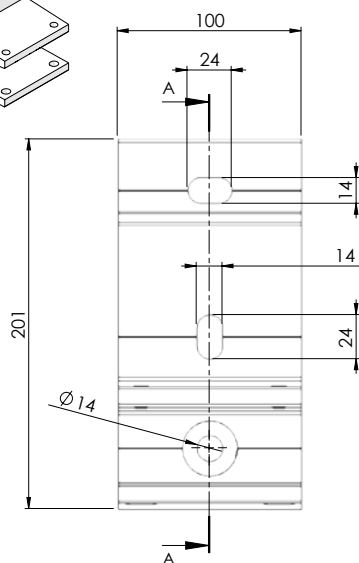
Size A4

Technical specifications LUX lateral-arm awning

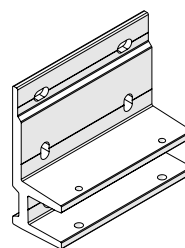
Wall console



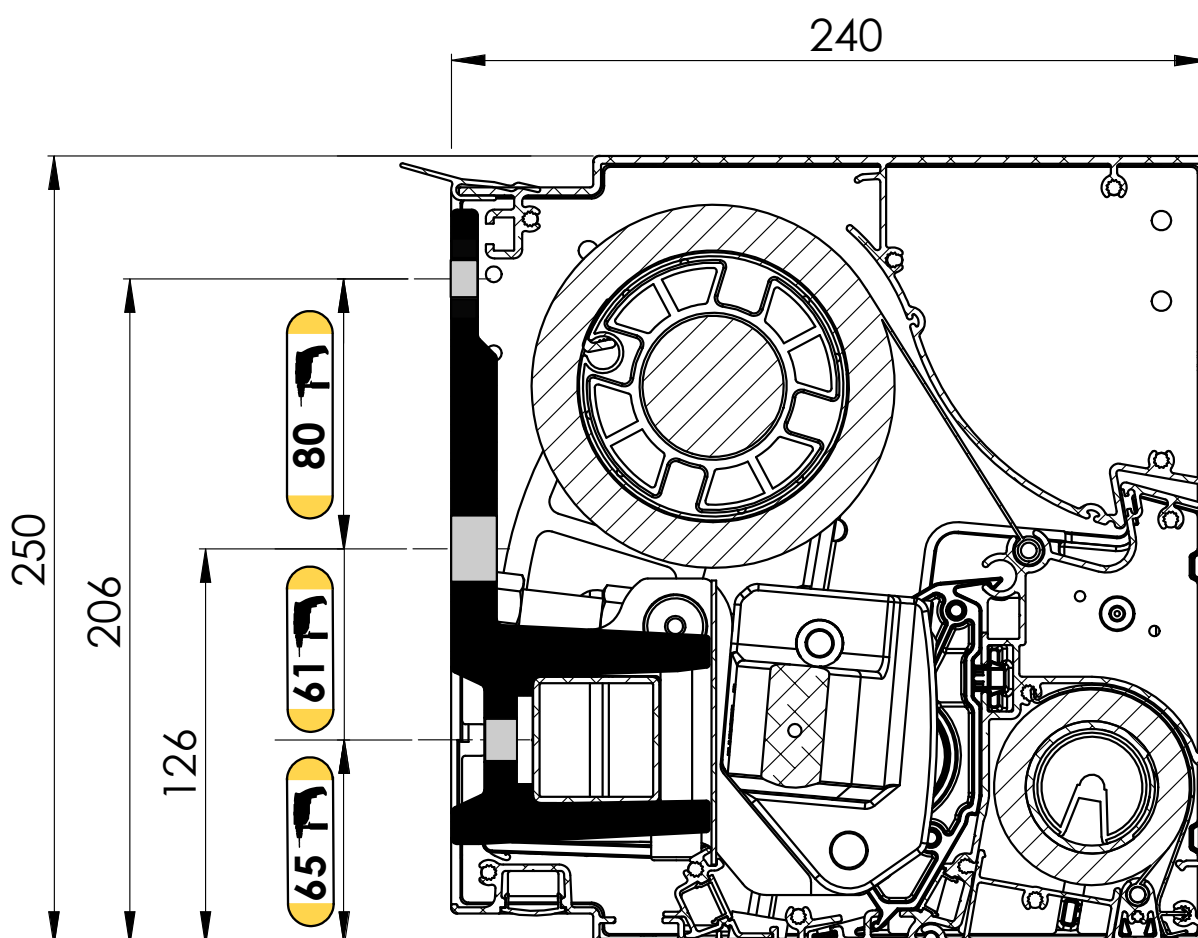
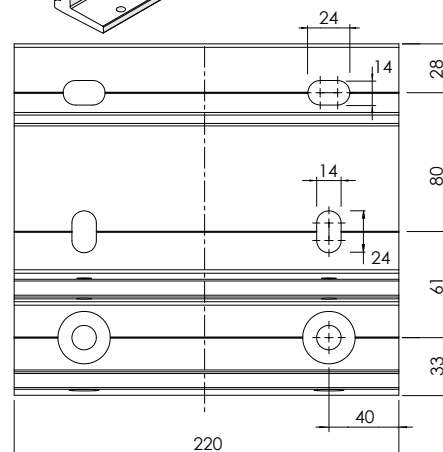
WALL CONSOLE



A-A (1 : 2)

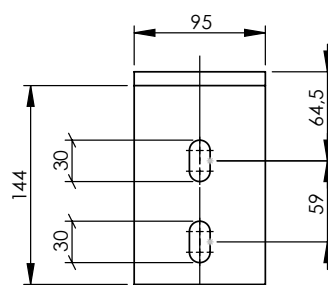
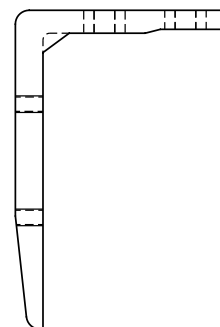
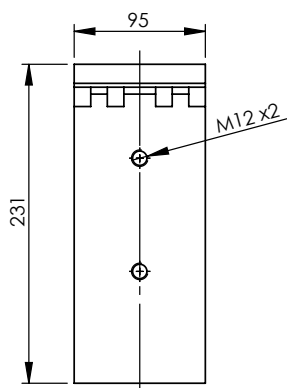
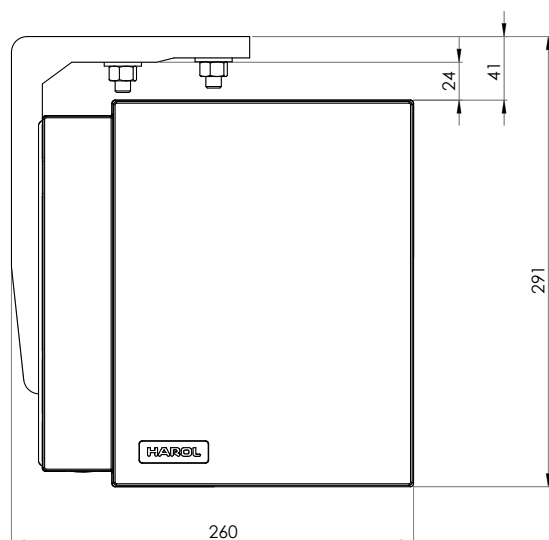
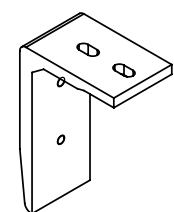


DOUBLE WALL CONSOLE

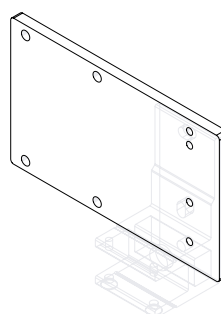
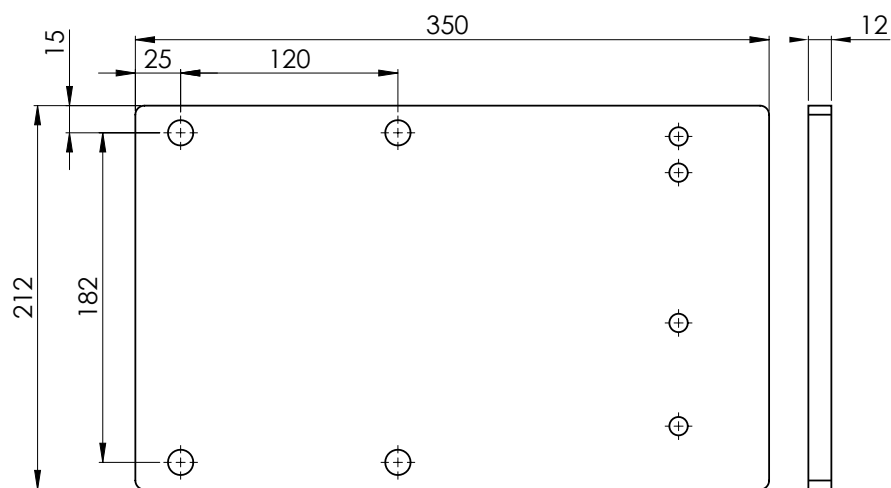
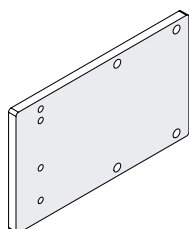


Technical specifications LUX lateral-arm awning

Ceiling bracket

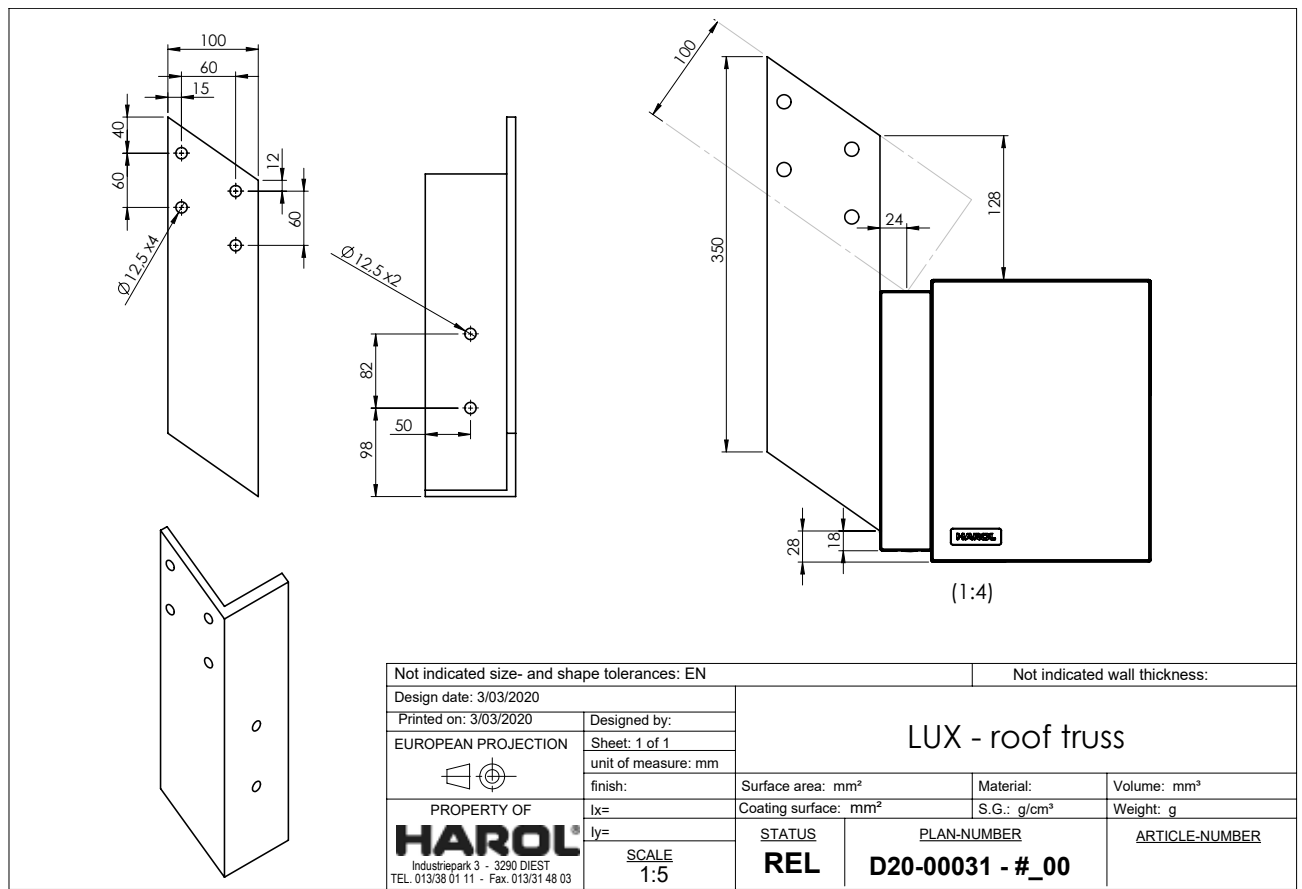


Side plate wall console: (optional A2746)



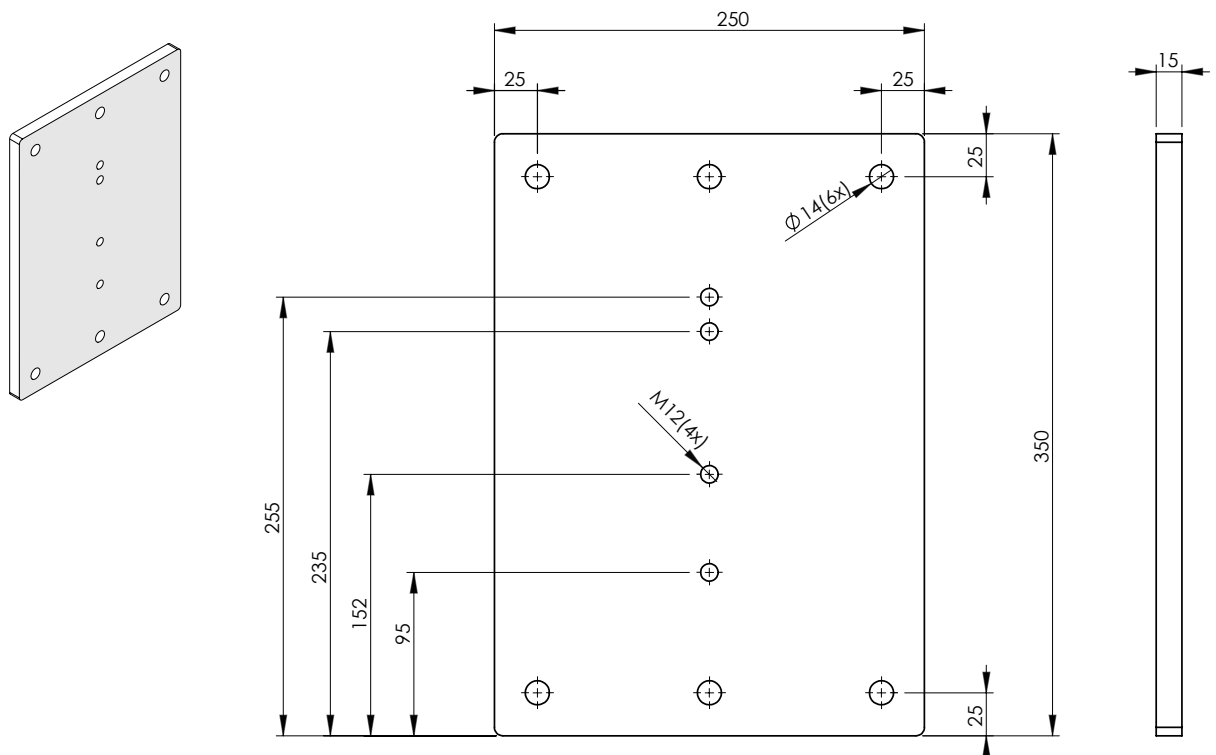
Technical specifications LUX lateral-arm awning

Roof truss console



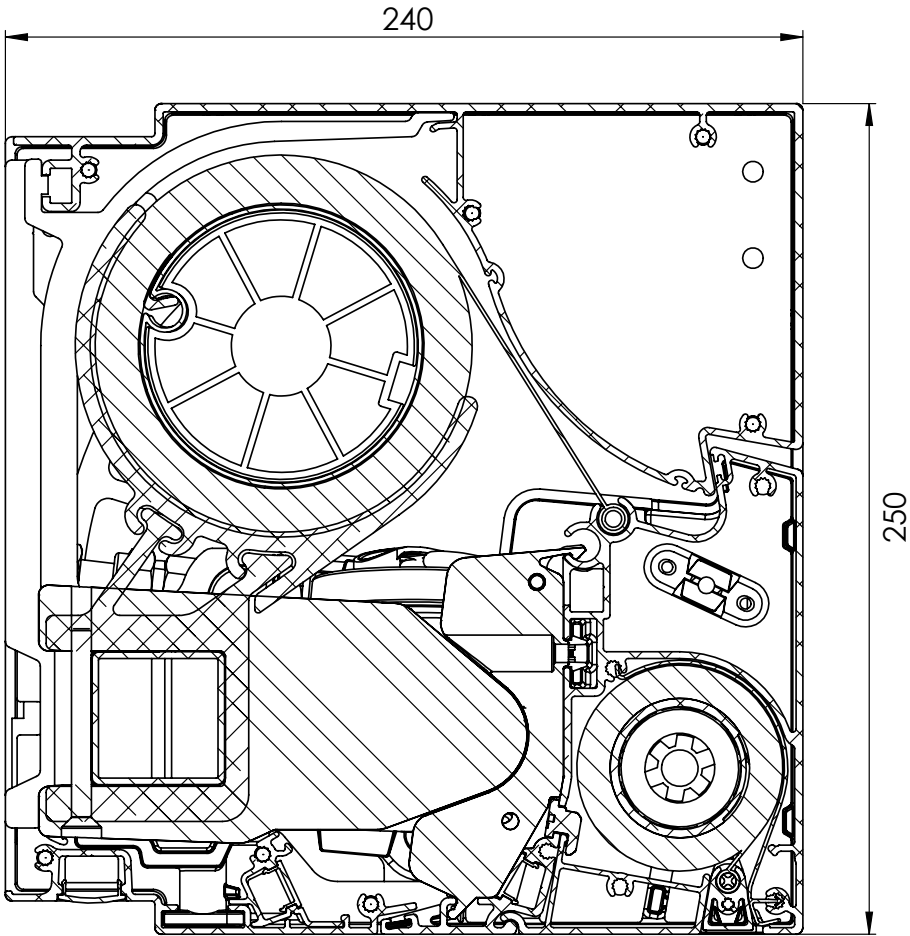
Size A4

Backplate

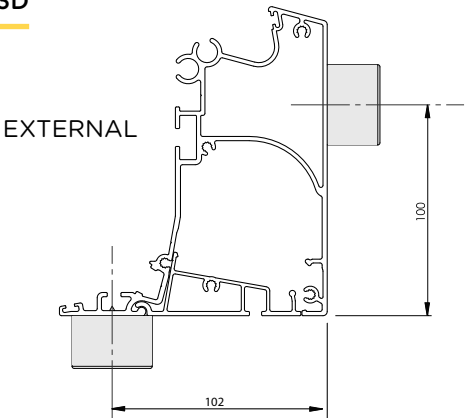


Technical specifications LUX lateral-arm awning

Cross-section



EOLIS 3D



EOLIS 3D AT THE INSIDE OF THE FRONT FRAME
POSSIBLE FROM THESE MINIMUM WIDTHS

	LINKING	LINKING	LINKING	LINKING	LINKING
PROJECTION	A	B	C	D	E
1500	2550	6001	2600	2600	2600
2000	3100	6001	3100	3100	3100
2500	3450	6001	3600	3600	3600
3000	3950	6001	4100	4100	4100
3500	4450	6450	4600	4600	4600
4000	4950		5100	5100	5100

