ARCHITECTURAL SUN PROTECTION

Export EN I 2019

RENSON®
Creating healthy spaces

OUR **MISSION**

Creating healthy spaces

Paul Renson

"Renson® specialises in ventilation, sun protection and outdoor. With experience dating back to 1909, and an integrated team of over 1000 employees, we develop systems and solutions which provide consumers with a healthy and comfortable living and working environment, also taking into account energy efficiency and the use of renewable energy. We develop innovative products and systems, and offer total solutions to make every house into a healthy and comfortable home.

"We also appreciate the aesthetic values of every building, allowing our sun control and ventilation systems to be incorporated invisibly into your home. Our patio covers and aluminium blades for covering façades provide clear accents, offering added value to the architecture. Inside, we ensure that doors are integrated invisibly with no conspicuous frames or visible joints."

Discover how Renson® products can optimise the comfort experience while guaranteeing a contemporary design.

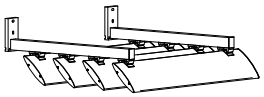
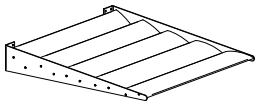
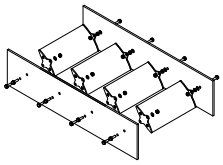
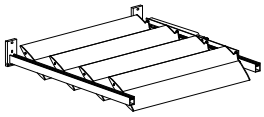
"We develop innovative products and systems allowing for aesthetic integration in every building."

RENSON 110 YEARS OF LEADERSHIP IN INNOVATION 1909-2019

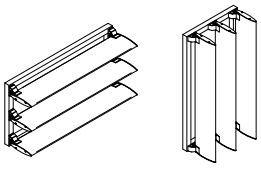
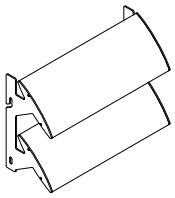
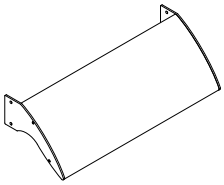
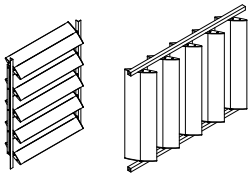
TABLE OF CONTENTS

OVERVIEW

Horizontal sun protection

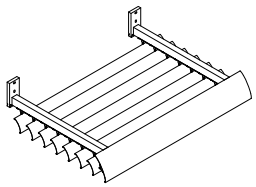
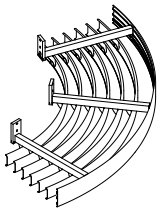
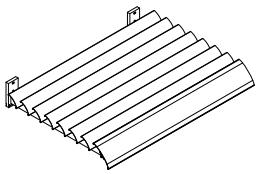
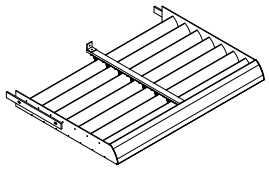
	Icarus				
Type	Quickfix® awning with fixed blades	Cassettes, multiple fixed blades	Fixed, single blades	Movable blades	
	Page 16	Page 18	Page 20	Page 22	
					

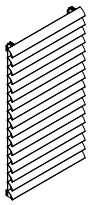
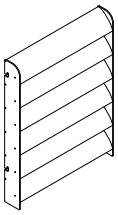
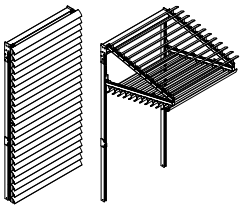
Vertical sun protection

	Icarus				
Type	Quickfix® with horizontal or vertical blades	Cassettes, multiple fixed blades	Fixed, single blades	Movable with horizontal or vertical blades	
	Page 34	Page 36	Page 38	Page 40	
					

Sliding panels

	Loggialu				
	Standard				
Type	Paro	Privacy	Plano		
	Page 52	Page 54	Page 56		
					
	Project solutions				
Type	LG.040/LG.065		LG.130	Patio	
	Page 64		Page 66	Page 68	

	Sunclips			
	Blades positioned below	Curved blades positioned below	Blades positioned above	Cassettes
	Page 24	Page 26	Page 28	Page 30
				

	Sunclips		Cilium
	Vertical – on mullions	Cassettes	Folding shutters
	Page 42	Page 44	Page 46
			

	Loggiawood		Loggiascreen
	Standard		
	Paro	Privacy	Canvas
	Page 58	Page 60	Page 62
			
	Project solutions		
			4FIX
			Page 70

WHY SUN PROTECTION?

As trendsetter and pioneer, Renson® is a world player in sun protection. Thanks to exhaustive testing and continuous innovation, the design of our products is optimized time and time again, durability is improved and comfort is raised to a higher level.

SUN PROTECTION IS NECESSARY

A building or home with large glazed surfaces facing south offers many advantages. During autumn, winter and spring, you enjoy the benefits of the incoming sunlight. But in the summer this can create an uncomfortable indoor climate and irritating light reflections.

Architectural sun protection and screens prevent overheating. They stop the sun's rays before they come into contact with glazed surfaces. Undesired heat and blinding light do not enter the building. This means no blinding or annoying reflections on TV or computer screens. And yet you still retain visual contact with your environment. The view outside is important, and it is respected.

KYOTO PROTOCOL

Many countries have now signed the Kyoto protocol. With growing awareness, they are now acknowledging the detrimental but not yet irreversible effect man is having on our planet and on the climate in particular. They want to commit themselves to the cause and take corrective measures. If we want to reduce the greenhouse effect, energy consumption must fall.

One major energy-consuming activity is the cooling of buildings. Efficient sun shading can partly and sometimes even fully resolve this issue. It makes additional cooling unnecessary and saves on energy.

Various governments have already agreed on laws in relation to energy consumption and ventilation.

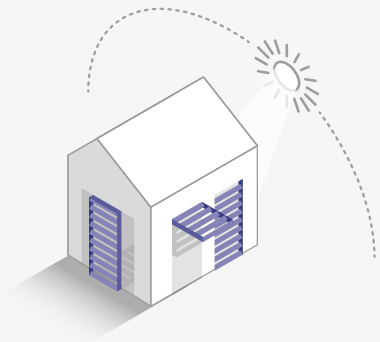
- Belgium: Regelgeving van Energieprestatie & Binnenklimaat (EPB)
- The Netherlands: Energie Prestatie Coëfficiënt (EPC)
- France: Réglement Thermique 2012 (RT2012)
- Germany: Energieeinsparverordnung
- UK:
  - Approved document L1 'Conservation of fuel and power in dwellings'
  - Approved Document L2 'Conservation of fuel and power in buildings other than dwellings'

ENJOY ALL SEASONS

You enjoy your garden year-round. And, you can also enjoy your sunscreens year-round. Everyone wants an outdoor view and as much natural daylight in their home as possible, while always keeping the indoor climate under control. And that is what sunscreens are for. It is the only way to guarantee indoor comfort both during the hot summer months and the cold winter. Moreover, sunscreens also positively affect your power consumption.

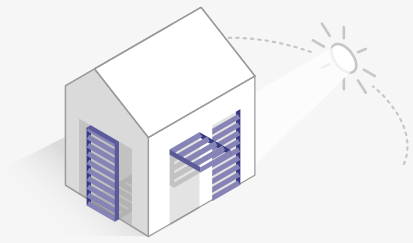
SUMMER

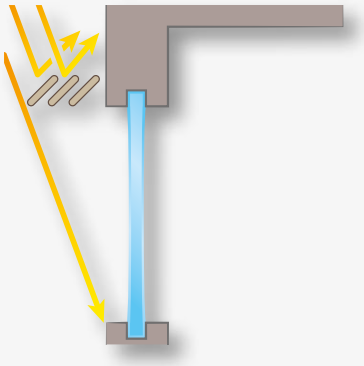
When the sun is high in the sky, efficient external solar shading is a necessity to prevent the indoors overheating. Using architectural sunscreens reduces the need for power-hungry air conditioning. It also improves indoor comfort without losing sight of your garden.



WINTER

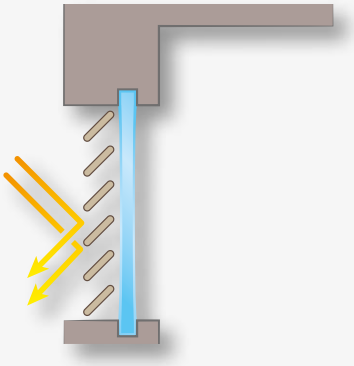
When the sun is low in the sky, it is important to optimally use the benefits of sunlight (warmth and light) to increase comfort and reduce power consumption.



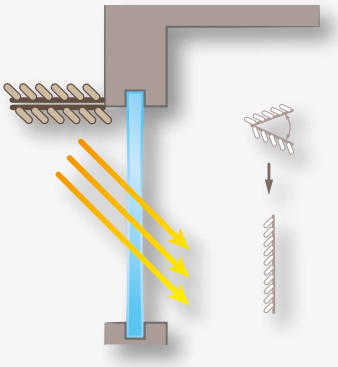


An extensive selection of external solar shading

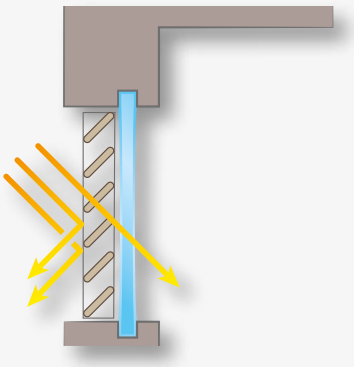
Fixed architectural sun protection with horizontal blades that are mounted on an aluminium support structure. Because the architectural sun protection hangs above the windows, it does not interfere with the view outdoors. The systems also provide good shade when the sun is high in the summer months. When the sun is low during the winter, these allow the pleasant warmth of the sun to enter.



Aluminium blades that are attached vertically in front of the windows onto an anchored support structure on the façade. The size of these installations and the fact that the fixed or movable blades are always in front of the windows do not make these systems suitable for homes. These are frequently used for large building projects. The production of a similar solution requires customisation and the installation must be entrusted to a steel or façade builder.



Shutters are a type of dynamic sunscreen where the blades are movable in front of the window. In the open position, it is horizontal above the window.



As a response to the increasing demand for aesthetic multifunctional façade elements, Renson® has expanded its assortment sliding panels.
The Loggia panels are made of frames containing aluminium blades, wood blades, or screens. The Patio panels are sliding panels where the aluminium blades are screwed in between vertical endcap plates (e.g. Sunclips and Icarus). Multiple types of blades can be used in both systems.
Depending on the desired shading and required transparency, the blades can be positioned at different angles of inclination and staggered at different distances. In addition to this wide selection of sliding panels based on fixed aluminium or wooden sunscreen blades, panels with a screen or adjustable blades are available.

UNIQUE DESIGN

Renson® believes in high-quality design. Our extensive selection and the integration in your façade make the architectural sunscreens from Renson® become one with your home.

AN EYE-CATCHER FOR YOUR HOME

Whatever system you select, the architectural external solar shading of Renson® adds extra cachet to your home. You emphasize the shape of your façade, accentuate the style of your home, or provide a playful accent.

MULTIFACETED SOLUTIONS

Horizontal architectural sun protection above a window, Vertical sun protection in front of a window, fixed or movable. Our dynamic systems help you achieve openness or privacy and manage the incoming sunlight and illumination angle. In the summer, you are protected from overheating. In the winter, you allow more sunlight in to benefit from the solar heat. Can be integrated into new buildings and renovation projects. Thanks to the many options, any building can be provided with efficient sunscreens.

STYLISH FINISH

We always strive to achieve a minimalistic design with sleek lines. The aluminium parts guarantee that the sunscreen is durable and maintenance friendly.

2 TYPES OF BLADES: ICARUS® & SUNCLIPS®

ICARUS®

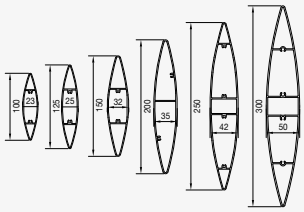
Icarus blades are extruded aluminium profiles for use as sun protection, wall cladding or visual barriers.

- Icarus Aero are aerofoil blades in widths ranging from 100 to 480 mm.
- Icarus Plaero is the combination of a block blade and an aerofoil blade in widths of 150, 200 and 300 mm.
- Icarus Plano are block blades in widths of 60, 150, 200 and 300 mm.

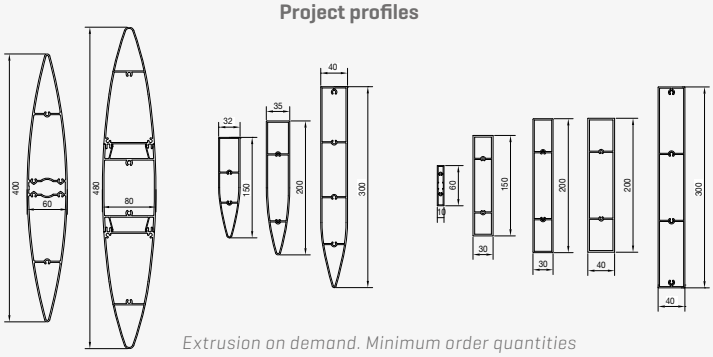
Other shapes and sizes are possible in consultation with our design division to suit your project requirements.

Technical drawings

Standard profiles



Project profiles

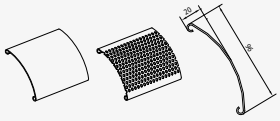


Extrusion on demand. Minimum order quantities and leadtime to be confirmed per project.

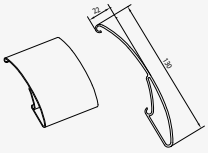
SUNCLIPS®

Sunclips are C-shaped extruded aluminium blades, mounted on a fixed supporting structure. The Sunclips system is installed horizontally or vertically in front of the façade to achieve the desired shading effect. Sunclips^{EVO} comes in 3 sizes: SE.096, SE.130 and SE.176, with 96, 130 and 176 mm oversizing, respectively.

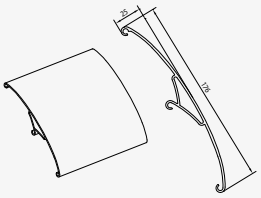
Technical drawings



SE.096.01
SE.096.02



SE.130



SE.176

TECHNICAL DATA ICARUS®

Icarus® Aero	Width (mm)	Height (mm)	I_y (mm^4)	W_y (mm^3)	I_z (mm^4)	W_z (mm^3)
ICA.100	100	23	256337	5126	16992	1482
ICA.125	125	25	484640	7754	29399	2352
ICA.150	150	32	950301	12616	64713	3936
ICA.200	200	35	2395293	23905	113538	6387
ICA.250	250	42	5155315	41231	214720	10264
ICA.300	300	50	9699889	64666	402436	16097
ICA.400*	400	60	23853116	119266	874358	29079
ICA.480*	480	80	46149163	192285	2321828	58045
Icarus® Plaero	**Width (mm)**	**Height (mm)**	**I_y (mm^4)**	**W_y (mm^3)**	**I_z (mm^4)**	**W_z (mm^3)**
ICL.150*	150	32	1201029	14735	96620	5426
ICL.200*	200	35	3318686	30087	176148	9937
ICL.300*	300	40	11843210	73712	400594	19031
Icarus® Plano	**Width (mm)**	**Height (mm)**	**I_y (mm^4)**	**W_y (mm^3)**	**I_z (mm^4)**	**W_z (mm^3)**
ICP.060*	60	10	70800	2333	3131	626
ICP.150*	150	30	2270694	30273	153477	10232
ICP.200/30*	200	30	4028998	40285	171972	11271
ICP.200/40*	200	40	5417853	54177	382888	19143
ICP.300*	300	40	1402200	93480	462605	22384

y: axis strength · z: axis weakness
** Project profiles not in stock*

TECHNICAL DATA SUNCLIPS®

Sunclips®	Width (mm)	Height (mm)	I_y (mm^4)	W_z (mm^4)	I_z (mm^3)
SE.096.01 / SE.096.02	96	20	160842	6048	3348
SE.130	130	22	556097	19124	7610
SE.176	176	25	1250307	24909	14097

y: axis strength · z: axis weakness

HORIZONTAL SUN PROTECTION

ICARUS® QUICKFIX®

A patented clip system for rapid assembly and continuous lines

HORIZONTAL

ICARUS®

QUICKFIX

INTRODUCTION

Icarus Quickfix is a unique, patented architectural sun protection system, held in place simply and discreetly using clips. The Quickfix bracket consists of one clip attached to the supporting structure and one fork profile attached to the blade using stainless steel rivets. This 2-part concept allows the blade to expand slightly when heated but avoids stresses occurring in the supporting structure. This system also allows for the creation of a continuous line of blades.

MATERIALS AND CONSTRUCTION

Blade: aluminium extrusion profile in EN AW-6063 T66 alloy

End plates are AlMg3 alloy.

Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

The following blade types and inclinations are standard:

ICA.100, 125, 150, 200, 250, 300, 400, ICL.200 and 300 : 45° or 90°ICA.100, 125, 150, 200, 250, 300, 400, ICL.200 and 300 : 60° or 75°

For details of Quickfix brackets and end caps, see pages 26/27 and 36/37.

MAXIMUM UNSUPPORTED SPAN

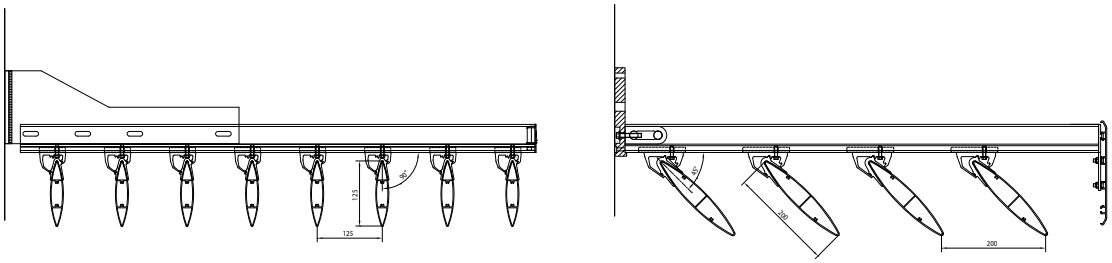
Maximum recommended blade length for angles below 45° in relation to the horizontal overhang:

Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
ICA.100	2220 mm	2060 mm	1780 mm
ICA.125	2540 mm	2360 mm	2020 mm
ICA.150	3110 mm	2900 mm	2480 mm
ICA.200	3400 mm	3150 mm	2700 mm
ICA.250	3760 mm	3580 mm	3050 mm
ICA.300	4200 mm	4100 mm	3500 mm
ICA.400	3600 mm	3600 mm	3120 mm
ICL.150	3440 mm	3440 mm	3270 mm
ICL.200	3710 mm	3710 mm	3710 mm
ICL.300	4150 mm	4150 mm	4150 mm

The maximum unsupported spans described here apply only to the blades and depend on the overhang of the sun protection. Maximum unsupported spans for other blade angles are available upon request.

TECHNICAL DRAWINGS

Section detail Icarus® Quickfix



ICARUS® CASSETTE

Icarus blades screwed in between aluminium plates

HORIZONTAL

ICARUS®

CASSETTES

INTRODUCTION

Horizontal, overhanging, permanent awning with multiple blades mounted between end plates to form cassettes. Free choice of blade orientation, overhang and shape. Attachment of the end plates directly to the façade (solution 1) or on knife brackets (solution 2).

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy

End plates are aluminium alloy (AlMg3) or steel. The thickness is calculated as a function of the dimensions, weight and local wind load. Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

BLADE TYPE

Suitable for all Icarus blades types.

MAXIMUM UNSUPPORTED SPAN

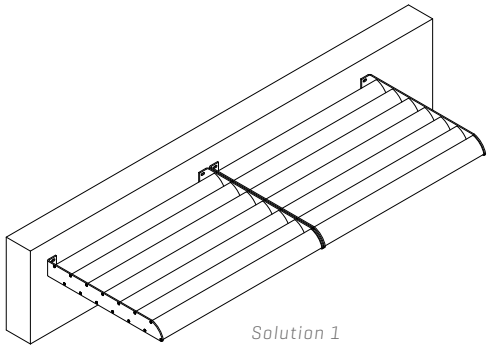
Maximum recommended blade length for angles below 45° in relation to the horizontal overhang:

Blade type	Wind load 650 Pa	800 Pa	1250 Pa
ICA.100	2450 mm	2270 mm	1960 mm
ICA.125	2800 mm	2600 mm	2225 mm
ICA.150	3430 mm	3185 mm	2735 mm
ICA.200	3740 mm	3460 mm	2970 mm
ICA.250	4140 mm	3940 mm	3350 mm
ICA.300	4610 mm	4520 mm	3850 mm
ICA.400	5330 mm	5330 mm	4580 mm
ICA.480	6000 mm	6000 mm	6000 mm
ICL.150	3640 mm	3515 mm	3320 mm
ICL.200	3825 mm	3685 mm	3440 mm
ICL.300	4610 mm	4520 mm	3850 mm
ICP.060	1610 mm	1490 mm	1270 mm
ICP.150	3850 mm	3850 mm	3540 mm
ICP.200/30	3910 mm	3910 mm	3910 mm
ICP.200/40	4730 mm	4730 mm	4730 mm
ICP.300	4755 mm	4755 mm	4755 mm

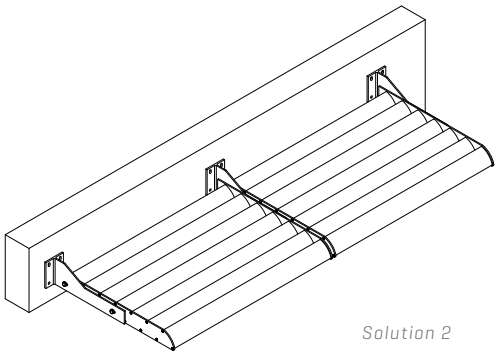
The maximum unsupported spans described here apply only to the blades and depend on the overhang of the sun protection. Maximum unsupported spans for other blade inclinations are available upon request.

TECHNICAL DRAWINGS

Section detail Icarus® Cassettes



Solution 1



Solution 2

ICARUS® FIXED

Icarus blades with end caps to fix to an existing structure

HORIZONTAL

ICARUS®

FIXED

INTRODUCTION

Horizontal, overhanging, permanent awning with single blades mounted between end plates. Free choice of blade orientation, overhang and shape.
The end plates are attached directly to a load-bearing substructure. One side is attached tightly and the other loosely to allow for thermal expansion.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are aluminium alloy (AlMg3). The thickness is calculated as a function of the dimensions, weight and local wind load.
Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

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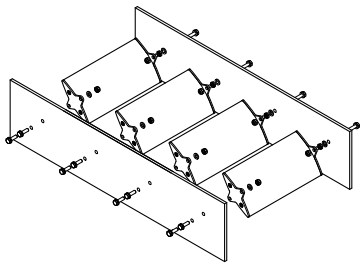
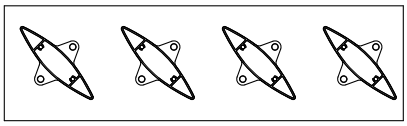
ICA.125	2800 mm	2600 mm	2225 mm
ICA.150	3430 mm	3185 mm	2735 mm
ICA.200	3740 mm	3460 mm	2970 mm
ICA.250	4140 mm	3940 mm	3350 mm
ICA.300	4610 mm	4520 mm	3850 mm
ICA.400	5330 mm	5330 mm	4580 mm
ICA.480	6000 mm	6000 mm	6000 mm
ICL.150	3640 mm	3515 mm	3320 mm
ICL.200	3825 mm	3685 mm	3440 mm
ICL.300	4610 mm	4520 mm	3850 mm
ICP.060	1610 mm	1490 mm	1270 mm
ICP.150	3850 mm	3850 mm	3540 mm
ICP.200/30	3910 mm	3910 mm	3910 mm
ICP.200/40	4730 mm	4730 mm	4730 mm
ICP.300	4755 mm	4755 mm	4755 mm

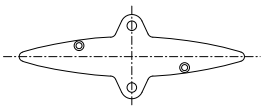
The maximum unsupported spans described here apply only to the blades and depend on the overhang of the sun protection. Maximum unsupported spans for other blade angles are available upon request.

TECHNICAL DRAWINGS

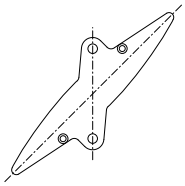
Section detail Icarus® fixed







Type 14



Type 15

ICARUS® MOVABLE

Dynamic sunshade system with movable blades

HORIZONTAL

ICARUS®

MOVABLE

INTRODUCTION

Horizontal, overhanging, permanent awning with movable blades. The blades can be tilted a standard 90°. Other angles are possible in consultation with our project division.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are AlMg3 alloy.
Supporting structures in aluminium or steel, according to overhang, blade weight, and wind and snow load.
Pivot sleeves are made of stainless steel mounted centrally in aluminium end caps.
Bearings and circlips are made of UV-resistant synthetic material. Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

BLADE TYPE

Suitable for all Icarus blades types.

MAXIMUM UNSUPPORTED SPAN

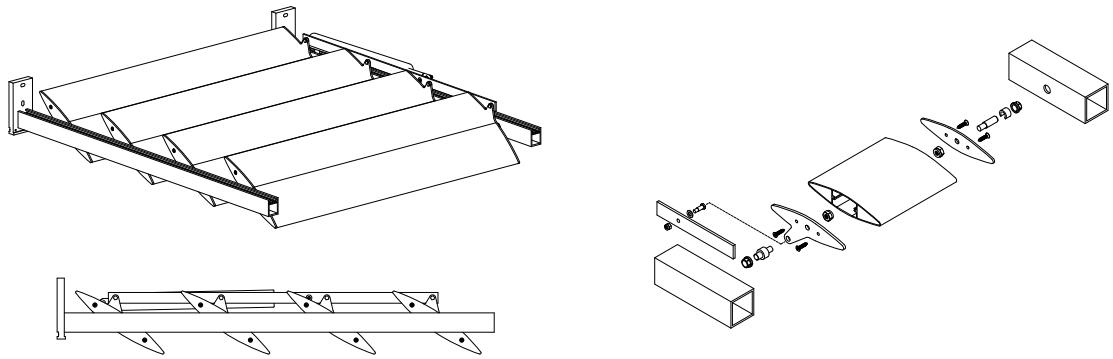
Recommended maximum blade length:

Blade type	Wind load 650 Pa	800 Pa	1250 Pa
ICA.100	1870 mm	1750 mm	1520 mm
ICA.125	2080 mm	1950 mm	1700 mm
ICA.150	2540 mm	2390 mm	2070 mm
ICA.200	2790 mm	2620 mm	2270 mm
ICA.250	3190 mm	2990 mm	2600 mm
ICA.300	3690 mm	3460 mm	3010 mm
ICA.400	4320 mm	4070 mm	3540 mm
ICA.480	5170 mm	5170 mm	4590 mm
ICL.150	2830 mm	2660 mm	2310 mm
ICL.200	2980 mm	2800 mm	2430 mm
ICL.300	3690 mm	3460 mm	3010 mm
ICP.150	3120 mm	2940 mm	2550 mm
ICP.200/30	3170 mm	2980 mm	2595 mm
ICP.200/40	3830 mm	3830 mm	3370 mm
ICP.300	3850 mm	3620 mm	3150 mm

The maximum unsupported spans described here apply only to the blades and depend on the dimensions of the sun protection. Other spans may be possible after detailed study of the actual project situation.

TECHNICAL DRAWINGS

Section detail Icarus® Movable



SUNCLIPS® POSITIONED BELOW

Rapid assembly using clip system. Continuous lines.

HORIZONTAL

SUNCLIPS®

POSITIONED BELOW

INTRODUCTION

Permanent awning where the blades are positioned continuously under the mullions. This version can be horizontal or projecting at an angle.

MATERIAL

Aluminium extrusion profile in EN AW-6063 T66 alloy.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating (UK)) RAL or Syntha Pulvin colors (60-80 µ/40 µ)

BLADE TYPE

Suitable for all Sunclips blade types

BLADE SUPPORT

Blades are clipped to UV-resistant plastic clips

BLADE INCLINATION

The standard blade inclination is 60°.

BLADE PITCH

The standard blade pitch is 100 mm. A pitch of 133 mm is possible for blade type SE.130. A pitch of 166 mm is recommended for blade type SE.176.

FASCIA PROFILE

A fascia profile can be added to complete the awning structure. Several types are available. For details, see p. 88.

WALL FIXING

Different solutions are possible for fixing on a wall. For details, see p. 84.

MULLIONS

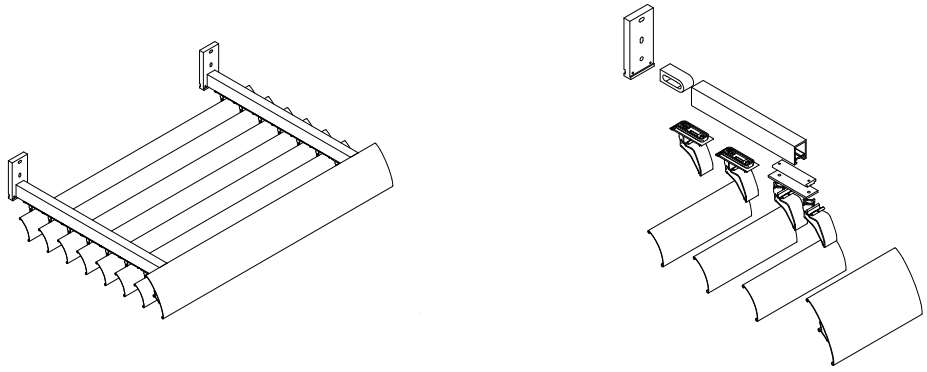
Three types of mullions can be used for horizontal sun awnings with blades positioned below: SD.014, SD.054 and SD.100. For details, see p. 80.
Mullion profiles can be placed under an angle of maximum 30° (see picture on the right).

INTERMEDIATE MULLION

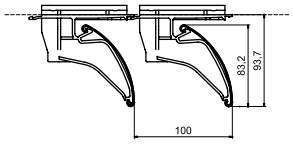
An SD.014 intermediate mullion with standard clips may be needed, depending on the unsupported span of the blades and the local wind load.

TECHNICAL DRAWINGS

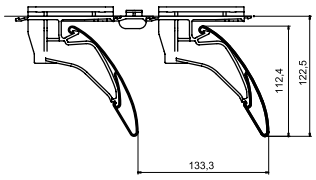
Section detail Sunclips® Positioned below



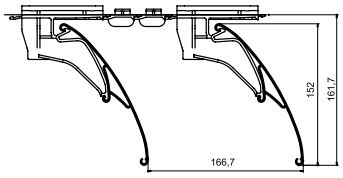
Types



SE.096.01 / SE.096.02

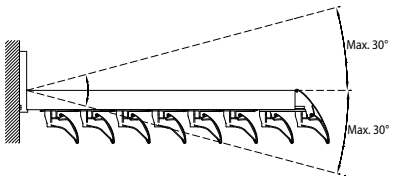


SE.130



SE.176

Mullion



CURVED SUNCLIPS® POSITIONED BELOW

Emphasizes the curve of your façade, curved or in facets

HORIZONTAL

SUNCLIPS®

POSITIONED BELOW

CURVED

INTRODUCTION

Permanent awning mounted on a curved wall where the blades are positioned continuously under the mullions. The design with curved blades is possible with blade type SC.096 and a minimum radius of 500 mm. Fascia profile SC.155 can also be curved. As an alternative design, the blades can be straight, with or without a curved SC.155 fascia profile. All Sunclips blade types can be used with this facetted design, which can also be angled.

MATERIAL

Aluminium extrusion profiles in EN AW-6063 T66 alloy

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

- Design with curved blades: SC.096 only
- Facetted design: all Sunclips blade types

BLADE SUPPORT

- Design with curved blades: aluminium clip type SC.080.11 -.15
- Facetted design:
  - for SC.096 blade: UV-resistant plastic clips type SC.084.11 -.14
  - for SE.096, SE.130 and SE.176 blades: UV-resistant plastic clips type SE.084.11 - .19

BLADE INCLINATION

- Design with curved blades: 90°
- Facetted design: 60°

BLADE PITCH

The standard blade pitch is 100 mm. Pitches of 133 mm and 166 mm are recommended for blade types SE.130 and SE.176, respectively.

FASCIA PROFILE

A fascia profile can be added to complete the awning structure. Only type SC.155 can be curved. For details, see p. 88.

WALL FIXING

Different solutions are possible: see p. 84.

MULLIONS

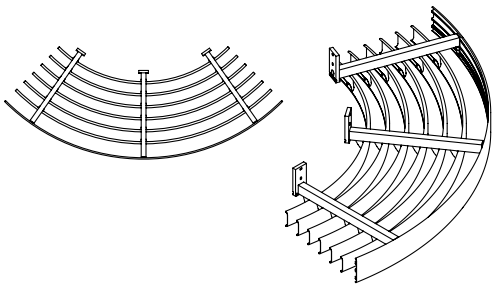
Three standard types of mullions can be used: SD.014, SD.054 and SD.100.
For details, see p. 80.

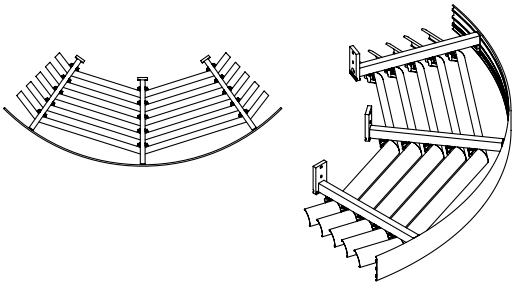
INTERMEDIATE MULLION

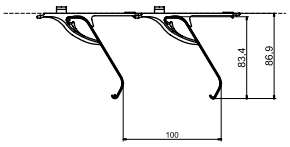
An SD.014 intermediate mullion with standard clips may be needed, depending on the unsupported span of the blades and the local wind load.

TECHNICAL DRAWINGS

Section detail







SC.096

SE.096
SE.130
SE.176

SUNCLIPS® POSITIONED ABOVE

Blades mounted on the support to impede people looking in from above

HORIZONTAL

SUNCLIPS®

POSITIONED ABOVE

INTRODUCTION

Permanent sun awning where the blades are positioned continuously above the mullions. This version can be horizontal or projecting at an angle.

MATERIAL

Aluminium extrusion profile in EN AW-6063 T66 alloy

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

Suitable for all Sunclips blade types

BLADE SUPPORT

Blades are clipped to aluminium clips

BLADE INCLINATION

The standard blade inclination is 45°.

BLADE PITCH

The standard blade pitch is 100 mm. Pitches of 133 and 176 mm are recommended for blades type SE.130 and SE.176, respectively.

FASCIA PROFILE

A fascia profile can be added to complete the awning: see p. 88.

- fascia profile type SC.155: flat fascia profile
- fascia profile blade type SE.176: rounded fascia profile

WALL FIXING

Different solutions are possible for fixing on a wall. For details, see p. 84.

MULLIONS

Three types of mullions can be used for horizontal sun awnings with blades positioned above: SD.014, SD.054 and SD.100. Adapter profile LD.0108 is required for Sunclips^{EVO}, see p. 80.

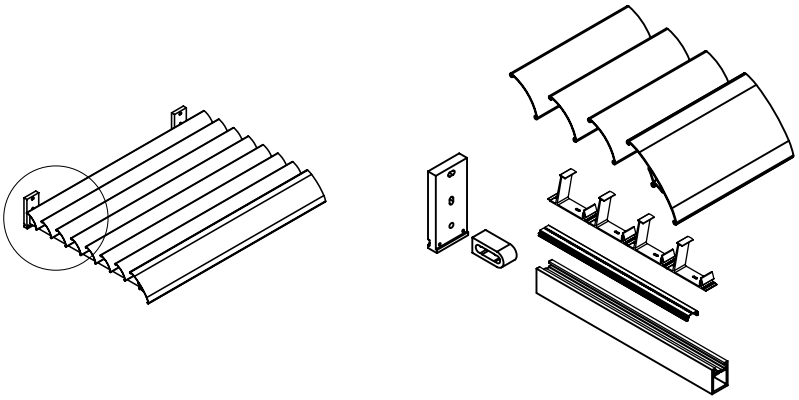
Mullion profiles can be placed under an angle of maximum 30° (see picture on the right).

INTERMEDIATE MULLION

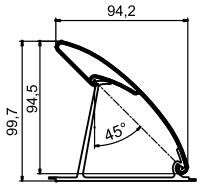
An SD.014 intermediate mullion with standard clips may be needed, depending on the unsupported span of the blades and the local wind load.

TECHNICAL DRAWINGS

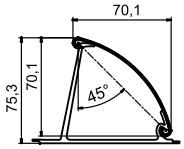
Section detail



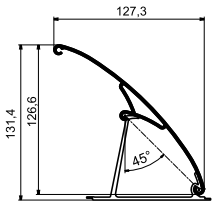
Types



SE.130

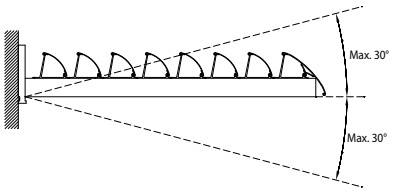


SE.096.01 / SE.096.02



SE.176

Mullion



SUNCLIPS® CASSETTES

Sunclip blades screwed in between aluminium plates

HORIZONTAL

SUNCLIPS®

CASSETTES

INTRODUCTION

Overhanging permanent awning where the blades are screwed in place between end plates. This application can be horizontal or projecting at an angle. The cassettes can be delivered to the site fully preassembled.

MATERIAL

Aluminium extrusion profile in EN AW-6063 T66 alloy.
End plates in aluminium or treated steel

SURFACE TREATMENT

- Anodised (20 micron) (aluminium parts only)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

BLADE TYPE

Possible with blades SE.096, SE.130. and SE.176

BLADE SUPPORT

Only applies to versions with an intermediate mullion

BLADE INCLINATION

Any blade inclination can be chosen. For cassettes with an intermediate mullion, the inclination is 60°.

BLADE PITCH

The standard blade pitch is 100 mm. Pitches of 133 mm and 176 mm are recommended for blade types SE.130 and SE.176, respectively, but any pitch can be used.

WALL FIXING

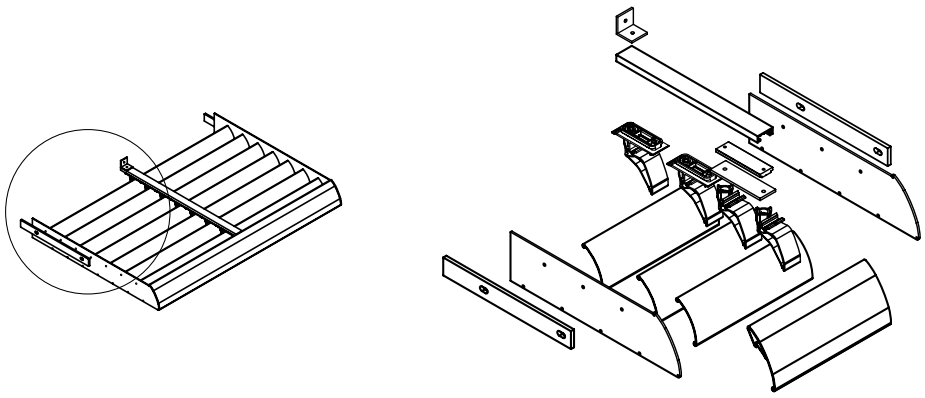
Knife bracket directly on the wall, see p. 84.

INTERMEDIATE MULLION

An SD.014 intermediate mullion with standard clips may be needed, depending on the unsupported span of the blades and the local wind load.

TECHNICAL DRAWINGS

Section detail



VERTICAL SUN PROTECTION

ICARUS® QUICKFIX®

A patented clip system for rapid assembly and continuous lines

VERTICAL

ICARUS®

QUICKFIX

INTRODUCTION

Icarus Quickfix is a unique, patented architectural sun protection system, held in place simply and discreetly using clips. The Quickfix bracket consists of one clip attached to the supporting structure and one fork profile attached to the blade using stainless steel rivets. This 2-part concept allows the blade to expand slightly when heated but avoids stresses occurring in the supporting structure. This system also allows for the creation of a continuous line of blades.

MATERIALS AND CONSTRUCTION

Blade: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are AlMg3 alloy.
Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

The following blade types and inclinations are standard:
ICA.100, 125, 150, 200, 250, 300, 400, ICL.200 and 300 : 45° or 90°
ICA.100, 125, 150, 200, 250, 300, 400, ICL.200 and 300 : 60° or 75°
For details of Quickfix brackets and end caps, see pages 96-103.

APPLICATION

The blades can be installed in a horizontal or vertical line in front of the building façade.

MAXIMUM UNSUPPORTED SPAN

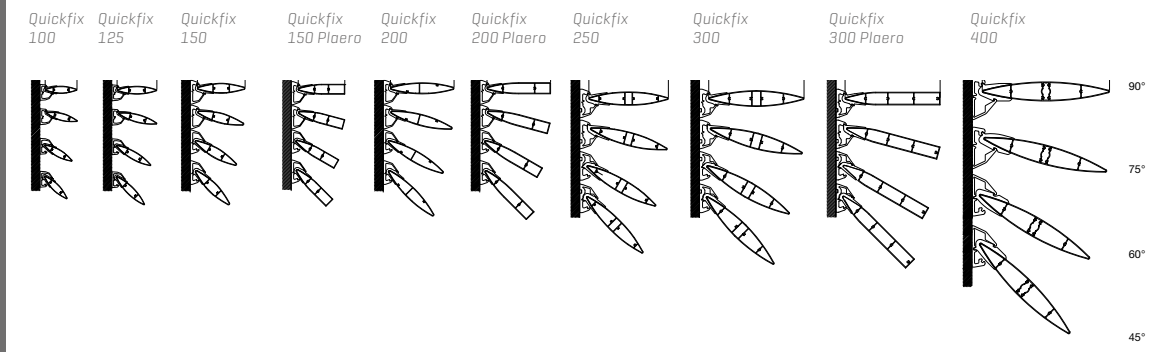
Maximum recommended blade length for angles below 90°:

Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
ICA.100	2000 mm	1860 mm	1590 mm
ICA.125	2150 mm	2000 mm	1706 mm
ICA.150	2775 mm	2580 mm	2200 mm
ICA.200	2820 mm	2620 mm	2240 mm
ICA.250	3320 mm	3085 mm	2635 mm
ICA.300	3735 mm	3735 mm	3415 mm
ICA.400	3235 mm	3235 mm	2865 mm
ICL.150	2860 mm	2660 mm	2270 mm
ICL.200	3210 mm	2980 mm	2545 mm
ICL.300	3700 mm	3455 mm	2950 mm

The maximum unsupported spans described here apply only to the blades and depend on the dimensions of the sun protection. Other spans may be possible after detailed study of the actual project situation.

TECHNICAL DRAWINGS

Section detail



ICARUS® CASSETTE

Icarus blades screwed in between aluminium plates

VERTICAL

ICARUS®

CASSETTE

INTRODUCTION

Vertical, permanent sun protection with multiple blades mounted between end plates to form cassettes. Any blade pitch and inclination can be chosen. Any version of the end plates is also possible. Attachment of the cassettes directly to the load-bearing substructure using standard brackets or attachment to knife brackets.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are aluminium alloy (AlMg3) or steel. The thickness is calculated as a function of the dimensions, weight and local wind load.
Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

MAXIMUM UNSUPPORTED SPAN

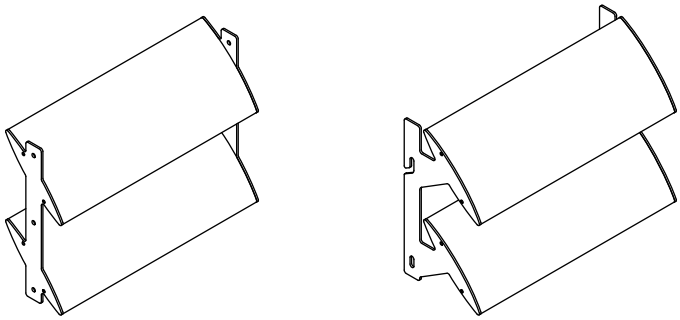
Maximum recommended blade length for angles below 45° in relation to the vertical overhang:

Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
ICA.100	2280 mm	2105 mm	1785 mm
ICA.125	2470 mm	2290 mm	1965 mm
ICA.150	3145 mm	2890 mm	2440 mm
ICA.200	3590 mm	3285 mm	2755 mm
ICA.250	4110 mm	3745 mm	3125 mm
ICA.300	4615 mm	4515 mm	3730 mm
ICA.400	5325 mm	5325 mm	4475 mm
ICA.480	6000 mm	6000 mm	5880 mm
ICL.150	3420 mm	3150 mm	2675 mm
ICL.200	3750 mm	3450 mm	2900 mm
ICL.300	4615 mm	4515 mm	3730 mm
ICP.060	1435 mm	1335 mm	1150 mm
ICP.150	3700 mm	3415 mm	2910 mm
ICP.200/30	3910 mm	3615 mm	3050 mm
ICP.200/40	4735 mm	4675 mm	3935 mm
ICP.300	4755 mm	4440 mm	3725 mm

The maximum unsupported spans described here apply only to the blades and depend on the dimensions of the sun protection. Other spans may be possible after detailed study of the actual project situation.

TECHNICAL DRAWINGS

Section detail



ICARUS® FIXED

Icarus blades with end caps to fix to an existing structure

VERTICAL

ICARUS®

FIXED

INTRODUCTION

Vertical, permanent sun protection with blades mounted between end caps. Any blade pitch and inclination can be chosen. Any version of the end caps is also possible. Attachment of the end caps directly to the load-bearing substructure.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are aluminium alloy (AlMg3). The thickness is calculated as a function of the dimensions, weight and local wind load.
Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

BLADE TYPE

Suitable for all Icarus blades types.

MAXIMUM UNSUPPORTED SPAN

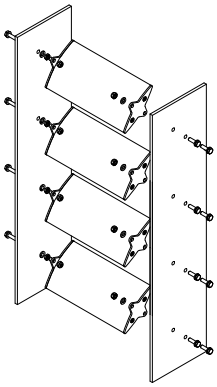
Maximum recommended blade length for angles below 45° in relation to the vertical overhang:

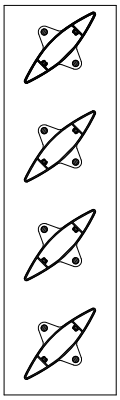
Blade type	Wind load 650 Pa	800 Pa	1250 Pa
ICA.100	2280 mm	2105 mm	1785 mm
ICA.125	2470 mm	2290 mm	1965 mm
ICA.150	3145 mm	2890 mm	2440 mm
ICA.200	3590 mm	3285 mm	2755 mm
ICA.250	4110 mm	3745 mm	3125 mm
ICA.300	4615 mm	4515 mm	3730 mm
ICA.400	5325 mm	5325 mm	4475 mm
ICA.480	6000 mm	6000 mm	5880 mm
ICL.150	3420 mm	3150 mm	2675 mm
ICL.200	3750 mm	3450 mm	2900 mm
ICL.300	4615 mm	4515 mm	3730 mm
ICP.060	1435 mm	1335 mm	1150 mm
ICP.150	3700 mm	3415 mm	2910 mm
ICP.200/30	3910 mm	3615 mm	3050 mm
ICP.200/40	4735 mm	4675 mm	3935 mm
ICP.300	4755 mm	4440 mm	3725 mm

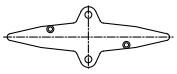
The maximum unsupported spans described here apply only to the blades and depend on the dimensions of the sun protection. Other spans may be possible after detailed study of the actual project situation.

TECHNICAL DRAWINGS

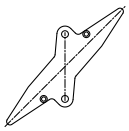
Section detail







Type 14



Type 15

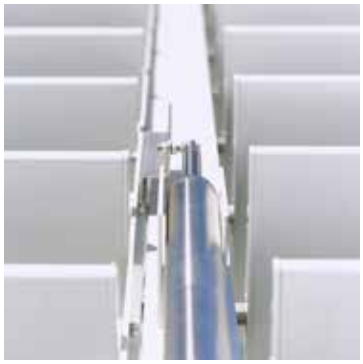
ICARUS® MOVABLE

Dynamic sunshade system with movable blades

VERTICAL

ICARUS®

MOVABLE



INTRODUCTION

Vertical sun protection with movable blades. The blades can be tilted a standard 90°. Other angles are possible in consultation with our project division.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion alloy EN AW-6063 T66
End plates in aluminium AlMg3.
Support structures in aluminium or steel, according to protrusion, blade weight, and wind and snow load.
Axles made of stainless steel mounted centrally in aluminium end caps.
Bearings and locking rings made of UV-resistant synthetic material.
Stainless steel tapping screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))
- Steel components are galvanised and powder coated

BLADE TYPE

Suitable for all Icarus blades types.

MAXIMUM UNSUPPORTED SPAN

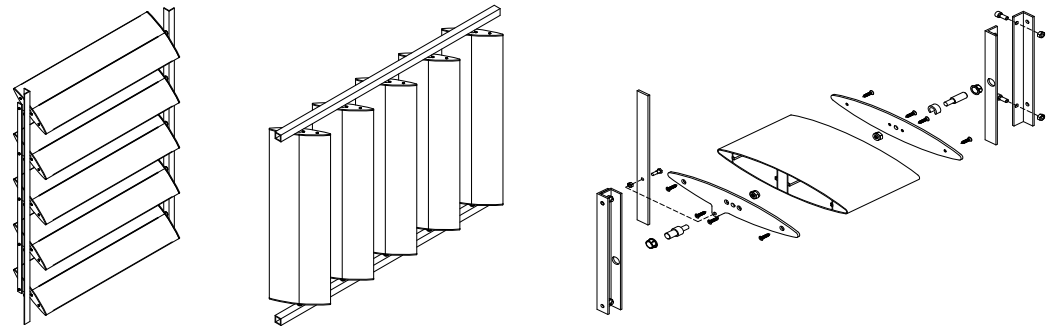
Recommended maximum blade length:

Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
ICA.100	2000 mm	1860 mm	1590 mm
ICA.125	2145 mm	1990 mm	1700 mm
ICA.150	2775 mm	2580 mm	2200 mm
ICA.200	2820 mm	2615 mm	2240 mm
ICA.250	3325 mm	3085 mm	2630 mm
ICA.300	3735 mm	3735 mm	3415 mm
ICA.400	4315 mm	4315 mm	3820 mm
ICA.480	5170 mm	5170 mm	4975 mm
ICL.150	2950 mm	2825 mm	2410 mm
ICL.200	2985 mm	2765 mm	2365 mm
ICL.300	3735 mm	3735 mm	3415 mm
ICP.150	3130 mm	3075 mm	2620 mm
ICP.200/30	3150 mm	2920 mm	2495 mm
ICP.200/40	3835 mm	3775 mm	3220 mm
ICP.300	3850 mm	3620 mm	3150 mm

The maximum unsupported spans described here apply only to the blades and depend on the dimensions of the sun protection. Other spans may be possible after detailed study of the actual project situation.

TECHNICAL DRAWINGS

Section detail



SUNCLIPS® ON MULLIONS

Rapid assembly using clip system. Continuous lines.

VERTICAL

SUNCLIPS®

ON MULLIONS

INTRODUCTION

Vertical, permanent visual barrier or sun shading. Ideal for use as sun shading on east- or west-facing walls.

MATERIAL

Aluminium extrusion profile in EN AW-6063 T66 alloy

SURFACE TREATMENT

- Anodised (20 micron)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

Possible with all Sunclips blades

BLADE SUPPORT

Blades are clipped to aluminium clips

BLADE INCLINATION

The standard blade inclination is 45°.

BLADE PITCH

The standard blade pitch is 100 mm. Pitches of 133 mm and 176 mm are recommended for blade types SE.130 and SE.176, respectively.

MULLIONS

Sunclips Evo range is possible on all SD and LD mullion types.
For details, see p. 81-82.

OPTIONAL: EXTENSION PANELS

Prefabricated extension panels can be provided for vertical sun shading, e.g. to allow window cleaning.

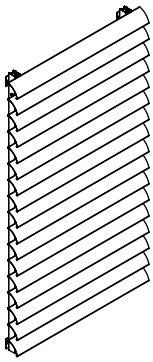
MAXIMUM UNSUPPORTED SPAN

Recommended maximum blade length:

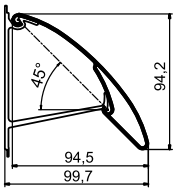
Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
SE.096	1350 mm	1220 mm	1000 mm
SE.130	2000 mm	1800 mm	1440 mm
SE.176	2000 mm	1800 mm	1440 mm

TECHNICAL DRAWINGS

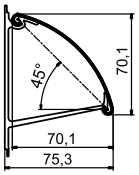
Section detail



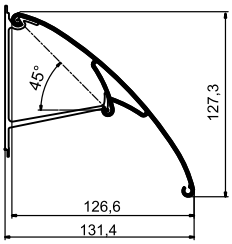
Types



SE.130



SE.096.01 / SE.096.02



SE.176

SUNCLIPS® CASSETTES

Sunclip blades screwed in between aluminium plates

VERTICAL

SUNCLIPS®

CASSETTES

INTRODUCTION

Vertical, permanent sun protection with multiple blades mounted between end plates to form cassettes. Any blade pitch and inclination can be chosen. Any version of the end plates is also possible. The cassettes can be delivered to the site fully preassembled. Attachment of the cassettes directly to the load-bearing substructure using standard brackets or attachment to knife brackets.

MATERIALS AND CONSTRUCTION

Blades: aluminium extrusion profile in EN AW-6063 T66 alloy
End plates are aluminium alloy (AlMg3) or steel.
The thickness is calculated as a function of the dimensions, weight and local wind load.
Stainless steel sheet-metal screws and fasteners.

SURFACE TREATMENT

- Anodised (20 micron) (only aluminium parts)
- Polyester powder coating RAL or Syntha Pulvin colors (60-80 µ/40 µ (UK))

BLADE TYPE

Possible with blades SE.096, SE.130. and SE.176

BLADE SUPPORT

Not applicable

BLADE INCLINATION

The standard blade inclination is 45°. Any blade inclination can be chosen.

BLADE PITCH

The standard blade pitch of SE.096 blades is 100 mm. Pitches of 133 mm and 176 mm are recommended for blade types SE.130 and SE.176, respectively. Any blade pitch can be chosen.

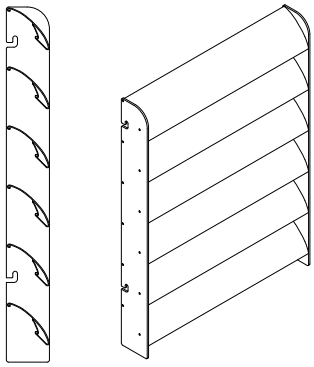
MAXIMUM UNSUPPORTED SPAN

Recommended maximum blade length:

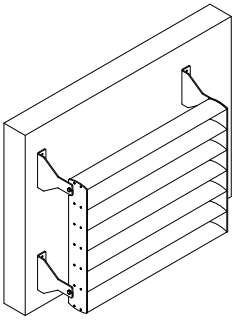
Blade type	Wind load		
	650 Pa	800 Pa	1250 Pa
SE.096	1350 mm	1220 mm	1000 mm
SE.130	2000 mm	1800 mm	1440 mm
SE.176	2000 mm	1800 mm	1440 mm

TECHNICAL DRAWINGS

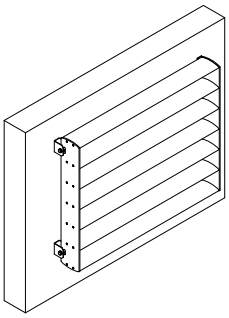
Section detail



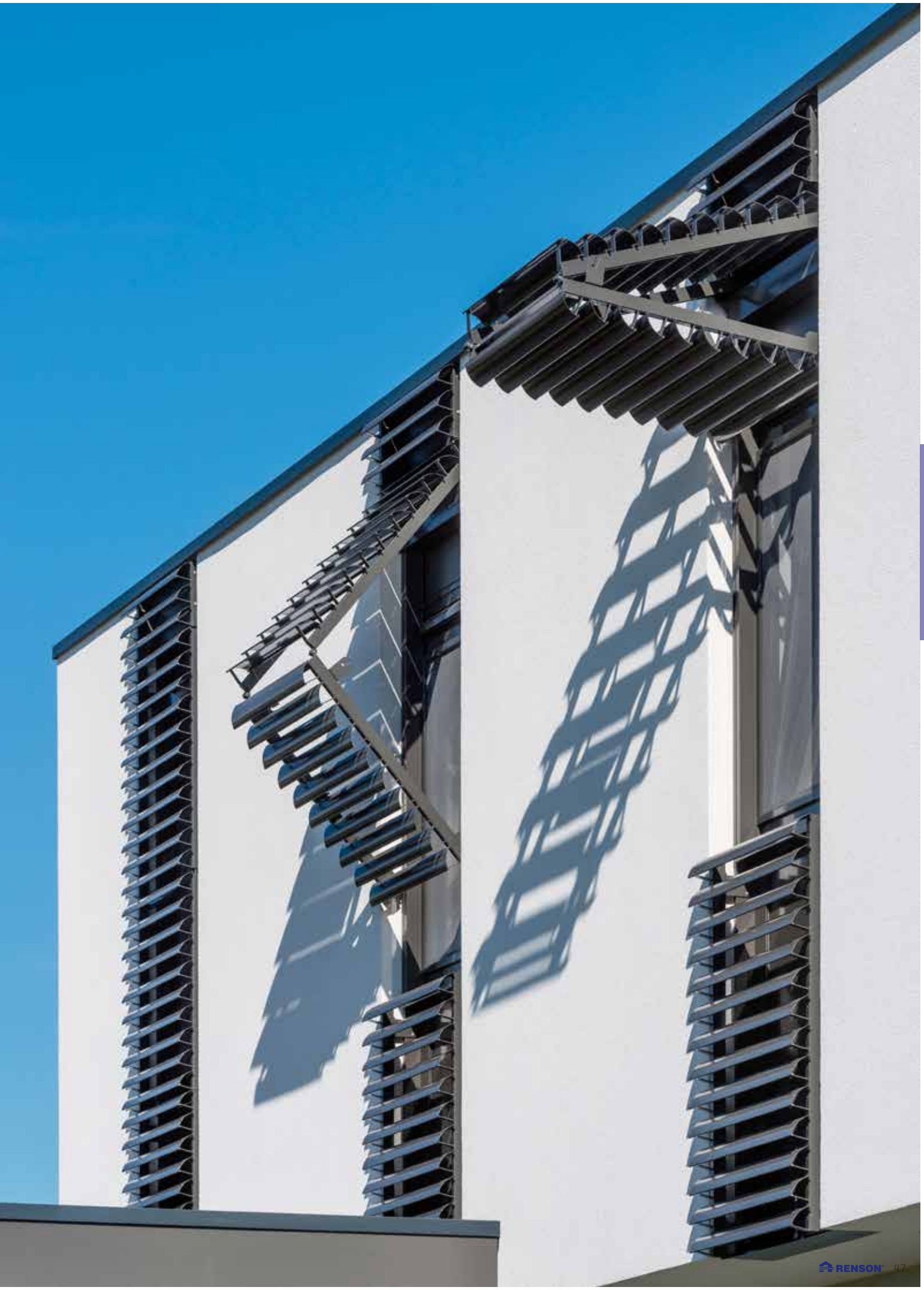
Attachment to knife bracket



Attachment using standard brackets



FOLDING SHUTTERS



CILIUM®

Convert vertical sun protection into into a horizontal awning

DYNAMIC

CILIUM®

FOLDING SHUTTER

INTRODUCTION

Cilium is a dynamic sunshade by Renson® that can be transformed from a vertical sunshade in front of a window to a horizontal, open position above a window. Cilium meets the requirements set by the EPBD "Energy Performance of Buildings Directive". Based on these guidelines, energy performance standards were introduced in all EU Member States for new builds and building renovations with the goal to reduce energy use in buildings.

MATERIALS AND CONSTRUCTION

Cilium is completely rustproof and consists mainly of aluminium and is available in anodized or powder coated versions.
Cilium is powered by 230V motor and belt-drive system.

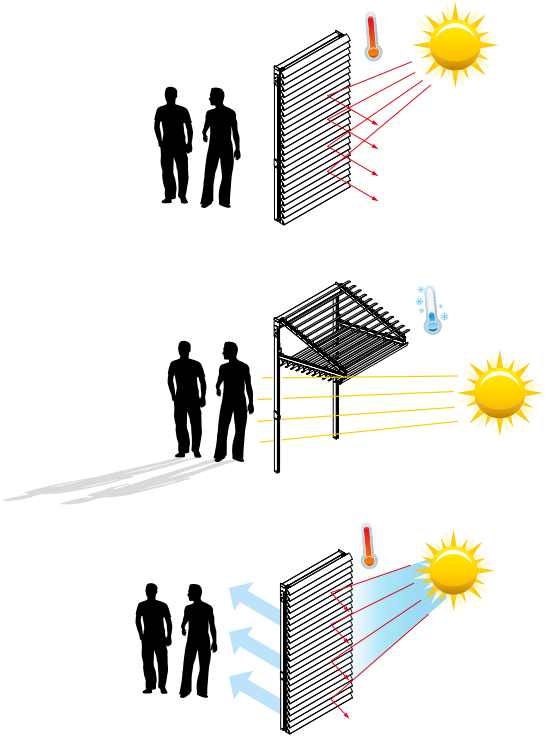
EXECUTIONS

Cilium is available as standard in the following versions:

- with Sunclips Evo SE.096 cladding
- with Sunclips Evo SE.130 cladding
- without cladding

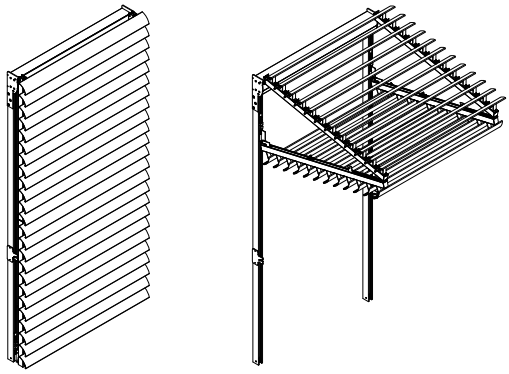
DIMENSIONS

Maximum height 3000 mm, maximum surface 4,5 m²
Maximum weight of the system incl. cladding: 50 kg



TECHNICAL DRAWINGS

Section detail



SLIDING PANELS

LOGGIALU®

Sliding panel with fixed parallelogram-shaped aluminium blades

SLIDING PANEL

LOGGIALU

INTRODUCTION

Loggialu combines the functionality of an efficient sun protection panel with the elegant appearance and aesthetic design of a high-quality modern concept. The frame ensures its stability, whilst the aluminium blades are incorporated into the side channels discreet and without visible fixing.

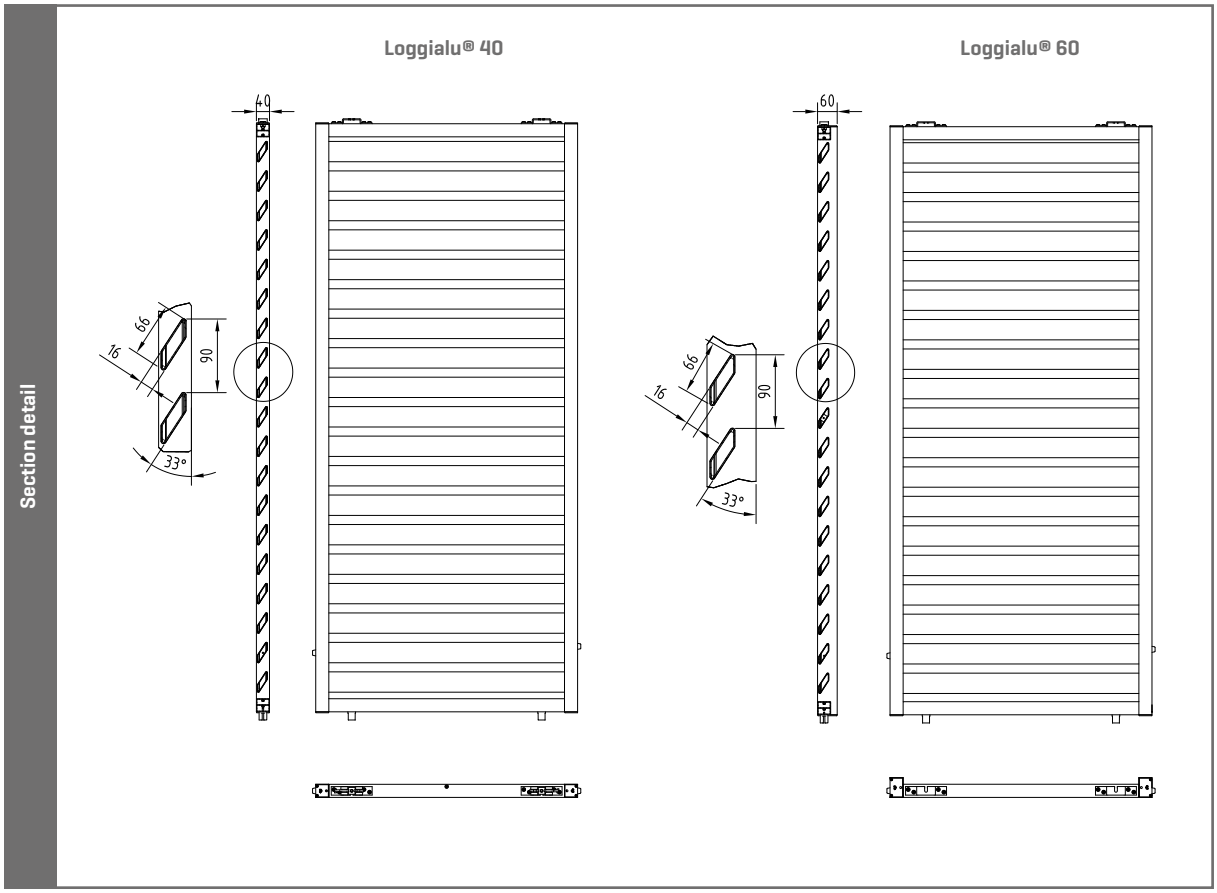
PRODUCT

- Efficient sun protection with maximum light and comfortable viewing
- Similar view of the element from inside and outside
- Finished panels without visible fixing elements
- Panel in extruded aluminium with anodised or powder coated finish
- Low maintenance:
  - High quality and maintenance-free slide fittings
  - Powder-coated or anodised aluminium finish, easy to clean
- Suitable as sliding or fixed panel
- Sliding systems:
  - Easy sliding
  - Symmetrical sliding
  - Telescopic sliding (Loggialu Paro 0140)
  - Manual or motorised
- Sizes are depending on the local wind load and regional legislation
- Loggialu Paro is available pre-assembled (custom manufacturing) or for self-assembly as a modular design (stock lengths, accessories and parts)

TECHNICAL SPECIFICATIONS

- Aluminium components
  - Aluminium extrusion, alloy EN AW-6063 T66
  - Anodised (20 micron) F1
  - Polyester powder coating RAL or Syntha Pulvin colours (60-80 µ / 40 µ (UK)
- Blades
  - Blade pitch : 90 mm
  - Depth : 30 mm
  - Inclination : 33°
  - Extreme angle of sunlight AS: 46°
  - Perpendicular visual opening OV: 31%
  - Maximum free span of the blade: 1500 mm
    Larger panel widths (> 1500 mm) are possible with spacers.
- CE markings approved
- Frames
  - Loggialu Paro 0140:
    Frame with a depth of 40 mm, suitable for normal panel dimensions (maximum panel height 3000 mm) and wind loads.
  - Loggialu Paro 0160:
    Frame with a depth of 60 mm, suitable for normal panel dimensions (maximum panel height 3500 mm) and wind loads.
- Depending on the height of the sliding panel, the horizontal frame profile (above and/or below) can be 70 mm high instead of 40 mm

TECHNICAL DRAWINGS



OVERVIEW OF POSSIBLE PANEL HEIGHTS "H" BASED ON WIND LOAD QB AND PANEL WIDTH "W":

Frame	Wind load qb in Pa	Typical panel widths "W" in mm		
		800	1200	1500
Standard 40	600	3000	2730	2580
	800	2800	2540	2400
	1200	2540	2300	2170 *
Project solutions 60	600	3500	3500	3500
	800	3500	3450	3270
	1200	3450	3120	2950 *

** With spacer:*
In consultation with our project team for detailed or larger panel dimensions.
Basic wind load qb in accordance with norm ENV 1991-2-4(1995).

OPTIONS

- Flexible lower guiding system: Flexguide (see p. 78)

LOGGIALU® PRIVACY

Sliding panel with movable aluminium blades

SLIDING PANEL

LOGGIALU

PRIVACY

INTRODUCTION

Loggialu Privacy combines the functionality of an efficient sun protection panel with the elegant appearance and aesthetic design of a high-quality modern concept. The blades are moveable with the "Privacy" concept, so they can be manually tilted from a closed to a completely open position or vice versa. The secure surrounding frame of extruded aluminium ensures good shape retention of the whole without visible fixations in the corners.

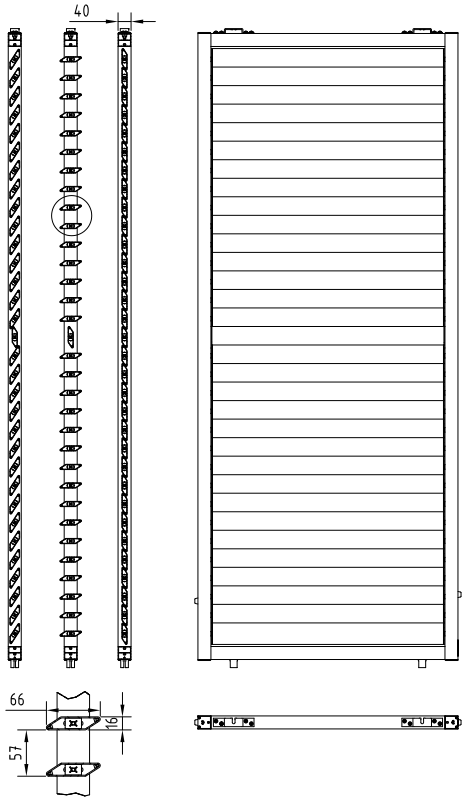
PRODUCT

- Blades suitable for manual tilting from closed to open position or vice versa and divided into two operating areas, which allows, for example, the blades to be in an open position above and closed below
- Aesthetically finished panels without visible fixing elements
- Frame and blades in extruded aluminium with anodised or powder coated finish
- Pre-assembled and ready to install, custom manufacture
- Low maintenance:
  - High quality and maintenance-free slide fittings
  - Powder-coated or anodised aluminium finish, easy to clean
- Suitable as sliding or fixed panel
- Sliding systems:
  - Easy sliding
  - Symmetrical sliding
  - Telescopic sliding (Loggialu Paro 0140 Privacy)
- Sliding panel manually operated or motorised
- Sizes are depending on the local wind load and regional legislation

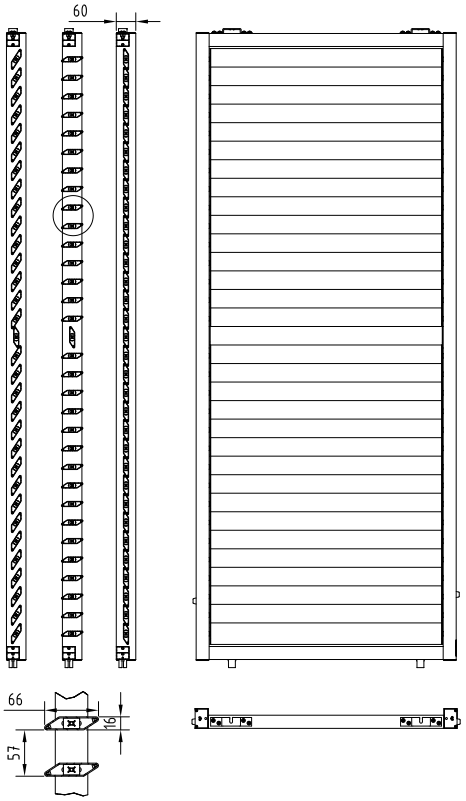
TECHNICAL DRAWINGS

Section detail

Loggialu® Privacy 40



Loggialu® Privacy 60



TECHNICAL SPECIFICATIONS

- Aluminium components
  - Aluminium extrusion, alloy EN AW-6063 T66
  - Anodised (20 micron) F1
  - Polyester powder coating RAL or Syntha Pulvin colours (60-80 µ / 40 µ (UK))
- Blades
  - Blade pitch : 57 mm
  - Blade inclination: 147°
  - Size of the blade: 65 x 16 mm
  - Maximum free span of the blade: 1.500mm
- CE markings approved
- Frames
  - Loggialu Paro 0140 Privacy:
    Frame with a depth of 40 mm, suitable for normal panel dimensions (maximum panel height 3000 mm) and wind loads.
  - Loggialu Paro 0160 Privacy:
    Frame with a depth of 60 mm, suitable for normal panel dimensions (maximum panel height 3500 mm) and wind loads.
- Depending on the height of the sliding panel, the horizontal frame profile on top can be 55 mm instead of 40 mm and 55 or 70 mm below instead of 40 mm high.

OPTIONS

- Flexible lower guiding system Flexguide (see p.78)

LOGGIALU® PLANO

Sliding panel with fixed rectangular aluminium blades

SLIDING PANEL

LOGGIALU

PLANO

INTRODUCTION

Loggialu Plano combines the functionality of an efficient sunshade with the elegant appearance and aesthetic design of a high-value contemporary concept. The firmly encircling framework guarantees good retention of shape for the entire unit, while the fine, perpendicular aluminium louvres are incorporated discreetly and without visible attachment into the vertical side profiles of the framework.

PRODUCT

- Efficient sun protection during maximum light entry and a comfortable view
- Identical appearance of the element both inside and outside
- Finished panels without visible connecting elements
- Panel in extruded aluminium with anodised or powder-coated finish
- Low maintenance:
  - High-value and low maintenance sliding hardware
  - Powder-coated or anodised aluminium, easy to clean
- Suitable as sliding panel or fixed panel
- Sliding systems: Simple, symmetrical, telescopically sliding (Loggialu Plano 0140), manual or motor-driven
- Possible dimensions depend on the local wind force and regional regulations (*)
- Loggialu Plano is delivered ready for installation (custom production).

(*) In consultation with our project team

TECHNICAL SPECIFICATIONS

- Aluminium components:
  - Aluminium extrusion, EN AW-6063 T66 alloy
  - Anodised (20 micron) F1
  - Polyester powder-coat paint (60-80 micron) in RAL colours
- Louvres
  - Step: 50 mm
  - Depth: 33 mm
  - Height: 16 mm
  - Outermost angle of direct sun entry AS: 46°
  - Perpendicular visual opening OV: 32 %
  - Maximum possible unsupported span for the louvre: 1,200 mm
- CE certified sliding panels
- Frames
  - Loggialu Paro 0140: Frame with a depth of 40 mm. Suitable for normal dimensions (maximum panel height 3000 mm) and wind forces.
  - Loggialu Paro 0160: Frame with a depth of 60 mm. Suitable for larger dimensions (maximum panel height 3500 mm) and higher wind forces.
- Depending on the height of the sliding panel, the horizontal framework profile (upper and/or lower) is 70 mm high instead of 40 mm.

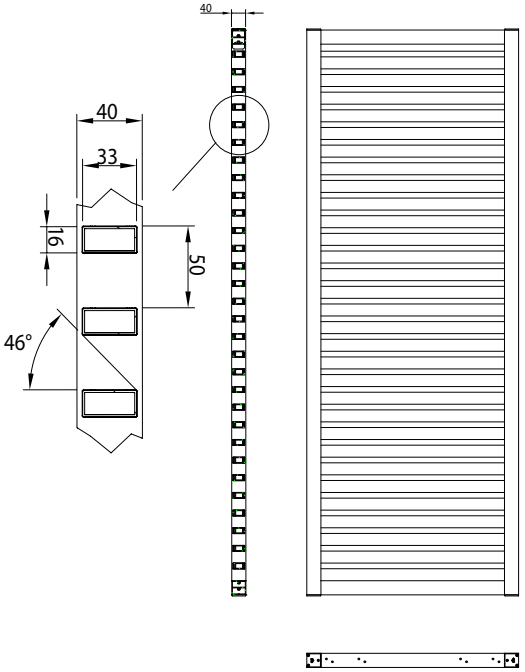
OPTIONS

- Flexguide flexible lower guide (see p.78)

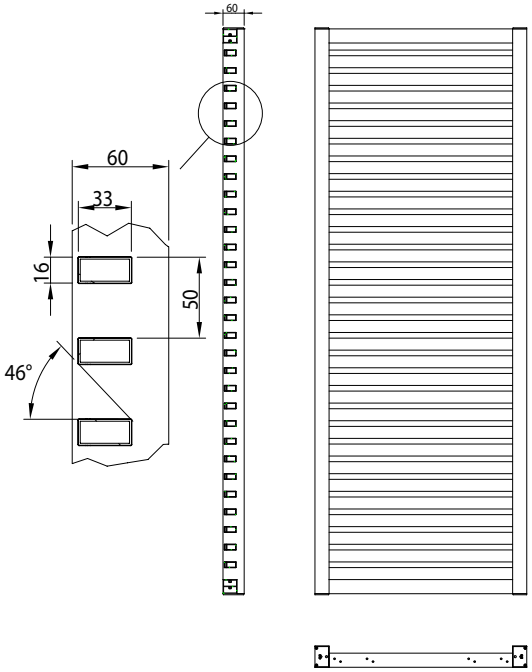
TECHNICAL DRAWINGS

Section detail

Loggialu® 40



Loggialu® 60



LOGGIAWOOD®

Sliding panel with fixed wooden blades

SLIDING PANEL

LOGGIAWOOD

INTRODUCTION

Loggiawood Paro combines the quality of aluminium and the naturalness of wood in an efficient, aesthetic contemporary system. The solid extruded aluminium frame ensures the panel retains its shape, with the wooden blades providing a very natural and elegant look.

PRODUCT

- Efficient sun protection with maximum light and comfortable viewing
- Similar view of the element from inside and outside
- Finished panels without visible fixing elements
- Panel in extruded aluminium with anodised or powder coated finish
- Low maintenance:
  - High quality and maintenance-free slide fittings
  - Powder-coated or anodised aluminium finish, easy to clean
- Suitable as sliding or fixed panel
- Sliding systems:
  - Easy sliding
  - Symmetrical sliding
  - Telescopic sliding (Loggialu Paro 0140)
  - Manual or motorised
- Sizes depending on the local wind load and regional legislation
- Loggialu Paro is available pre-assembled (custom manufacturing) or for self-assembly as a modular design (stock lengths, accessories and parts)

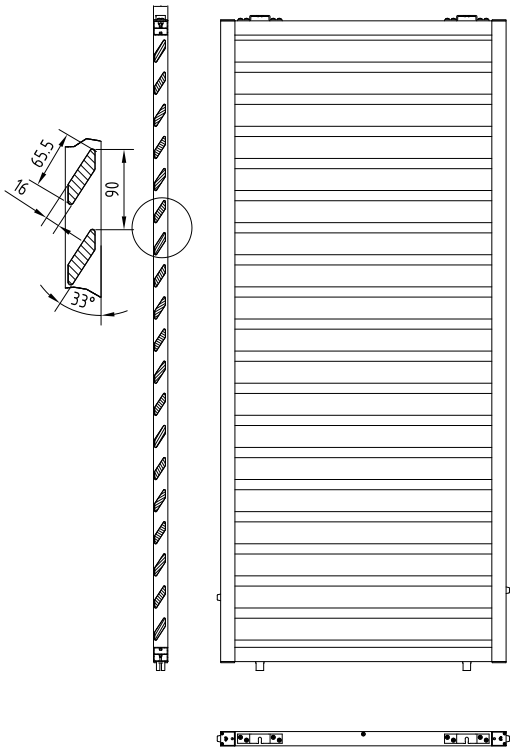
TECHNICAL SPECIFICATIONS

- Aluminium components
  - Aluminium extrusion, alloy EN AW-6063 T66
  - Anodised (20 micron) F1
  - Polyester powder coating RAL or Syntha Pulvin colours (60-80 µ / 40 µ (UK))
- Wooden blades
  - WR Cedar Clear n 2
  - Untreated, for natural aging
  - Blade pitch: 90 mm
  - Depth: 30 mm
  - Inclination: 33°
  - Extreme angle of sunlight AS: 46°
  - Perpendicular visual opening OV: 31%
  - Maximum possible free span of the blade: 1.200 mm
    Larger panel widths (> 1.200 mm) are possible using spacers.
- CE markings approved
- Frames
  - Loggiawood Paro 0140:
    Frame with a depth of 40 mm, suitable for normal panel dimensions (maximum panel height 3000 mm) and wind loads.
  - Loggiawood Paro 0160:
    Frame with a depth of 60 mm, suitable for normal panel dimensions (maximum panel height 3500 mm) and wind loads.
- Depending on the height of the sliding panel, the horizontal frame profile (above and/or below) can be 70 mm high instead of 40 mm

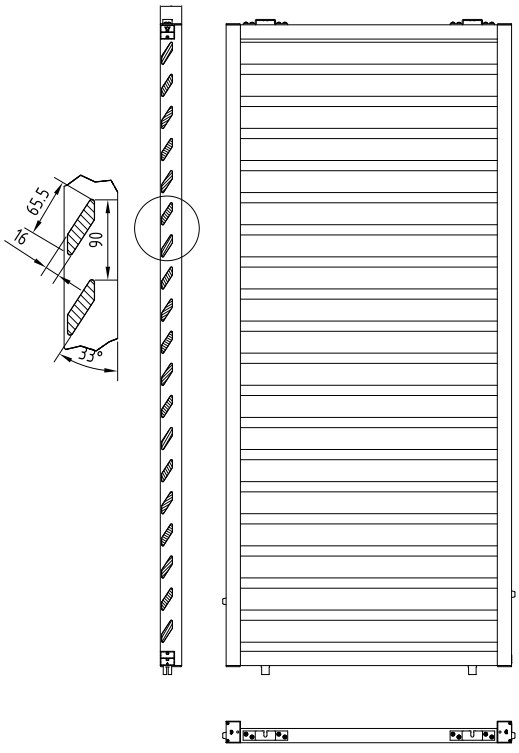
TECHNICAL DRAWINGS

Section detail

Loggiawood® Paro 0140



Loggiawood® Paro 0160



OVERVIEW OF POSSIBLE PANEL HEIGHTS "H" BASED ON WIND LOAD QB AND PANEL WIDTH "W":

Frame	Wind load qb in Pa	Typical panel widths "W" in mm		
		800	1200	1500
Standard 40	600	3000	2740	2590 *
	800	2820	2550	2410 *
	1200	2550	2300	2180 *
Project solutions 60	600	3500	3500	3500 *
	800	3500	3460	3280 *
	1200	3460	3130	2960 *

** With spacer:*
In consultation with our project team for detailed or larger panel dimensions.
Basic wind load qb in accordance with norm ENV 1991-2-4(1995).

OPTIONS

- Flexible lower guiding system Flexguide (see p.78)

LOGGIAWOOD® PRIVACY

Sliding panel with movable wooden blades

SLIDING PANEL

LOGGIAWOOD

PRIVACY

INTRODUCTION

Loggiawood Privacy combines the quality of aluminium and the natural aspect of wood in an aesthetic and efficient modern concept. The blades are moveable with the "Privacy" concept, so they can be manually tilted from a closed to a completely open position or vice versa. The frame of extruded aluminium ensures its stability, whilst the wooden blades on the panel provide a very natural and elegant appearance.

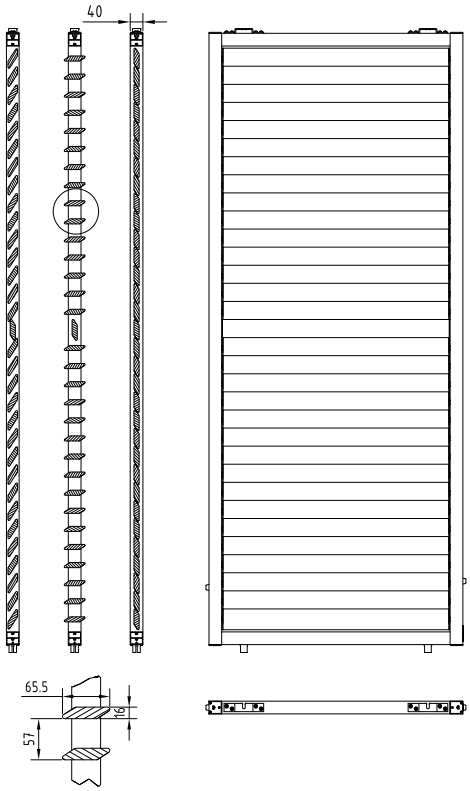
PRODUCT

- Blades suitable for manual tilting from closed to open position or vice versa and divided into two operating areas, which allows, for example, the blades to be in an open position above and closed below
- Aesthetically finished panels without visible fixing elements
- Frame in extruded aluminium with anodised or powder coated finish
- Pre-assembled and ready to install, custom manufacture
- Low maintenance:
  - High-quality wood, suitable for natural aging
  - High-quality and maintenance-free slide fittings
  - Powder-coated or anodised aluminium finish, easy to clean
- Suitable as sliding or fixed panel
- Sliding systems:
  - Easy sliding
  - Symmetrical sliding
  - Telescopic sliding (Loggiawood Paro 0140 Privacy)
- Sliding panel can be manually operated or motorised
- Sizes are depending on the local wind load and regional legislation

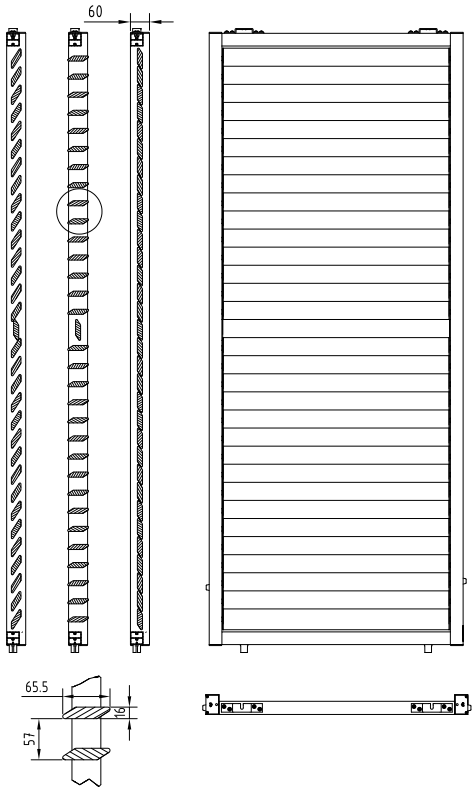
TECHNICAL DRAWINGS

Section detail

Loggiawood® Privacy 40



Loggiawood® Privacy 60



TECHNICAL SPECIFICATIONS

- Aluminium components
  - Aluminium extrusion, alloy EN AW-6063 T66
  - Anodised (20 micron) F1
  - Polyester powder coating RAL or Syntha Pulvin colours (60-80 µ / 40 µ (UK))
- Wooden blades
  - WR Cedar Clear n 2
  - Untreated, for natural aging
  - Blade pitch : 57 mm
  - Blade inclination: 147°
  - Size of the blade: 65 x 16 mm
  - Maximum free span of the blade: 1.200 mm
- CE markings approved
- Frames
  - Loggiawood Paro 0140 Privacy:
    Frame with a depth of 40 mm, suitable for normal panel dimensions (maximum panel height 3000 mm) and wind loads.
  - Loggiawood Paro 0160 Privacy:
    Frame with a depth of 60 mm, suitable for normal panel dimensions (maximum panel height 3500 mm) and wind loads.
- Depending on the height of the sliding panel, the horizontal frame profile above can be 55 mm instead of 40 mm and 55 or 70 mm below instead of 40 mm high.

OPTIONS

- Flexible lower guiding system Flexguide (see p.78)

LOGGIASCREEN® CANVAS

Sliding panel with screen fabric

SLIDING PANEL

LOGGIASCREEN

CANVAS

INTRODUCTION

Loggiascreen Canvas is a sliding panel with a contemporary design, which combines the characteristics of different materials. For efficient management of light and heat penetration, a high performant sun protection screen is clamped around a firm aluminum frame. A minimalistic look is obtained thanks to the invisible frame.

PRODUCT

- Efficient sun protection
- Finished panels without visible connecting elements
- Panel in extruded aluminium with anodised or powder-coated finish
- Screen made of prestressed coated polyester fabric (Soltis) or glass fibre (Sergé)
- Low maintenance:
  - High-value and low maintenance sliding hardware
  - Powder-coated or anodised aluminium, easy to clean
- Suitable as sliding panel or fixed panel
- Sliding systems: Simple, symmetrical, telescopically sliding (Loggialu Plano 0140), manual or motor-driven
- Possible dimensions depend on the local wind force and regional regulations (*). Maximum panel height 3000 mm.
- Loggiascreen Canvas is delivered ready for installation (custom production).
- CE certified sliding panels
- Frame 40 x 55 mm

(*) In consultation with our project team.

TECHNICAL SPECIFICATIONS

Aluminium components:

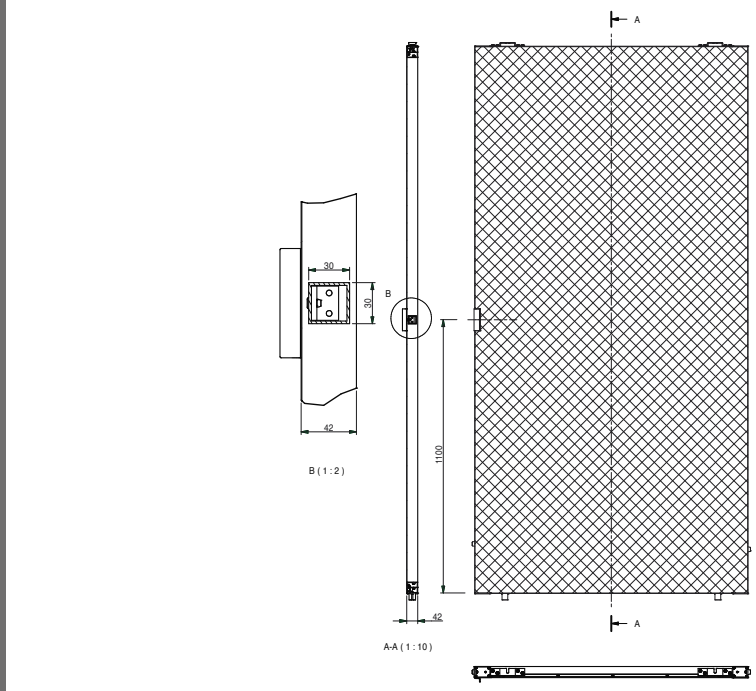
- Anodised (20 micron) F1
- Polyester powder-coat paint (60-80 micron) in RAL colours
- Aluminium extrusion, EN AW-6063 T66 alloy
- Screen fabric based on prestressed coated polyester fabric (Soltis 86) or glass fibre (Sergé), available in a wide range of colours

OPTIONS

- Flexguide flexbile lower guide
- Aluminium handle

TECHNICAL DRAWINGS

Section detail



LG.040 + LG.065

Aluminium sliding panels for project solutions

SLIDING PANEL

LOGGIALU

LG.040
LG.065

INTRODUCTION

Loggialu LG.040 and LG.065 are systems with a slim frame that goes all the way around and serve to control the solar heat and natural daylight. The fittings for these sliding panels consist of fixed blades of extruded aluminium, clipped into the system using the appropriate blade holders.

NORMAL MAXIMUM DIMENSIONS:

Blade type	Wind load qb in Pa	Typical dimension L x H (mm x mm)
LG.040 + L.066.21	650	1100 x 2500
	800	900 x 2500
	1250	800 x 2240
LG.065 + L.066.01	650	1000 x 3220
	800	1000 x 3010
	1250	800 x 2790

In consultation with our project team for detailed or larger panel dimensions.
Basic wind load qb in accordance with norm ENV 1991-2-4(1995).

TECHNICAL

- **LG.040 + L.066.21**
  Perpendicular visual opening OV: 30,3 %
  Limited angle of sunray incidence AS: 33°
  Blade pitch: 66 mm

- **LG.065 + L.066.01**
  Perpendicular visual opening OV: 42 %
  Limited angle of sunray incidence AS: 45°
  Blade pitch: 132 mm

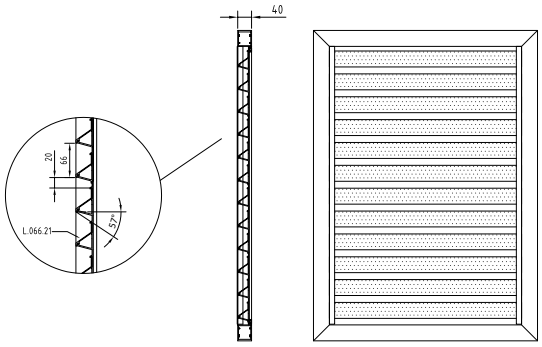
SURFACE TREATMENT

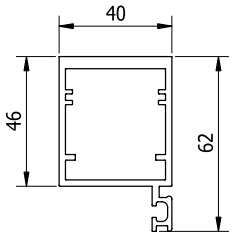
- Anodised (20 micron)
- Polyester powder-coated RAL or Syntha Pulvin colours (60 - 80 µ / 40 µ (UK))

TECHNICAL DRAWINGS

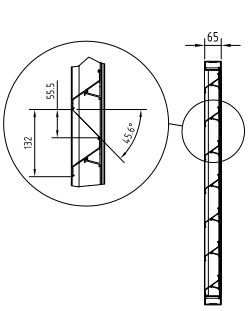
Section detail

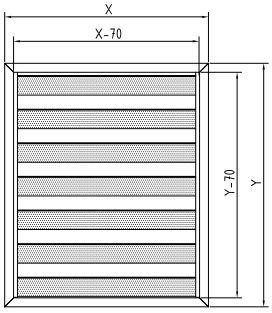
LG.040 + L.066.21

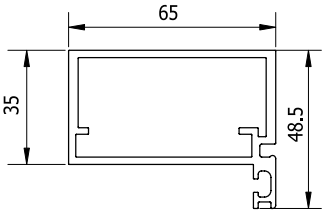




LG.065 + L.066.01







Loggia® LG.065 met L.066.01, Keppekouter, Kantoren, Erembodegem (BE)

LG.130

Aluminium sliding panels for project solutions

SLIDING PANEL

LOGGIALU

LG.130

INTRODUCTION

Loggia LG.130 frames are extra rigid, designed to meet the requirements for sun protection panels up to 6,000 mm in height. The local wind pressure bearing on the system and the type of blade to be fitted are always taken into account. LG.130 type frames can be fitted with different types of blades: ICA.125, ICA.150, ICP.150 and SE.130. The blades can be positioned at different inclinations and at different intervals. The following table suggests twenty different possibilities. Other configurations are possible on request.

To manage solar heat and natural daylight even more effectively, Renson® has developed the Loggialu LG.130 with manually **moving blades ICA.125**. This system allows not only the panel to be put in the desired position, but the blades can also be rotated into their ideal position. The angle of the blades depends on the position of the sun or the desired sun shading.

SURFACE TREATMENT

- Anodised (20 microns)
- Polyester powder-coated RAL or Syntha Pulvin colours (60 - 80 µ / 40 µ (UK))

TECHNICAL SPECIFICATIONS

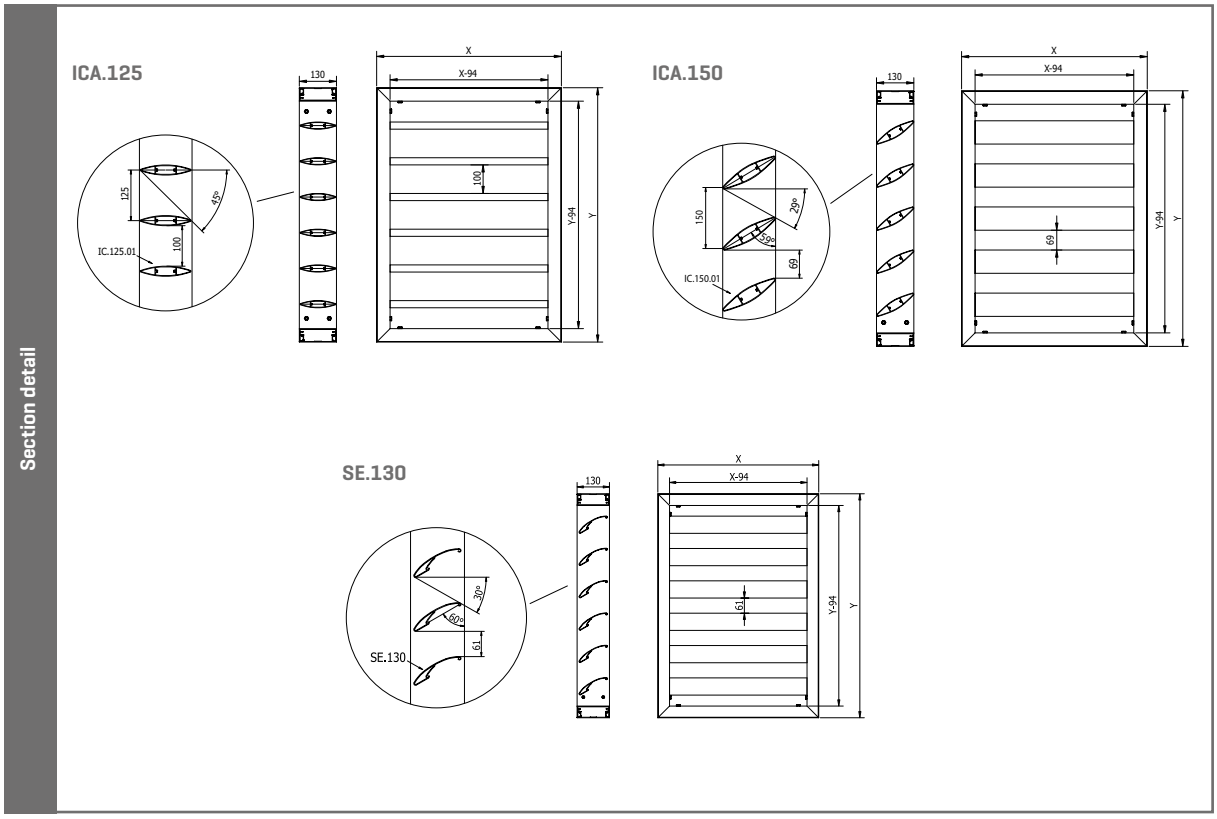
- Aluminium extrusion, alloy EN AW-6063 T66
- Anodised (20 micron) F1
- Polyester powder-coated RAL or Syntha Pulvin colours (60-80 µ / 40 µ (UK))
- Made-to-mesure
- Sliding panel operated manually or motorised
- Manual tilting blades
- Blades adjustable in 15° increments (7 positions)
- Maximum dimensions to be checked on request

Blade type	Angle (°)	Blade pitch (mm)	AS (°)	OV (%)
ICA.125	90	125	45	80,0
ICA.125	75	125	37	70,8
ICA.125	75	150	44	75,7
ICA.125	60	125	30	48,4
ICA.125	60	150	39	57,0
ICA.125	60	175	46	63,1
ICA.125	45	125	22	28,3
ICA.125	45	150	35	40,3
ICA.125	45	175	44	48,8
ICA.150	59	150	29	46,0
ICA.150	59	200	44	59,5
ICA.150	45	150	22	27,8
ICA.150	45	200	42	45,9
SE.130	60	130	30	46,8
SE.130	60	160	40	56,8
SE.130	45	130	22	27,5
SE.130	45	160	37	41,1
SE.130	45	190	47	50,4

AS: Limit angle of sunray incidence · OV: Perpendicular visual opening

TECHNICAL DRAWINGS

Section detail



PATIO

Aluminium sliding panels for project solutions. Slim frame.

SLIDING PANEL

PATIO

INTRODUCTION

Sunclips and Icarus Patio are sliding panels consisting of sun protection blades screwed between 2 flat vertical profiles. This assembly principle is the basis of this product's great flexibility: different types of blades can be installed at different intervals or at different angles. Patio sliding panels are notable for the elegant design of the vertical profiles. The maximum panel dimensions depend on the selected profiles and the local wind pressure bearing on the system.

SURFACE TREATMENT

- Anodised (20 microns)
- Polyester powder-coated RAL or Syntha Pulvin colours (60 - 80 µ / 40 µ (UK))

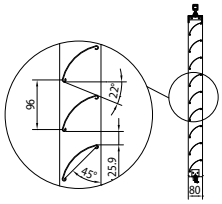
Blade type	Angle (°)	Blade pitch (mm)	AS (°)	OV (%)
EVO.96	45	96	22	27
EVO.96	45	115	35	39
EVO.96	45	135	45	48
EVO.130	45	130	22	28
EVO.130	45	160	36	41
EVO.130	45	190	47	50
ICA.100	0	100	45	77
ICA.100	0	120	50	81
ICA.100	15	100	37	70
ICA.100	15	120	44	75
ICA.100	30	100	30	48
ICA.100	30	120	39	57
ICA.100	30	140	46	63
ICA.100	45	120	22	28
ICA.100	45	120	35	40
ICA.100	45	140	44	49
ICA.125	0	125	45	80
ICA.125	0	150	50	83
ICA.125	15	125	37	71
ICA.125	15	150	44	76
ICA.125	30	125	30	48
ICA.125	30	150	39	57
ICA.125	30	175	46	63
ICA.125	45	125	22	24
ICA.125	45	150	35	40
ICA.125	45	175	45	49

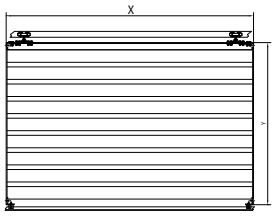
AS: Limit angle of sunray incidence · OV: Perpendicular visual opening

TECHNICAL DRAWINGS

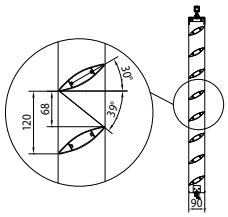
Section detail

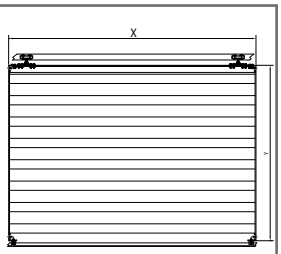
EVO.96



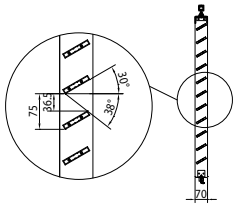


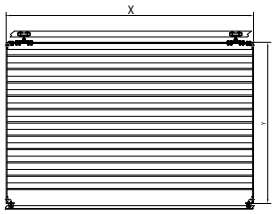
ICA.100





ICP.060





LOGGIASCREEN® *4*FIX

Sliding panel with screen fabric for project solutions

SLIDING PANEL

LOGGIASCREEN

4FIX

INTRODUCTION

Loggiascreen *4*FIX combines the characteristics of different materials and systems in a solution distinguished by its elegance, flexibility and efficiency. Double the attraction – the fabric is attached on all four sides and is held under permanent tension by an integrated system into the top and bottom frames. Loggiascreen *4*FIX is a system of panels (sliding or fixed) containing a taught fabric, which allows you to control light and heat penetration by changing the position of the panels to suit your needs. Loggiascreen *4*FIX can also be used to provide privacy and protection from the wind.

TECHNICAL SPECIFICATIONS

- Extruded aluminium frame, anodised or powder-coated
- Solid structure for high wind resistance
- Integrated system for attaching the fabric on all sides
- Permanent fabric tension
- Factory-assembled and delivered ready-to-fit, made to measure
- High-quality, maintenance-free sliding fittings
- Screen made of prestressed coated polyester fabric (Soltis) or glass fibre
- Motorised or manual sliding panels
- Dimensions depending on the local and regional legislation and the wind load (*). Maximum panel height: 3000 mm.

MATERIAL

- Aluminium extrusion, EN AW-6063 T66 alloy
- Screen fabric based on prestressed coated polyester fabric (Soltis 86) - available in a wide range of colours. Other types of fabric available on request.

SURFACE TREATMENT

Aluminium parts:

- Anodised (20 microns)
- Polyester powder-coated RAL or Syntha Pulvin colours (60 - 80 µ / 40 µ (UK))

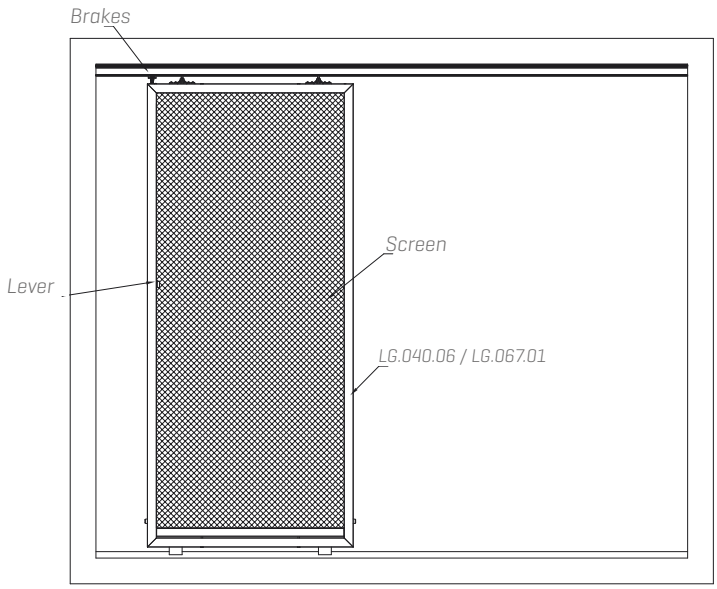
FRAMES

- Loggiascreen *4*FIX LG.040: Frame having a depth of 40mm, suitable for normal panel dimensions and wind loads.
- Loggiascreen *4*FIX LG.067: Frame having a depth of 67mm, suitable for larger panel sizes and higher wind loads.

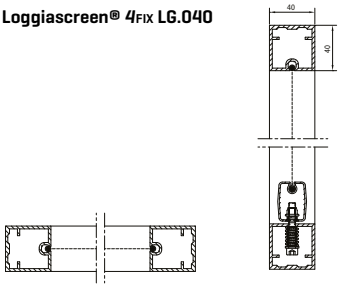
(*) To be determined per project in conjunction with our project team.

TECHNICAL DRAWINGS

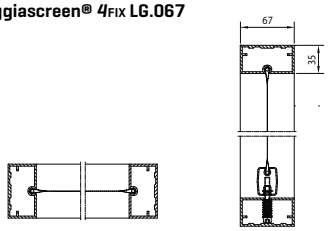
Section detail



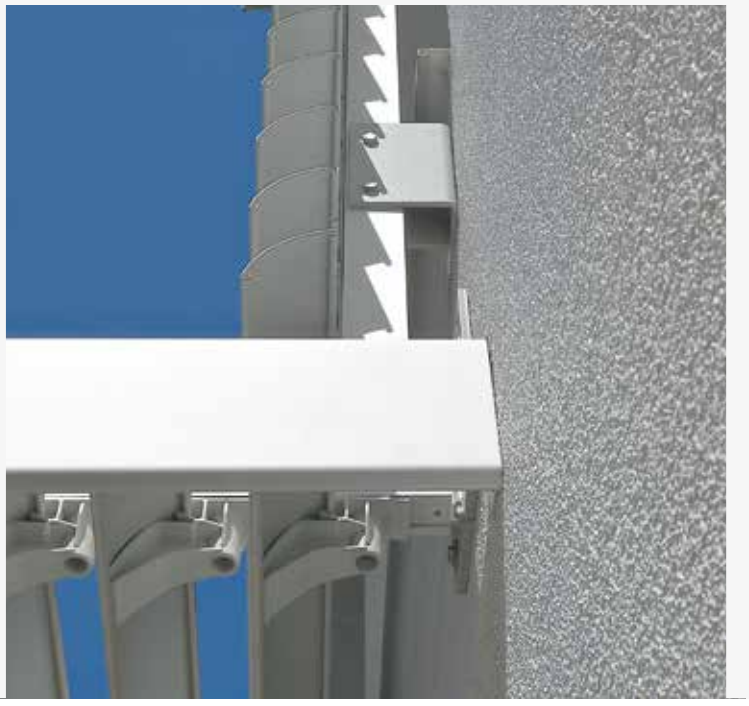
Loggiascreen® 4FIX LG.040



Loggiascreen® 4FIX LG.067



ACCESSORIES



ACCESSORIES SLIDING PANELS

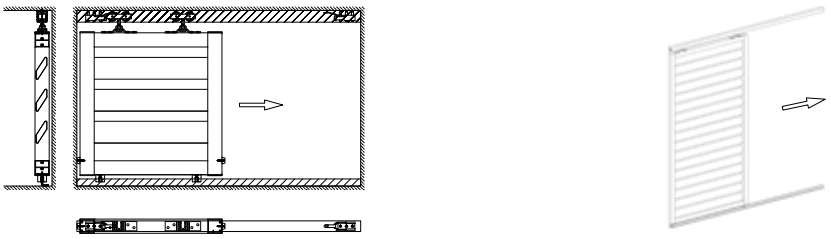
Sliding systems

Depending on the situation and user preferences, different sliding systems can be selected:

INDIVIDUALLY SLIDING

For this application, the panels are controlled individually. Each panel can be placed in its desired position without affecting the other panels.

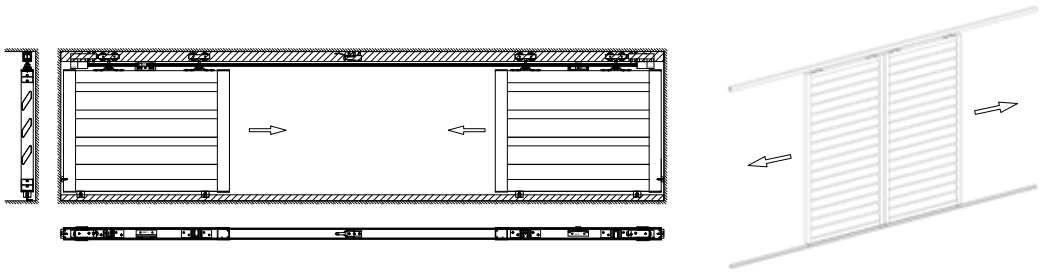
Section detail individually sliding



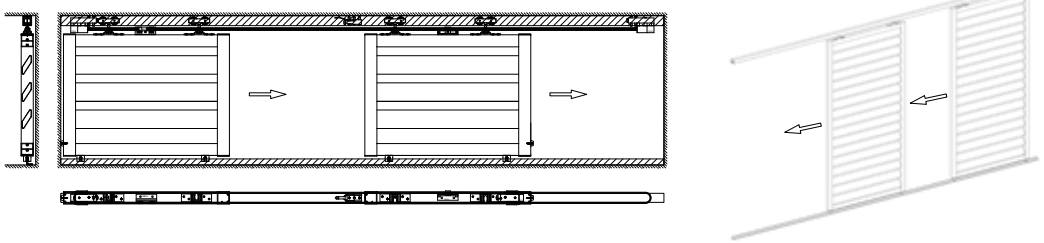
SYMMETRICALLY / SIMULTANEOUSLY SLIDING

This system consists of pairs of mutually interconnected panels. The panels are connected in order to move symmetrically in relation to one another.

Section detail symmetrically sliding



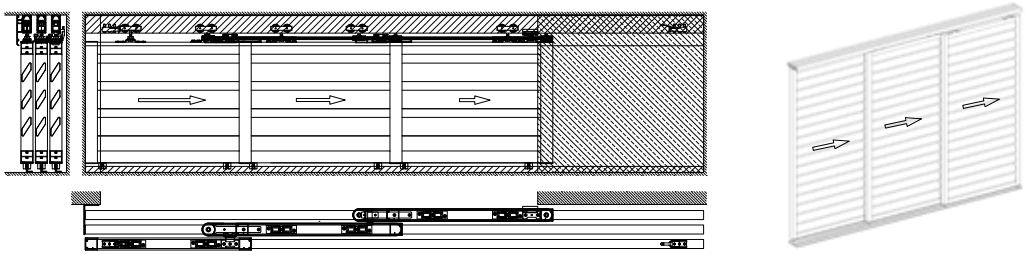
Section detail simultaneously sliding



TELESCOPICALLY SLIDING

For applications requiring wider window surfaces to be shaded in one go, telescopically connected panels are a suitable option. In this system, two or more panels are telescopically interconnected so that, if controlled, they telescopically slide out or behind one another. Each panel moves in a different rail and, in open position, they are neatly "parked" behind one another.

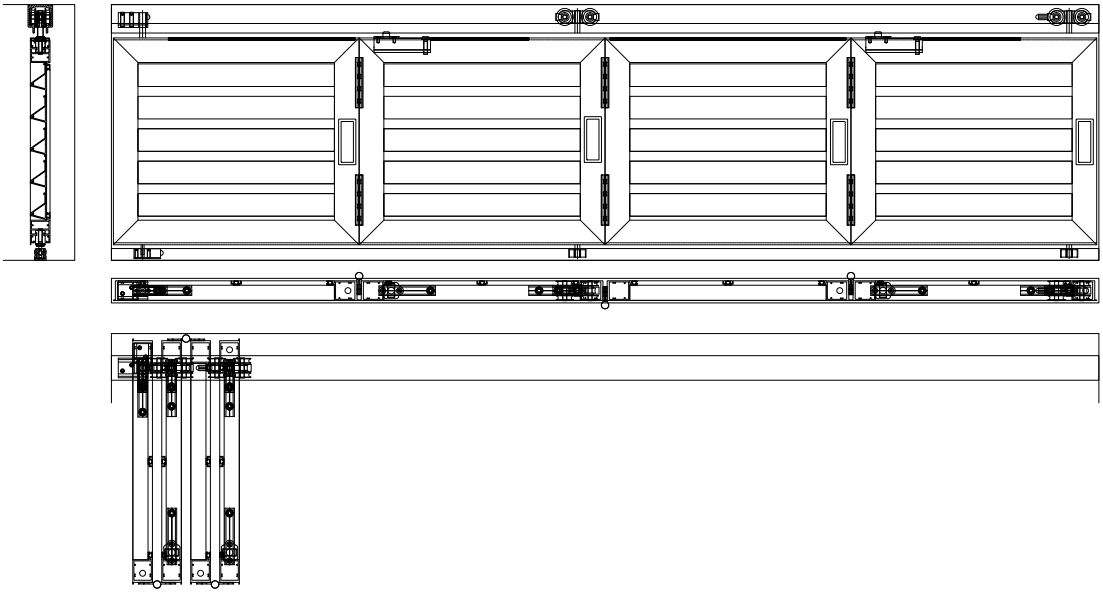
Section detail telescopically sliding



ACCESSORIES SLIDING PANELS

Folding panels

Technical drawings



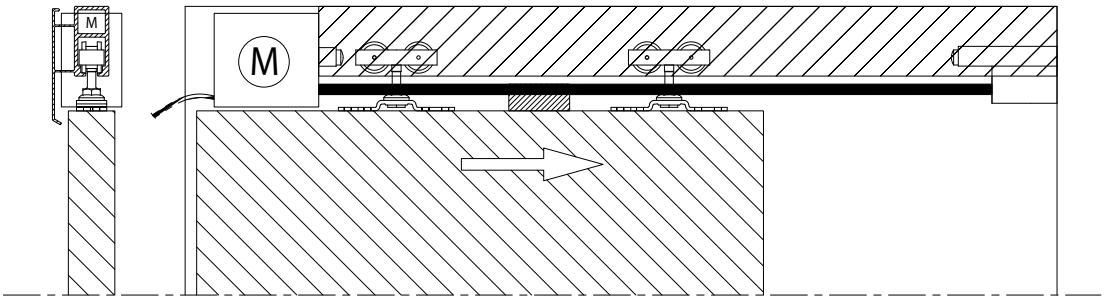
Available with LG.040
The folding system is only available in a manually controlled version.

CONTROL

All sliding systems can be operated manually or motorised.

- 230V motor is suitable for operating with a simple switch, remote control or by connecting it to a Building Management System (BMS).

Section detail



ACCESSORIES SLIDING PANELS

Flexguide®

LOWER GUIDING SYSTEM

SELF REGULATING

INTRODUCTION

Flexguide by Renson® is a patented, flexible lower guiding system that can compensate for level differences of up to 50 mm. This flexible lower guiding system automatically adjusts itself in situations with drainage slopes or uneven surfaces due to construction faults or temporary loads due to the spring tension, so that it is not necessary to thicken or double up the lower guiding system profile.

The lower guiding system is simply anchored to the surface, just as if it were a flat surface. The spring-loaded pin in the Flexguide continuously maintains contact with this lower guiding system, even on a sloping or irregular surface.

USES

- Sloping surfaces such as terrace coverings with drainage slope
- Between 2 levels such as ceiling and floor with possible constructional faults
- Applicable in all standard sliding panels:
  Loggialu (Privacy), Loggialu Plano, Loggiawood (Privacy), Loggiascreen Canvas

FEATURES

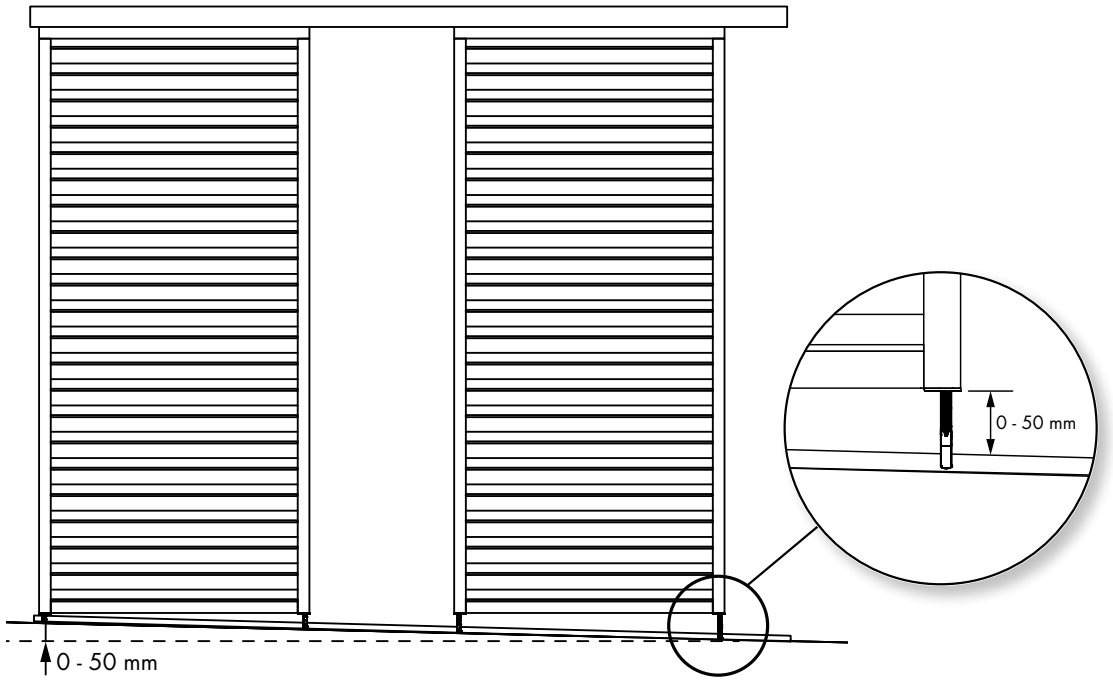
- Aesthetic
  - Flexguide is discreet and integrated into the sliding panels frame profile without visible fixings.
- Guarantees stability
  - Resistant to thermal expansion
  - Resistant to setting of building and building parts (permanent or temporary)

TECHNICAL SPECIFICATIONS

- Flexguide has been made entirely from stainless steel material and is maintenance free
- The above-mentioned types of sliding panels with Flexguide meet all CE requirements as stated in the declaration of performance DoP/RP/001 on the basis of harmonised technical specifications according to EN 13659:2004.
- During the development phase, Flexguide has undergone durability testing ensuring functionality and service life.
- Flexguide is also available as a separate component for Loggia building box system (modular system).

TECHNICAL DRAWINGS

Section detail

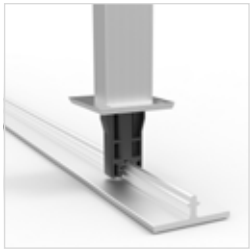


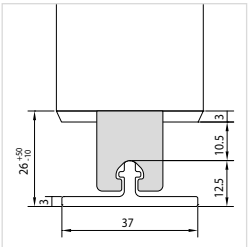
TYPES OF FLEXGUIDE® AND USES:

Flexguide®-Plus

Flexguide®-Plus

- 37x12,5x3 mm
- "T" under-base guiding profile with slight elevation of 12,5 mm suitable for openings, e.g.: wheelchair users
- Typical application: terrace covering

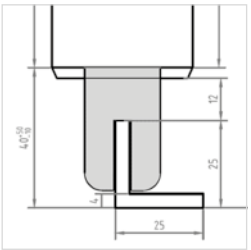




Flexguide®-Long

Flexguide®-Long

- 25x25x4 mm
- "L" under-base guiding profile with height of 25 mm
- Typical application: suitable for high wind loads



ACCESSORIES SUNCLIPS® / ICARUS®

Mullions

Extruded aluminium profiles used as mullions for permanent vertical sun shades.

MATERIAL

Aluminium extrusion profile in EN AW-6063 T66 alloy

SURFACE TREATMENT

- Anodised (20 micron) F1
- Polyester powder coating (60-80 micron) in RAL colours

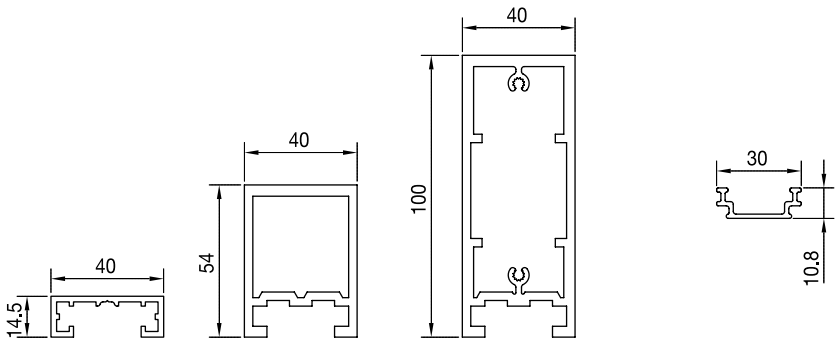
TECHNICAL DATA

	LD.0065	LD.0108 *	LD.0195	LD.0440	LD.0460	LD.0995	LD.1250	SD.014	SD.054	SD.100
Profile depth (mm)	6,5	10,8	17,5	44	44	97,5	125	14,5	54	100
Profile width (mm)	30	30	36	36	36	36	36	40	40	40
Moment of inertia (mm^4)	261	987	5931	83228	83348	625740	1219444	4510	208672	1248414
Flexural modulus (mm^3)	60	147	570	3622	3560	12097	18531	497	7360	24405

(*) Adapter profile for combination with SD.014, SD.054 or SD.100 mullions

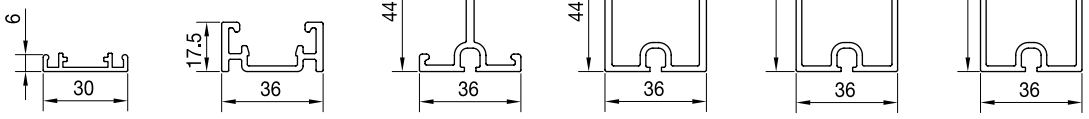
SD TYPE MULLIONS FROM THE SUNCLIPS® RANGE

Types



LD TYPE MULLIONS FROM THE LINIUS® RANGE - ONLY FOR VERTICAL INSTALLATION

Types



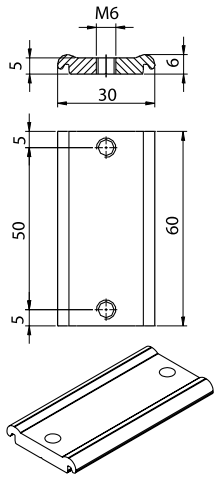
LD.0065 LD.0195 LD.0440 LD.0460 LD.0995 LD.1250

ACCESSORIES SUNCLIPS® / ICARUS®

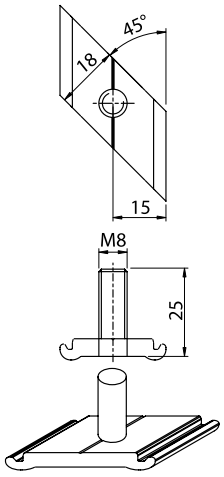
Fixations vertical mullions

FIXING BRACKETS LZ.4202, LZ.4211 AND LZ.4206

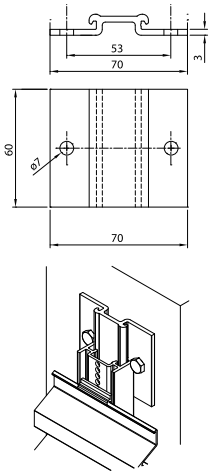
Section detail



Type LZ.4202
Includes 2 bolts (M6x16) & washer



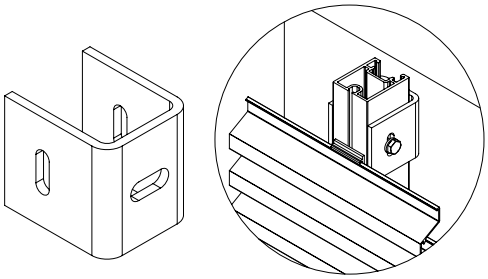
Type LZ.4211
Includes M6 nut & washer



Type LZ.4206

U-SHAPE MOUNTING BRACKET LZ.4210 FOR SUPPORTING STRUCTURE LINIUS

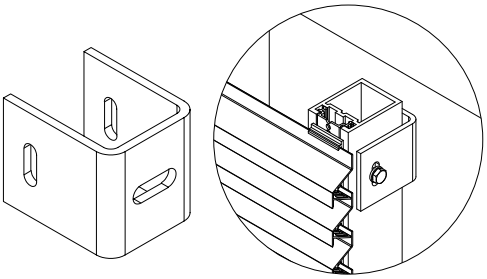
Section detail



Includes bolt (M6 x16), nut & washer

U-SHAPE MOUNTING BRACKET SD.086.11 FOR SUPPORTING STRUCTURE SUNCLIPS

Section detail

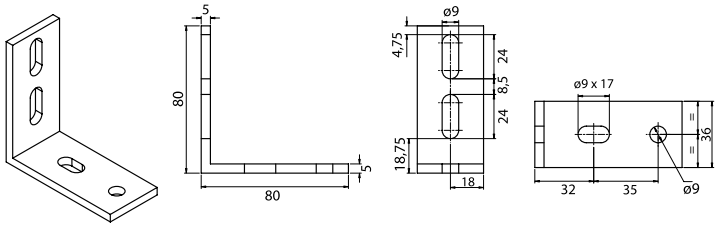


Includes bolt (M6 x16), nut & washer

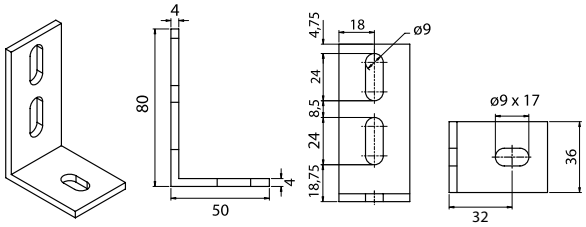
L-SHAPED BRACKET TYPES LZ.4203 AND LZ.4209

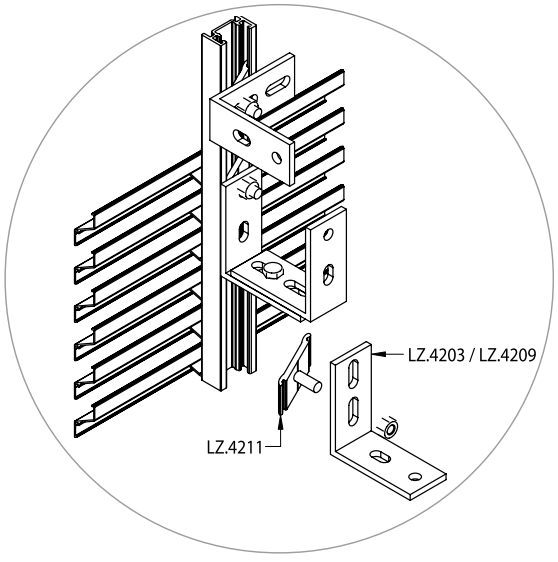
Section detail

Type LZ.4203



Type LZ.4209





Where necessary, project specific brackets can be designed and provided by a Renson® approved manufacturer/installer.

ACCESSORIES SUNCLIPS® / ICARUS®

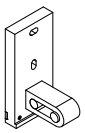
Fixations horizontal mullions

The method of fixing is determined by the dimensions of the awning, the wind load and the type of wall structure on which the awning is installed. We can offer various standard solutions.

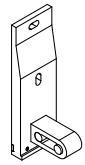
TYPE: RENSON® BRACKET

Renson® has a number of standard brackets that can be assembled beforehand on type SD mullions. They are mainly used for direct attachment to steel, concrete or 50/60 mm curtain walls.

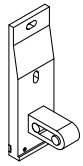
Types



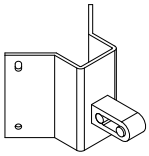
Standard bracket SD.088.11
Application: for attachment to solid background such as concrete.
Suitable for SD.054 mullions.



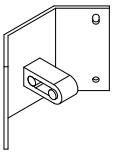
Bracket SD.088.41
Application: for attachment to weak background such as facing brick.
Suitable for SD.054 mullions.



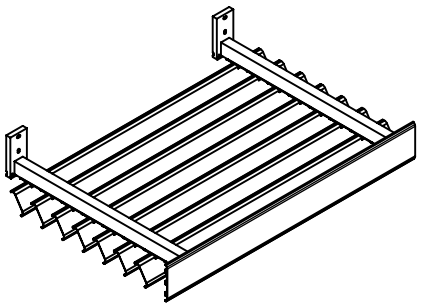
Standard bracket SD.088.71
Application: for attachment to solid background such as concrete and large overhangs.
Suitable for SD.100 mullions.



Steel bracket SD.088.23
Application: bearer for outer corners.
Suitable for SD.054 and SD.100 mullions.



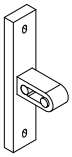
Steel bracket SD.088.24
Application: bearer for inner corners.
Suitable for SD.054 and SD.100 mullions.



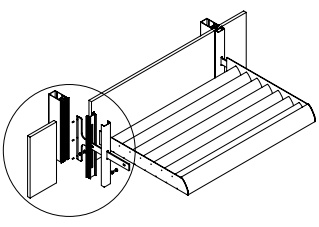
TYPE: CURTAIN WALL ATTACHMENT

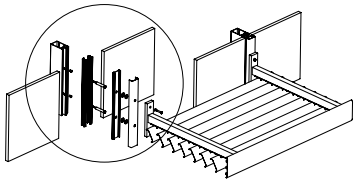
Specific project solutions can be developed, depending on the type of curtain profile. Similar to fixing to a knife bracket.

Types



Brackets SD.088.51 / SD.088.61
Application: for attachment to curtain walls (SD.088.51 = 50 mm / SD.088.61 = 60 mm).
Suitable for SD.054 mullions.

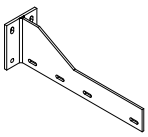




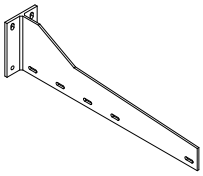
TYPE: ATTACHMENT TO KNIFE BRACKET

The knife brackets are installed beforehand. The awning structure can be fitted afterwards. Mainly used with system construction.

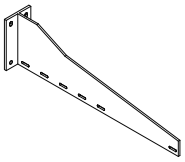
Types



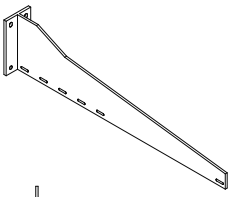
Steel knife bracket SD.089.01 – type 1, 450 mm long
Application: - Normal overhangs and wind loads
- Façade package up to 100 mm
Suitable for SD.054 and SD.100 mullions



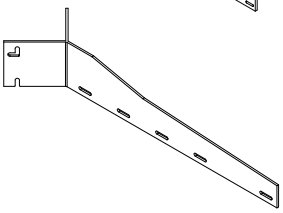
Steel knife bracket SD.089.02 – type 2, 650 mm long
Application: - Large overhangs and wind loads
- Façade package up to 200 mm
Suitable for SD.054 and SD.100 mullions



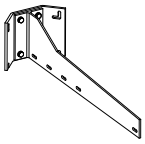
Steel knife bracket SD.089.06 – type 3, 860 mm long
Application: - Large overhangs and wind loads
- Façade package up to 500 mm
Suitable for SD.054 and SD.100 mullions



Steel knife bracket SD.089.07 – type 4, 1112 mm long
Application: - Extreme large overhangs and wind loads
- Façade package up to 500 mm
Suitable for SD.054 and SD.100 mullions

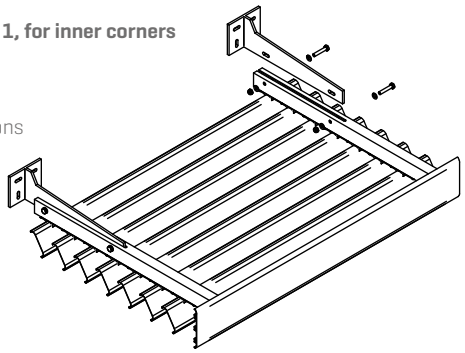


Steel knife bracket SD.089.03 – for outer corners
Application: bearer for outer corners.
Suitable for SD.054 and SD.100 mullions



Steel knife bracket SD.089.04 – type 1, for inner corners
Application: bearer for inner corners,
normal overhangs and wind loads
Suitable for SD.054 and SD.100 mullions

Steel knife bracket SD.089.05 – type 2, for inner corners
Application: bearer on inner corners,
large overhangs and wind loads
Suitable for SD.054 and SD.100 mullions

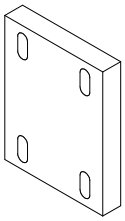


ACCESSORIES SUNCLIPS® / ICARUS®

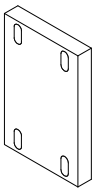
Fixation horizontal mullions

OPTION: STEEL BRACKETS WITH THERMAL BREAK

Section detail



SD.089.91

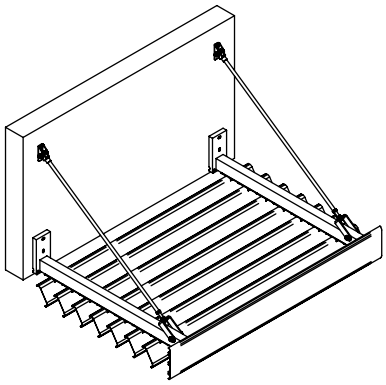


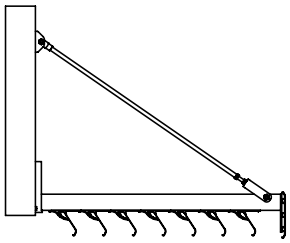
SD.089.92

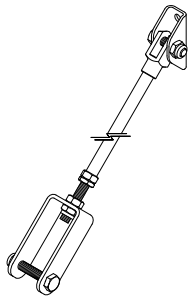
TIE ROD

A custom-made adjustable tie rod can be supplied to suit the overhang, fixing method and wind load.

Section detail





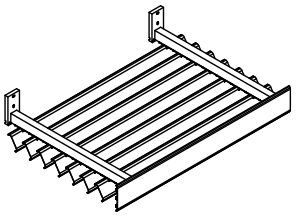


ACCESSORIES SUNCLIPS® / ICARUS®

Fascia profiles for horizontal fixation

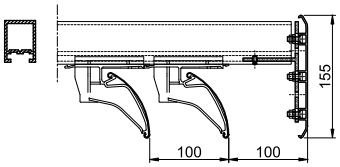
Different fascia profiles can be added to complete the awning structure, depending on the fixing method.

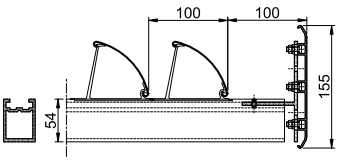
Types

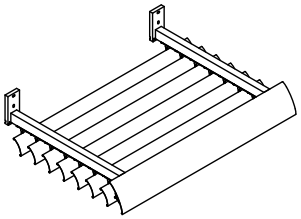


Fascia profile SC.155

- Installation method: awning with blades positioned above or below
- Application: recommended for combination with blade types Sunclips Classic SC.096 or Evo SE.096 and mullion SD.054

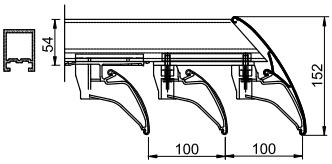


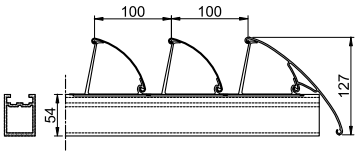


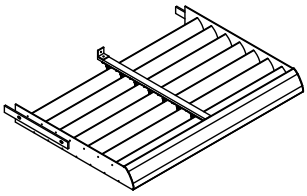


Fascia profile Sunclips® Evo-blade SE.176

- Installation method: awning with blades positioned above or below
- Application: recommended for combination with blade types Sunclips Classic SC.096 or Evo SE.096 and mullion SD.054

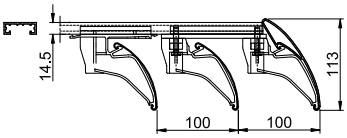


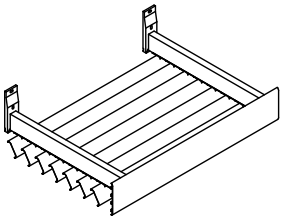




Fascia profile Sunclips® Evo-blade SE.130

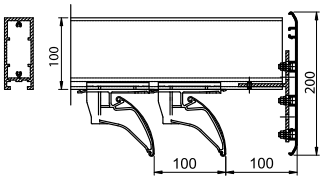
- Installation method: cassette
- Application: recommended for mullion SD.014

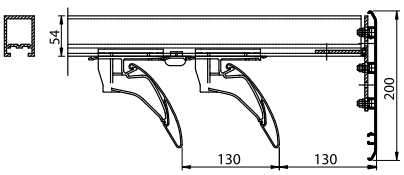


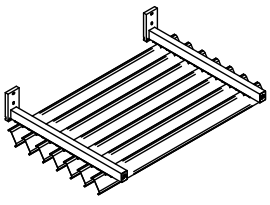


Fascia profile SC.200

- Installation method: awning with blades positioned above or below
- Application: in combination with
  - blade types Sunclips Classic SC.096 or Evo SE.096 and mullion SD.100
  - blade types Sunclips Evo SE.130 and mullion SD.054
  - blade type Icarus ICA.150 and mullion SD.054

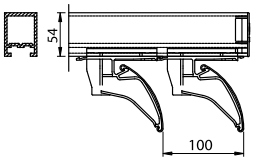






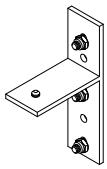
Without fascia profile – End cap SD.054.98

- Application: in combination with mullion SD.054

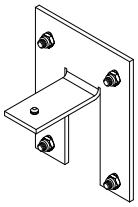


ATTACHING FASCIA PROFILES

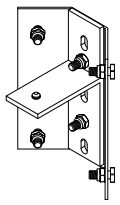
Types



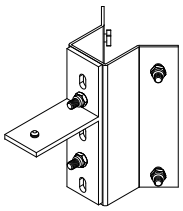
Standard fascia profile attachment SC.087.11
Application: for attaching a continuous fascia profile type SC.155 or SC.200. Suitable for SD.014, SD.054 and SD.100 mullions.



Fascia profile joint attachment SC.087.12
Application: for attaching two fascia profiles type SC.155 or SC.200. Suitable for SD.014, SD.054 and SD.100 mullions.

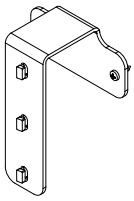


Fascia profile outer corner attachment SC.087.13
Application: for attaching two fascia profiles type SC.155 or SC.200 to outer corners. Suitable for SD.014, SD.054 and SD.100 mullions.

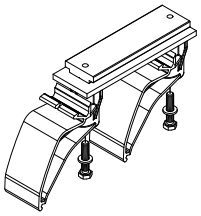


Fascia profile inner corner attachment SC.087.14
Application: for attaching two fascia profiles type SC.155 or SC.200 to inner corners. Suitable for SD.014, SD.054 and SD.100 mullions.

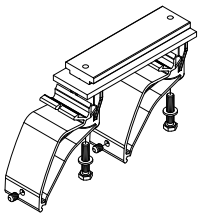
Fascia profile end corner attachment SC.090
Toepassing: voor bevestiging van twee Fascia profileen type SC.155 of SC.200 aan de uiteinden van de hoeken. Geschikt voor Mullion SD.014, SD.054 en SD.100.



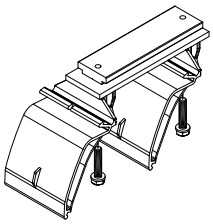
Fascia profile side attachment SC.091
Application: for side attachment of a fascia profile type SC.155 or SC.200 to the mullion. Suitable for SD.054 and SD.100 mullions.



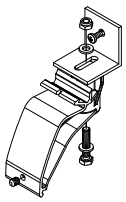
Fascia profile attachment SE.095.01
Application: plastic clip (black or grey POM) for attaching a continuous fascia profile type SE.176. Suitable for SD.014, SD.054 and SD.100 mullions.



Fascia profile attachment SE.095.02
Application: Plastic clip (black or grey POM) with M6 x 8 set screw to stop fascia profile SE.176 coming away as a result of thermal expansion. Suitable for SD.014, SD.054 and SD.100 mullions.



Fascia profile joint attachment SE.095.12
Application: plastic clip (black or grey POM) for attaching two fascia profiles type SE.176. Suitable for SD.014, SD.054 and SD.100 mullions.



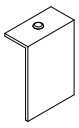
Fascia profile side attachment SE.091
Application: for side attachment of a fascia profile type SC.176 to the mullion. Suitable for SD.054 and SD.100 mullions.

END CAP FOR MULLIONS

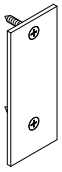
If required, Sunclips can also be supplied without a fascia profile.
Here, the ground edges of the mullions are sealed with end caps.

Types

SD.054.98
POM plastic end cap
for SD.054 mullion



SD.054.99
Aluminium end cap
for SD.054 mullion



SD.100.99
Aluminium end cap
for SD.100 mullion

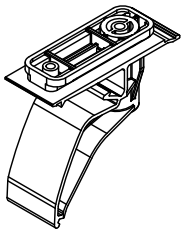
ACCESSORIES SUNCLIPS®

Blade supports

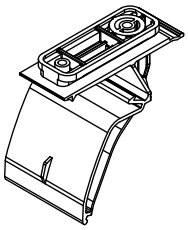
SUNCLIPS® BLADE SUPPORTS FOR BLADES POSITIONED BELOW

The blade supports for Sunclips with blades positioned below are made of black or grey UV-resistant POM plastic and have a fixed blade installation angle of 60° to the horizontal.
The blade supports are available in single and double versions for joints and angle clips for inner and outer corners.

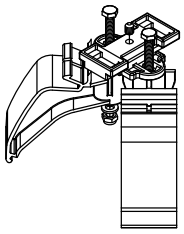
Types



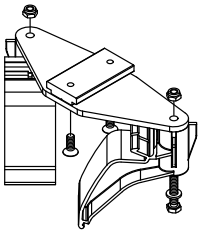
Standard blade supportsE.084.11
Application: for attaching continuous type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades. Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.



Blade supportsE.084.12
Application: for attaching two type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades. Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.



Blade supportsE.084.13
Application: for outer corner solution using two type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades. Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.

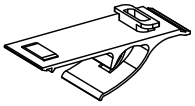


Blade supportsE.084.14
Application: for inner corner solution using two type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades. Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.

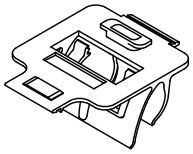
Connector for 33 mm clip SE.084.10
Application: as a connecting piece for widely separated type SE.130.01 and SE.176.01 blades. Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.

SUNCLIPS® BLADE SUPPORTS FOR BLADES POSITIONED BELOW

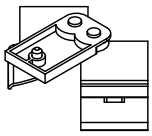
Types



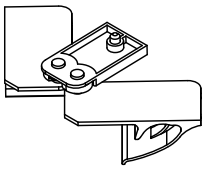
Standard blade supportsC.084.11
Application: for attaching continuous type SC.096.01 blades.
Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.



Blade supportsC.084.12
Application: for attaching two type SC.096.01 blades.
Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.



Blade supportsC.084.13
Application: for outer corner solution using two type SC.096.01 blades.
Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.



Blade support SC.084.14
Application: for inner corner solution using two type SC.096.01 blades.
Suitable for SD.014, SD.054 and SD.100 mullions – see p. 80.

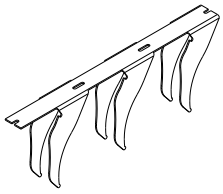
ACCESSORIES SUNCLIPS®

Blade supports

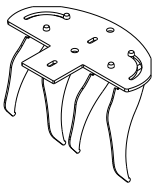
OTHER TYPES OF SUNCLIPS® BLADE SUPPORTS

Other blade supports are available for different applications in addition to the standard blade supports for Sunclips.

Types

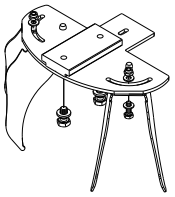


SC.080.11
Aluminium clip for Sunclips Classic, for three blades positioned below or curved blades, with a fixed installation angle of 90° to the horizontal.

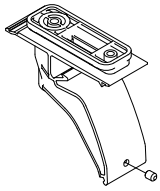


SC.080.12
Aluminium joint clip for Sunclips Classic, for blades positioned below or curved blades, with a fixed installation angle of 90° to the horizontal.

SC.080.13
Aluminium clip for Sunclips Classic, for blades positioned below or curved blades, with a fixed installation angle of 90° to the horizontal.



SC.080.15
Aluminium external corner clip for Sunclips Classic, for blades positioned below or curved blades, with a fixed installation angle of 90° to the horizontal.

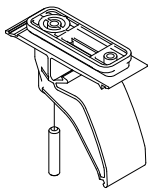


SE.084.15
Plastic clip (black or grey POM) for Sunclips EVO, same design as type SE.084.11, with M6 x 8 set screw to stop the blade coming away as a result of thermal expansion.

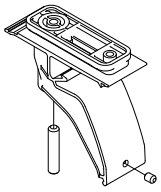
OTHER TYPES OF SUNCLIPS® BLADE SUPPORTS

Other blade supports are available for different applications in addition to the standard blade supports for Sunclips.

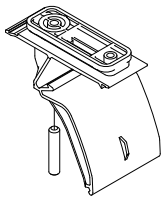
Types



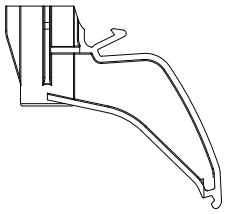
SE.084.16
Plastic clip (black or grey POM) for Sunclips *EVO*, same design as type SE.084.11, with M8 x 40 set screw to attach the clip to the mullion.



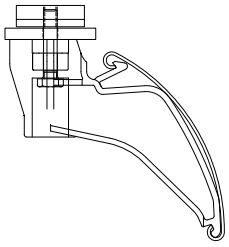
SE.084.17
Plastic clip (black or grey POM) for Sunclips *EVO*, same design as type SE.084.11, with M6 x 8 set screws to stop the blade coming away as a result of thermal expansion, and an M8 x 40 set screw to attach the clip to the mullion.



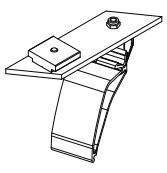
SE.084.18
Plastic joint clip (black or grey POM) for Sunclips *EVO*, same design as type SE.084.12, with M8 x 40 set screw to attach the clip to the mullion.



SE.084.19
Plastic corner clip (black or grey POM) for Sunclips *EVO*, same design as type SE.084.11, with M6 x 8 set screw to stop the blade coming away as a result of thermal expansion.



SE.084.23
Plastic corner clip (black or grey POM) for Sunclips *EVO* with blades positioned below and a fixed installed angle of 60° to the horizontal, suitable for outer corner on knife bracket SD.110.11 or SD.110.12.



SE.084.24
Plastic corner clip (black or grey POM) for Sunclips *EVO* with blades positioned below and a fixed installed angle of 60° to the horizontal, suitable for inner corner on knife bracket SD.110.11 or SD.110.12.

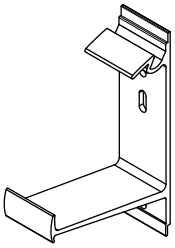
ACCESSORIES SUNCLIPS®

Blade supports

SUNCLIPS® BLADE SUPPORTS FOR BLADES POSITIONED ABOVE

The blade supports for Sunclips with blades positioned above are made of aluminium and have a fixed blade installation angle of 45° to the horizontal. The blade supports are available in single and double versions for joints.

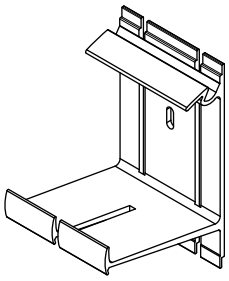
Types



Blade support SE.082.11

Application: for attaching continuous type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades.

Suitable for Linius type LD.0065, LD.0195, LD.0440, LD.0460, LD.0995 and LD.1250 mullions and Sunclips type SD.014, SD.054 and SD.100 mullions in combination with adapter profile LD.0108.



Blade support SE.082.12

Application: for attaching two type SE.096.01, SE.096.02, SE.130.01 and SE.176.01 blades.

Suitable for Linius type LD.0065, LD.0195, LD.0440, LD.0460, LD.0995 and LD.1250 mullions and Sunclips type SD.014, SD.054 and SD.100 mullions in combination with adapter profile LD.0108.

ICARUS® QUICKFIX®

Horizontal and vertical fixation

BRACKETS

There are four types of Quickfix clips which can be combined with different fork profiles, depending on the blade inclination.

- **Type 1:** for ICA.100 and ICA.125 blades: clip and fork for 90° / 45° or 75° / 60° blade inclination
- **Type 2:** for ICA.150, ICL150, ICA.200 and ICL.200 blades: clip and two forks for 90° or 45° / 75° or 60° blade inclination
- **Type 3:** for ICA.250, ICA.300 and ICL.300 blades: clip and two forks for 90° or 45° / 75° or 60° blade inclination
- **Type 4:** for ICA.400 blade: clip and two forks for 90° or 45°/ 75° or 60° blade inclination

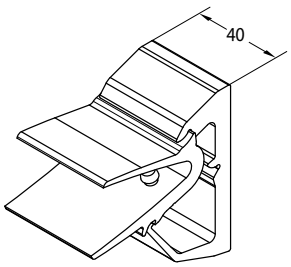
Quickfix brackets are also available in single or double versions.

OVERVIEW OF AVAILABLE QUICKFIX® BRACKETS

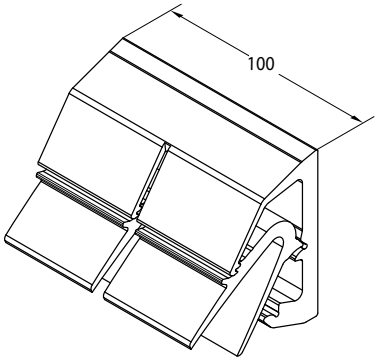
Icarus® Quickfix®		Blade inclination							
		45°		60°		75°		90°	
Bracket type	Blade type	Single bracket	Double bracket	Single bracket	Double bracket	Single bracket	Double bracket	Single bracket	Double bracket
Type 1	ICA.100	IQ.1101	IQ.1201	IQ.1102	IQ.1202	IQ.1102	IQ.1202	IQ.1101	IQ.1201
	ICA.125	IQ.1101	IQ.1201	IQ.1102	IQ.1202	IQ.1102	IQ.1202	IQ.1101	IQ.1201
Type 2	ICA.150	IQ.2101	IQ.2201	IQ.2102	IQ.2202	IQ.2102	IQ.2202	IQ.2101	IQ.2201
	ICL.150	IQ.2101	IQ.2201	IQ.2102	IQ.2202	IQ.2102	IQ.2202	IQ.2101	IQ.2201
	ICA.200	IQ.2101	IQ.2201	IQ.2102	IQ.2202	IQ.2102	IQ.2202	IQ.2101	IQ.2201
	ICL.200	IQ.2101	IQ.2201	IQ.2102	IQ.2202	IQ.2102	IQ.2202	IQ.2101	IQ.2201
Type 3	ICA.250	IQ.3101	IQ.3201	IQ.3102	IQ.3202	IQ.3102	IQ.3202	IQ.3101	IQ.3201
	ICA.300	IQ.3101	IQ.3201	IQ.3102	IQ.3202	IQ.3102	IQ.3202	IQ.3101	IQ.3201
	ICL.300	IQ.3101	IQ.3201	IQ.3102	IQ.3202	IQ.3102	IQ.3202	IQ.3101	IQ.3201
Type 4	ICA.400	IQ.4101	IQ.4201	IQ.4102	IQ.4202	IQ.4102	IQ.4202	IQ.4101	IQ.4201

Parts

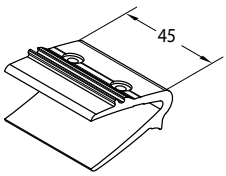
Single clip



Double clip



Fork



SAFETY BRACKET

Each blade must have a safety bracket at one location. The type depends on the kind of blade.

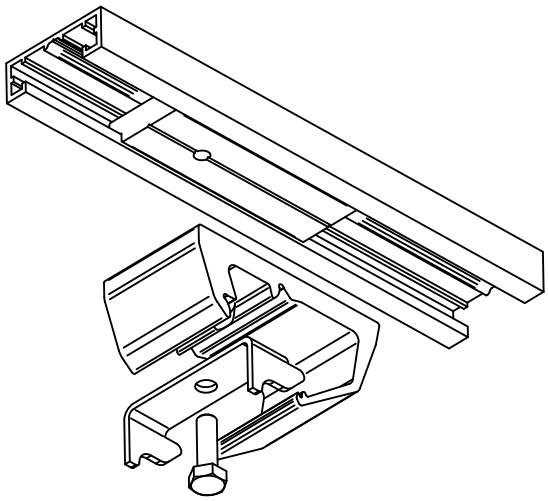
Types

Safety bracket Type 1 – IQ.1001 (ICA.100 and ICA.125)

Safety bracket Type 2 – IQ.2001 (ICA.150, ICL.150, ICA.200 and ICL.200)

Safety bracket Type 3 – IQ.3001 (ICA.250, ICA.300 and ICL.300)

Safety bracket Type 4 – IQ.4001 (ICA.400)

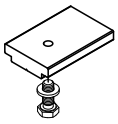


ICARUS® QUICKFIX®

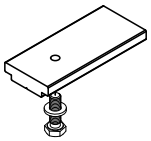
Horizontal and vertical fixation

FASTENER SETS

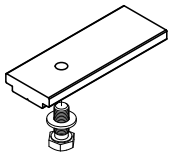
Types



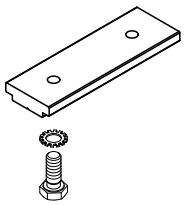
Fastener set IQ.1002
Application: fastener set type 1 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix systems ICA.100 and ICA.125



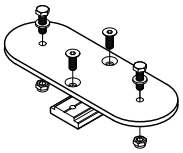
Fastener set IQ.2002
Application: fastener set type 2 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix systems ICA.150, ICL.150, ICA.200 and ICL.200



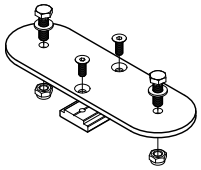
Fastener set IQ.3002
Application: fastener set type 3 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix systems ICA.250, ICA.300 and ICL.300



Fastener set IQ.4002
Application: fastener set type 4 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix system ICA.400

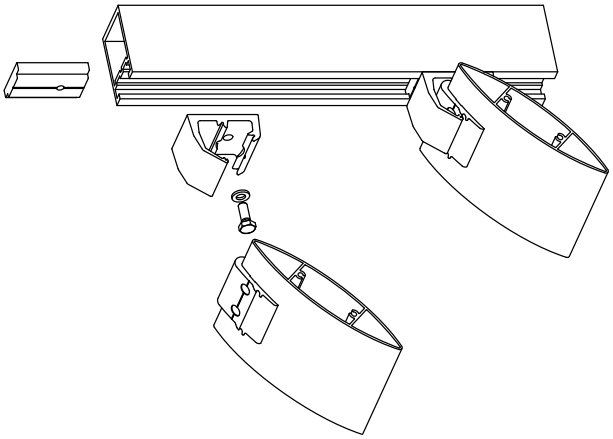


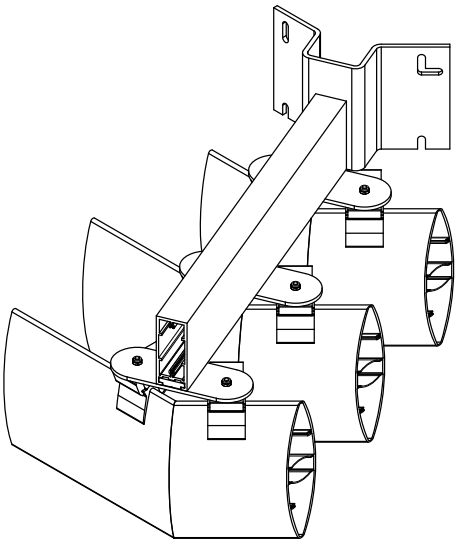
Fastener set IQ.9001 for corner solutions
Application: fastener set type 1 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix systems ICA.100, ICA.125, ICA.150, ICL.150, ICA.200 and ICL.200



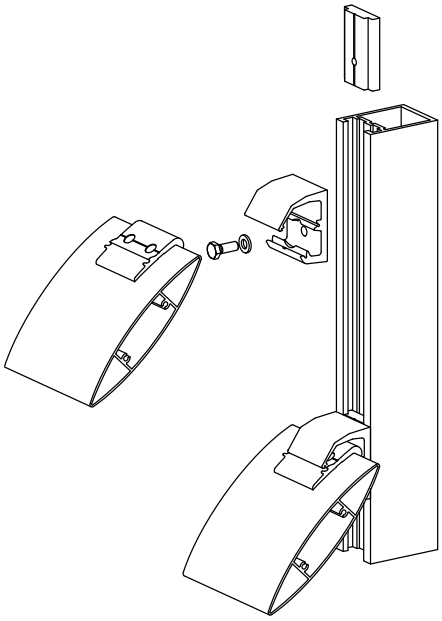
Fastener set IQ.9002 for corner solutions
Application: fastener set type 2 for Quickfix on SD mullions see p. 80.
Suitable for Quickfix systems ICA.250, ICA.300 and ICL.300

Section detail





Horizontal



Vertical

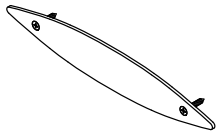
ICARUS® END CAPS

Horizontal and vertical fixation

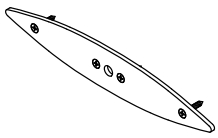
ICARUS® END CAPS

The ground edges of Icarus blades are sealed with end caps, depending on the application. The end caps are attached by screws in the threaded channels in the blades.

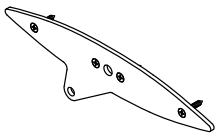
Types



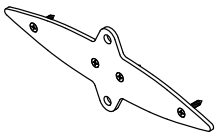
End cap fixed - Type 1
Application: fitted to the ends of the Icarus blades in Icarus Quickfix systems



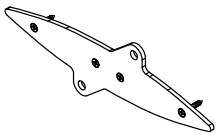
End cap movable without command - Type 2
Application: fitted to the ends of the Icarus blades in movable Icarus systems – on a side without command



End cap movable with command - Type 3
Application: fitted to the ends of the Icarus blades in movable Icarus systems – on a side with command



End cap fixed for 90° attachment - Type 4
Application: fitted to the ends of Icarus blades with 90° inclination



End cap fixed for 45° attachment - Type 5
Application: fitted to the ends of Icarus blades with 45° inclination

SUMMARY TABLE – END CAP TYPES

	End cap type				
	Type 1	Type 2	Type 3	Type 4	Type 5
ICA.100	ICA.100.11	ICA.100.12	ICA.100.13	ICA.100.14	ICA.100.15
ICA.125	ICA.125.11	ICA.125.12	ICA.125.13	ICA.125.14	ICA.125.15
ICA.150	ICA.150.11	ICA.150.12	ICA.150.13	ICA.150.14	ICA.150.15
ICA.200	ICA.200.11	ICA.200.12	ICA.200.13	ICA.200.14	ICA.200.15
ICA.250	ICA.250.11	ICA.250.12	ICA.250.13	ICA.250.14	ICA.250.15
ICA.300	ICA.300.11	ICA.300.12	ICA.300.13	ICA.300.14	ICA.300.15
ICA.400	ICA.400.11	ICA.400.12	ICA.400.13	ICA.400.14	ICA.400.15
ICA.480	ICA.480.11	ICA.480.12	ICA.480.13	ICA.480.14	ICA.480.15
ICL.150	ICL.150.11	ICL.150.12	ICL.150.13	ICL.150.14	ICL.150.15
ICL.200	ICL.200.11	ICL.200.12	ICL.200.13	ICL.200.14	ICL.200.15
ICL.300	ICL.300.11	ICL.300.12	ICL.300.13	ICL.300.14	ICL.300.15
ICP.150	ICP.150.11	ICP.150.12	ICP.150.13	ICP.150.14	ICP.150.15
ICP.200/30	ICP.200.31	ICP.200.32	ICP.200.33	ICP.200.34	ICP.200.35
ICP.200/40	ICP.200.11	ICP.200.12	ICP.200.13	ICP.200.14	ICP.200.15
ICP.300	ICP.300.11	ICP.300.12	ICP.300.13	ICP.300.14	ICP.300.15

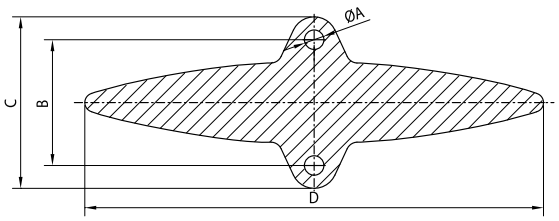
ICARUS® END CAPS

Horizontal and vertical fixation

DIMENSIONS END CAPS FOR FIXED INSTALLATION

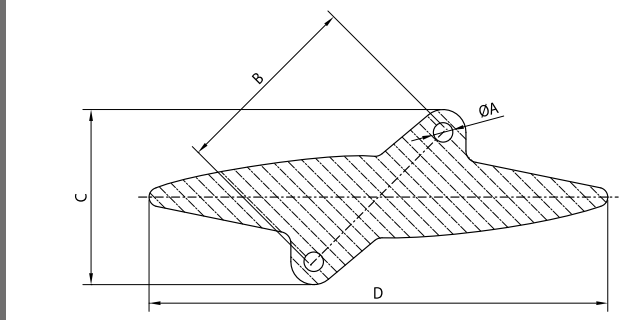
End cap type 4 90° inclination	Dimensions as per sketch (mm)			
	Size D	Size ø A	Size B	Size C
ICA.100.14	100	6,5	45	57
ICA.125.14	125	8,5	45	65
ICA.150.14	150	8,5	50	70
ICA.200.14	200	8,5	55	75
ICA.250.14	250	8,5	65	85
ICA.300.14	300	8,5	70	90
ICA.400.14	400	10,5	85	110
ICA.480.14	480	10,5	120	150
ICL.150.14	150	8,5	50	70
ICL.200.14	200	8,5	60	80
ICL.300.14	300	8,5	70	90
ICP.150.14	150	8,5	50	70
ICP.200.34	200	8,5	50	70
ICP.200.14	200	8,5	60	80
ICP.300.14	300	8,5	70	90

Technical drawing



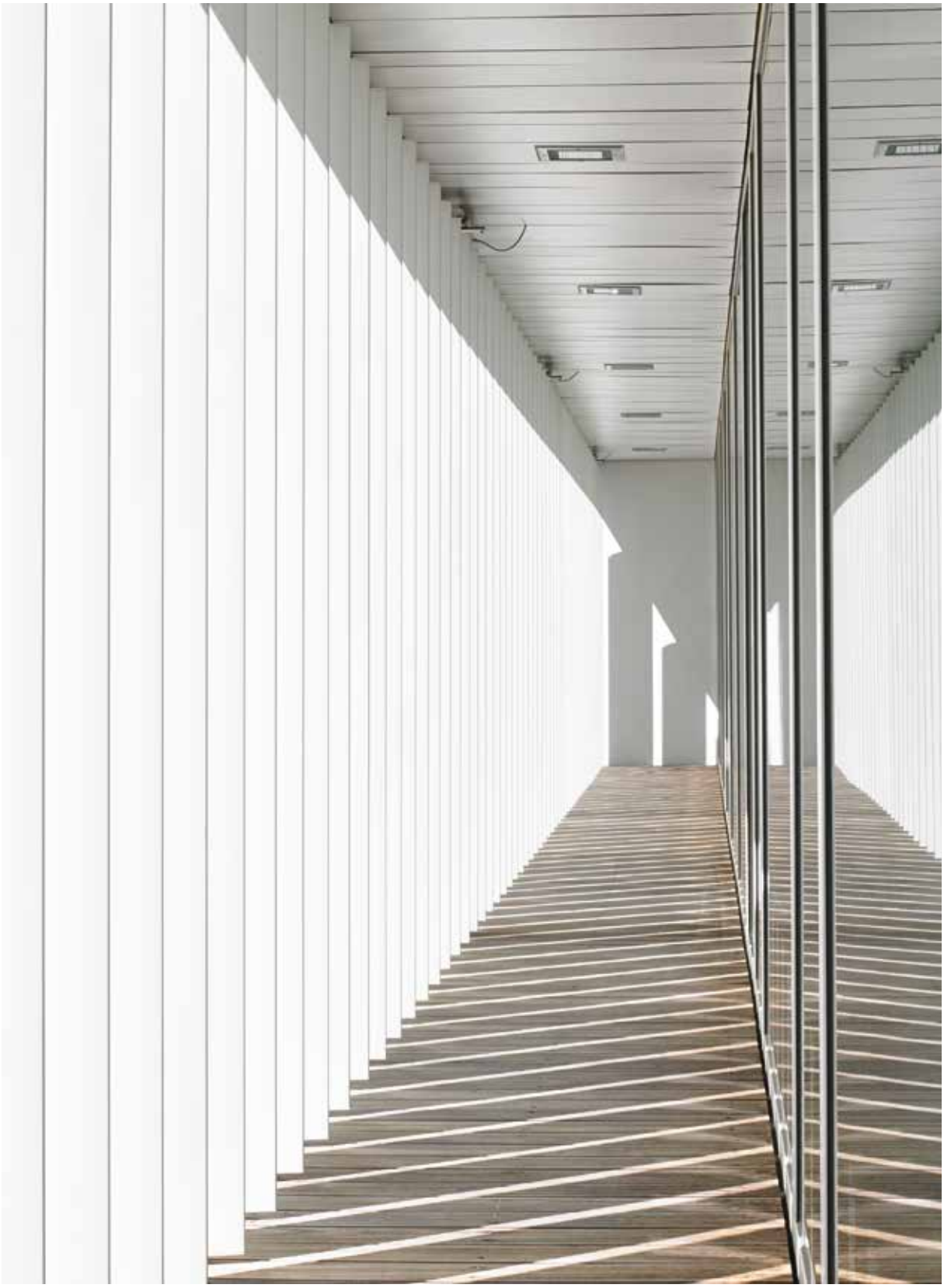
End cap type 5 45° inclination	Dimensions as per sketch (mm)			
	Size D	Size ø A	Size B	Size C
ICA.100.15	100	6,5	60	55
ICA.125.15	125	8,5	65	66
ICA.150.15	150	8,5	70	70
ICA.200.15	200	8,5	80	77
ICA.250.15	250	8,5	90	84
ICA.300.15	300	8,5	100	94
ICA.400.15	400	10,5	120	110
ICA.480.15	480	10,5	160	144
ICL.150.15	150	8,5	75	73
ICL.200.15	200	8,5	85	80
ICL.300.15	300	8,5	100	94
ICP.150.15	150	8,5	75	73
ICP.200.35	200	8,5	75	73
ICP.200.15	200	8,5	90	84
ICP.300.15	300	8,5	100	94

Technical drawing



ICARUS® MOVABLE

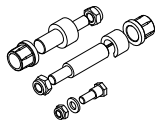
Horizontal and vertical fixation



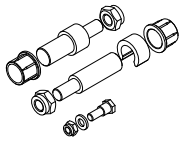
ROTATION SETS

Three types of rotation sets are available, depending on the blade system used. A rotation set consists of two stainless steel pivot sleeves (1x long; 1x short), two plastic bearing bushes, one plastic circlip for attaching the blade, two lock nuts to secure the pivot sleeves to the end caps and one set for connecting the rod, consisting of one Ø8-M6 shaft with one plastic washer for M8 and one M6 lock nut.

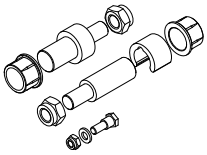
Types



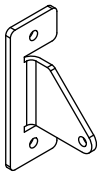
Rotation set IM.9001
Application: fastener set for movable system type 1.
Suitable for type ICA.100, ICA.125, ICA.150, ICL.150, ICA.200, ICL.200 and ICP.150, ICP.200/30, ICP.200/40 blades



Rotation set IM.9002
Application: fastener set for movable system type 2.
Suitable for type ICA.250, ICA.300, ICA.360 and ICL.300 blades



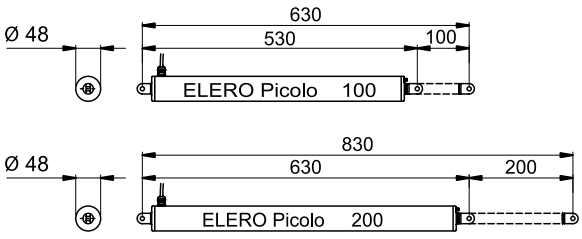
Rotation set IM.9003
Application: fastener set for movable system type 3.
Suitable for type ICA.400 and ICA.480 blades.



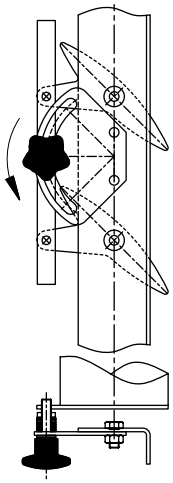
Stainless steel motor support IM.9201
Application: Stainless steel support for attaching motors to substructures.
Suitable for several types of motors.

Control options

Automatic
Examples of suitable motors



Manual
Direct manual control



The type of motor is a function of the length of travel needed.

CORNER SOLUTIONS

Horizontal

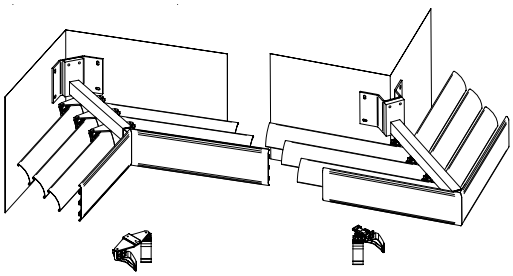
Sunclips® corner solutions

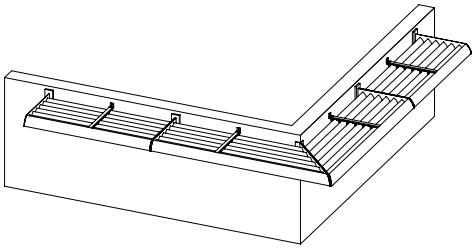
Renson® has a unique corner solution for awnings with blades positioned below, offering these significant advantages:

- only 1 mullion is required
- all angles are possible
- inner and outer corners are possible
- blades are continuous with perfect connections

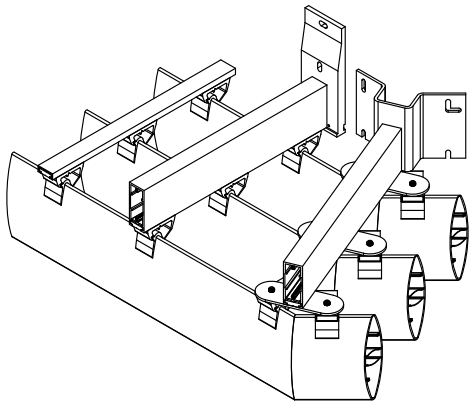
Blade supports and attachment components for fascia profiles: see p. 88.

Corner solutions are also possible for framed sun awnings (with Sunclips^{EVO} blade). To be dimensioned per project.

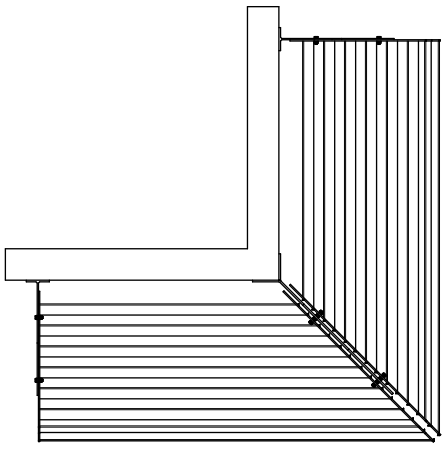




Icarus® Quickfix corner solutions

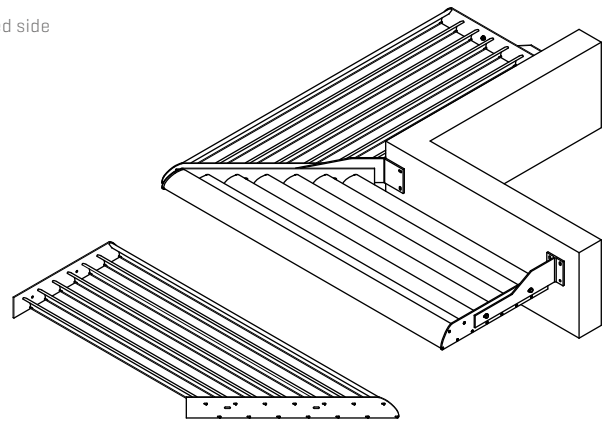


Corner solutions cassettes icarus® / Sunclips®



fixed side

fixed side



expansion side

expansion joint at corner

CORNER SOLUTIONS

Vertical

MITRED CORNERS

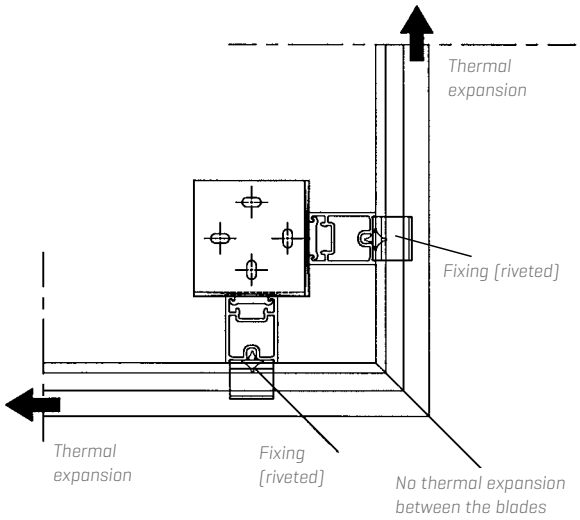
Where a corner is formed, the blades are sawed to the correct angle so they fit perfectly and ensure an attractive, aesthetic finish.

Possible solutions for installing corners

Expansion

Expansion

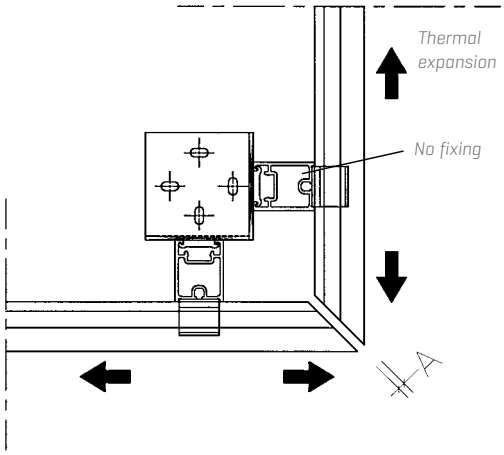
The mullions are fitted as close as possible to the corner



Expansion joint included in mitre

Expansion joint included in mitre

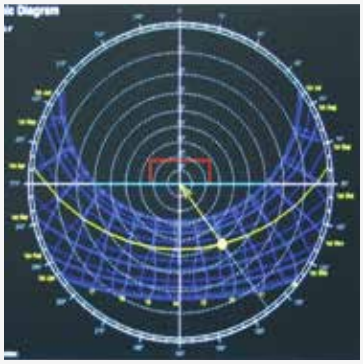
The mullions are fitted as close as possible to the corner



PROJECT SOLUTIONS

This brochure merely gives you an overview of our standard solutions. Our project leaders can advise you and work with you to detail and develop any desired system on a project basis.

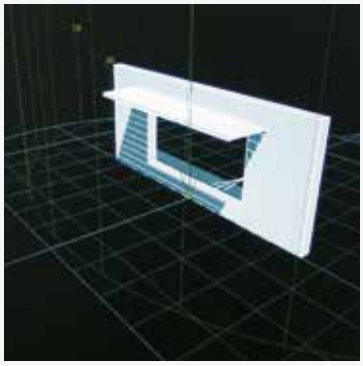
GENERAL



Stereographic diagram

DIMENSIONING OF SUNSHADING

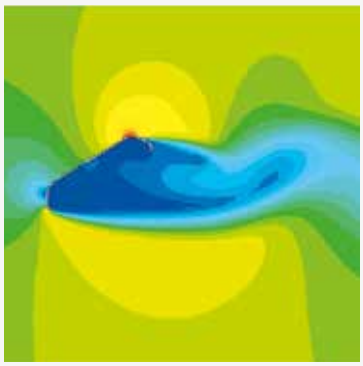
The sun is an important primary source of heat and light. The design, dimensioning and control of sunshading are sometimes quite complex. Sun protection has to be designed to reduce solar heat in summer, but allow in the extra warmth in winter. Natural sunlight must also be kept under control. There must be sufficient natural lighting, but no annoying reflections or glare.
A number of basic principles apply to the data needed to dimension sun protection.



Shadow analysis

SUN'S PATH

The position of the sun varies from hour to hour and from day to day. The different positions can be shown in a sun path graph. The sun path curves depend on the location on the globe, so the meridians of latitude and longitude must be known. The sun path curves are always based on solar time (highest sun position at 12 noon) but need to be adapted to the local time zone and/or winter or summertime. The above data, plus the orientation of the façade, allow the shading angles to be calculated when designing and dimensioning the sun protection. Renson® Sun Protection Projects has the software required to offer you professional advice in this respect.



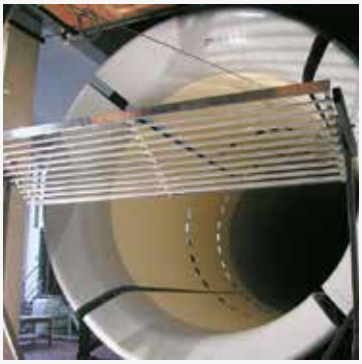
CFD simulation

DEVELOPMENT

New developments are conceived using the latest technology in the area of CFD simulations and collaboration with famous research institutes such as the BBRI, Von-Karman Institute, CSTB, etc.
All products are fully tested for stability and durability.

STABILITY AND DIMENSIONS

A detailed stability calculation can be made on the basis of the prevailing Eurocodes, to determine the correct wind and snow load on the awning. This load determines the correct spans of blades and mullions, as well as the method of fixation to the supporting structure.

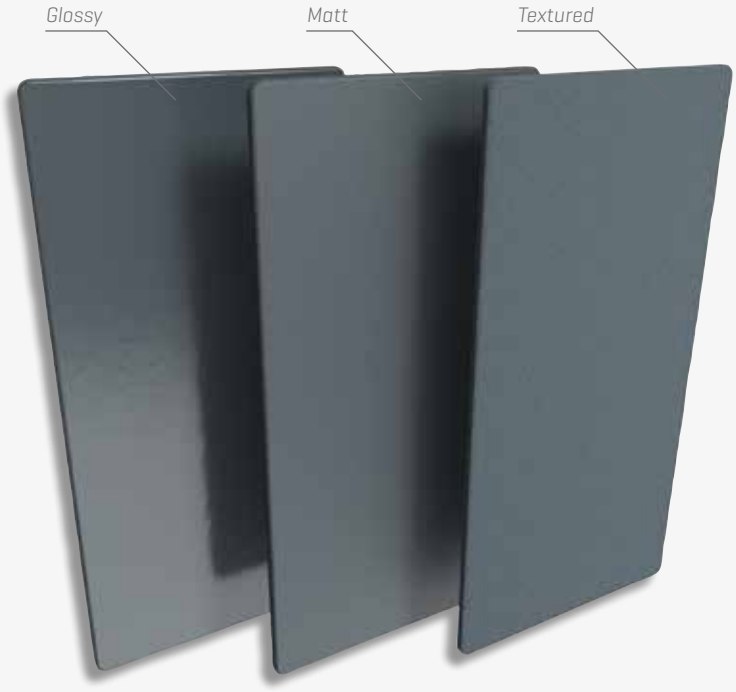


Wind tunnel test

Renson® Sun Protection Projects offers different options for achieving aesthetic and architectural sun protection in accordance with current regulations.

RAL COLOURS

You can choose from a wide range of RAL colours. This ensures that the sun protection screen always fits in seamlessly with the building's style. The choice is yours: a glossy or matt finish or rather a trendy texture coating that is not only wear-and scratch resistant, but also maintenance-friendly.



To guarantee the colour-fastness of the paint, we recommend Seaside Quality for coastal areas and other aggressive environments (heavy industry, ...). In this way, the paintwork always remains in perfect condition and will still look new after several years.

WARRANTY

All of the materials we use are of high quality and are tailored to meet the intended purpose.

As the manufacturer, we guarantee:

- 5 year* product warranty for normal household use and regular maintenance.
- 5 year warranty on the electronic control
- 10-year colour-fastness warranty for the powder coating on the aluminium parts.
- 5 year warranty on gloss level on aluminium profiles.

The warranty covers the delivery of replacement parts, assembly on site by an installer (possibly assisted by a technical employee from Renson® Sun Protection-Projects), or a complete revision of the system by the manufacturer at our location. The assembly costs (travel plus hourly rate) are not covered by this warranty.

The warranty period starts from the production date and only applies to the actual product, not on the installation thereof.

The warranty only applies when the product is used and maintained in accordance with the instructions of the user manual. The warranty becomes void after incorrect or abnormal use of the product.

** Also see the warranty certificate.*

MAINTENANCE

Sun protection requires little maintenance. You add many years to the service life of your sun protection by handling it with care.

Enkele algemene richtlijnen:

- Before cleaning, first remove loose dirt with a brush. You can subsequently remove the remaining dirt with a cleaning product (avoid corrosive products) and lukewarm water. Always rinse the fabric after cleaning. Avoid cleaning in fierce sunlight: stains may remain on the fabric when the soap water dries quickly.
- We do not recommend using high pressure devices.
- Do not use any aggressive abrasives.
- We recommend semi-annual maintenance for non-aggressive environments. For aggressive environments (sea, heavy industry ...) we recommend frequent maintenance, about 4 times a year.
- Always use the manufacturer's original spare parts.

** See our user manual.*

Easy maintenance with the Renson® Maintenance Set

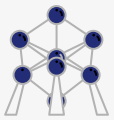
- The texture is made of powder coated aluminium. An annual cleaning with the **Renson® Maintenance Set** products ensures years of maintaining the intense colors and gives extra protection against acid rain, sea air and UV rays. Maintenance is designated at least 2 x per year in coastal areas and wooded environments.
- The **Renson® 'Clean'** is a concentrated product with strong cleansing and degreasing properties for the most common natural pollutants, such as dust, greasy deposits, grease stains, moss, insect marks, etc. This product is not comparable with most cleaning products. Because of its in-depth action, the dirt is 'lifted', so to speak. This product can also be used for cleaning polyester fabric roofs and vertical fibreglass screen fabrics. After cleaning, you must protect the aluminium texture with **Renson® 'Protect'**. It leaves a protective film that facilitates subsequent cleaning of the surface area with a simple swipe of the surface and realises it with minimum use of **Renson® 'Clean'**. It also protects the aluminium against acid rain, sea air, UV rays and thus ensures that the intense colour is retained.
- Both products must not be used in direct sunlight or hot weather. The fast drying of the product could leave stains on the structure or the fabric. Never use corrosive or aggressive products, scouring pads or other abrasives. Furthermore, never use high-pressure devices.

Renson® Maintenance Set

WHY RENSON®?

Renson® sets the bar high and is always one step ahead of the future. And you can get a piece of this. Choosing for Renson® is not a coincidence?

You choose for Belgian quality
You get the warranty that every element is produced durably in accordance with the strictest quality requirements. This allows you to enjoy your investment for a long time. Designed & Made in Belgium.



You draw the map of innovation
You like to join the latest technologies? So do we. Our substantial R&D-team continuously develops new products and possibilities. Before our products enter the market, they are subjected to sound thorough durability tests. At Renson®, you always choose the best of the best and you know that it works.

Your prefer 100% customization
We speak your language. Thanks to the extensive product range, Renson® offers a customized solution according to your situation, your taste, your needs and your budget. Our specialists pilot and guide you through all the options.

Your believe in the power of communication
Not only do we have the know-how, but we also share this knowledge. For example, you can enter our EXIT 5 showroom without any obligation, you can find us on the most important (inter)national fairs and our website offers the latest inventions and technical information. Do you have an urgent question? Please contact us by telephone.

You choose for trust
You opt for a reliable partner with tons of experience, which is also financially sound. Since its founding in 1909, Renson® has always been a family enterprise where entrepreneurship, perseverance and dynamism are key.

You choose for experts in sun protection and ventilation
Renson® relies on a powerful and particularly extensive dealer network. Each and everyone is a professional with years of experience. There is always a Renson® specialist in your area who speaks your language. Due to continuous training, we remain abreast with the latest products and techniques.

You are not alone
Renson® commits to advising you, from start to finish. And it does not end with a perfect installation, you can keep on relying on the expertise of our professionals.


Healthbox® 3.0
RENSON

RENSON® ACADEMY

Why?
The proper functioning of our products does not only depend on the quality, but also on the correct installation and adjustment by the installer. As manufacturer, we also ensure that these installers deliver good work.

How do we manage this?
Installers receive a thorough technical training at our training centre. Our experienced installers show them how to install everything correctly.

The result?
Properly working systems that ensure the comfort and health of the residents and meet all the technical and quality requirements.

RENSON® PRE- & AFTERSALES

Why?
A specific project? We look for a suitable solution together with you. We can also help you with questions about installation.

How do we manage this?
A team of technically trained employees is ready with a suitable answer to all your questions.

Result?
For every project, there is a suitable solution and an excellent after-sales service.

Get inspired in our showroom
EXIT5 at Waregem along the E17

EXIT 5

EXPERIENCE, **I**NNOVATION & **T**ECHNOLOGY @ RENSON

WE'D BE HAPPY TO HELP YOU!

Our head office - the elegant building designed by the late architect Jo Crepain, which has been the visiting card of our company for many years - is now being renovated. The bottom part of the building now has an imposing glass façade. Behind the façade, there is a new 'Customer Centre' with reception rooms for customers, conference rooms, and an auditorium, where large groups of more than 300 people can participate in presentations. In case of smaller groups, this auditorium can also be divided into 3 separate rooms.

The highlight of the project is the new showroom of 1250 m², where professional customers as well as private individuals can be accommodated. Apart from a showroom for Renson®'s various innovative solutions and concepts, it is planned to make this room a knowledge centre, where customers can walk in and ask questions about ventilation, heating, sun protection, ventilative cooling, acoustics, interior, etc, ... In short: everything to provide the home with all the necessary comfort. There is also the possibility to view the solutions in practice in show houses located nearby.

For more information about the network of Renson® ambassadors, please visit our website at: www.renson.eu

RENSON®: YOUR PARTNER IN VENTILATION, SUN PROTECTION AND OUTDOOR CONCEPTS

- **Creating healthy spaces**
  From 1909, we've been developing energy efficient solutions assuring a healthy and comfortable indoor climate. Our headquarters - built according to the 'Healthy Building Concept' – is a beautiful example portraying our corporate mission.

- **No speed limit on innovation**
  A multidisciplinary team of more than 90 R&D employees continually optimize our products and develop new and innovative concepts.

- **Strong in communication**
  Contact with the customer is of the utmost importance. A group of 100 in-the-field employees worldwide and a powerful international distribution network are ready to advise you on site. EXIT 5 at Waregem gives you the possibility to experience our products on your own and provides necessary training for installers.

- **A reliable partner in business**
  We can guarantee our customers optimal quality and service thanks to our environmentally friendly and modern production sites (with automated powder coating line, anodisation line, uPVC injection molding machinery and mold making shop) covering an area of 95.000 m².

RENSON®
Creating healthy spaces

RENSON® Headquarters
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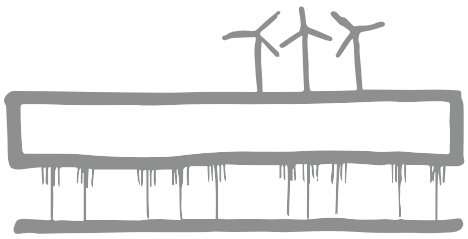
info@renson.eu
www.renson.eu



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