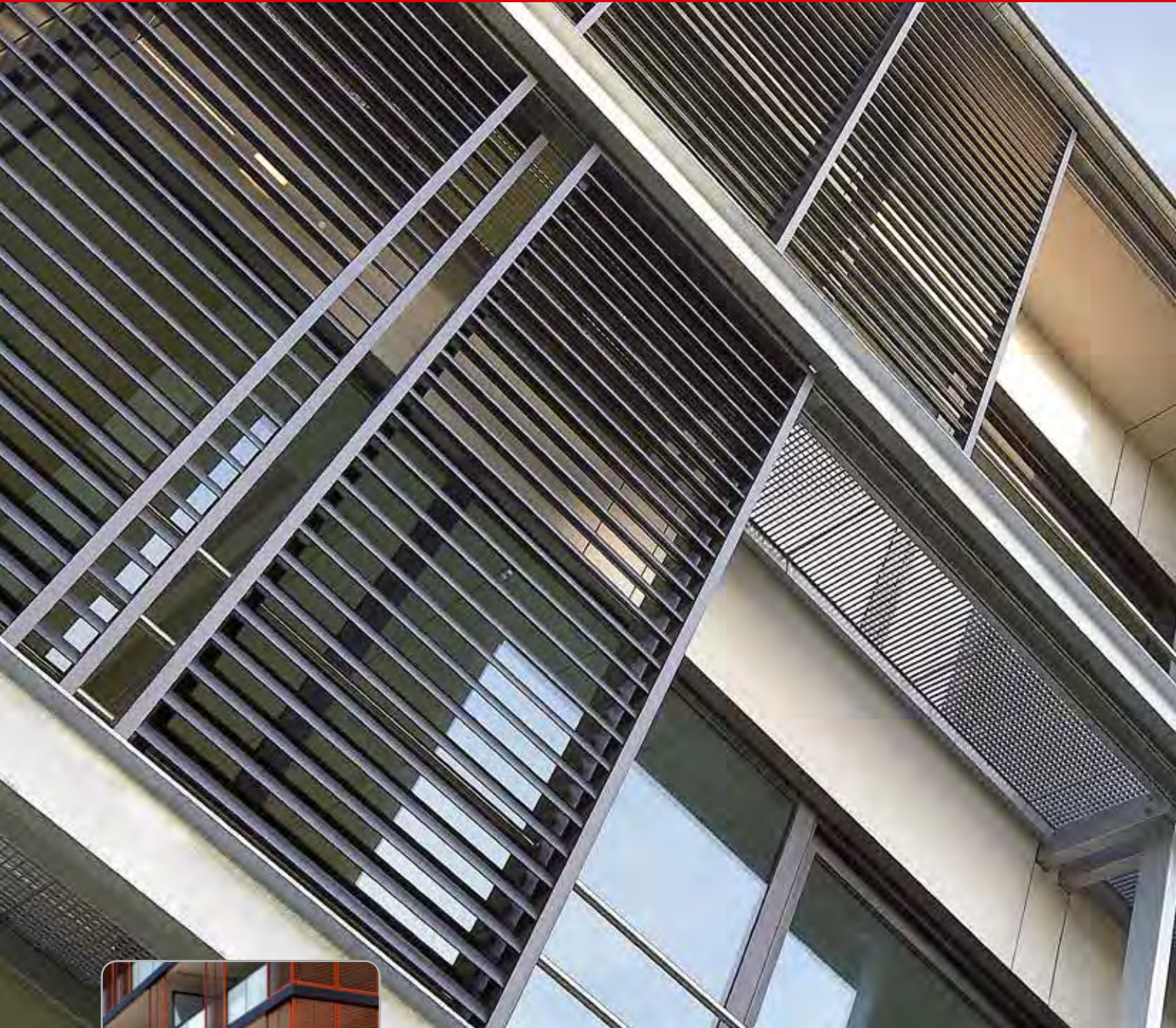




Creating healthy spaces



Sliding panels

Structural aluminium sunprotection
Loggia® | Patio®

Summary

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Over the past decade, healthy and ecological construction methods have become increasingly important. Particular attention should be paid to avoid overheating in summer and to assure a good air quality. Nevertheless, it has become obvious that the right solution is more complex than simply installing an air conditioning system. Various studies have proven that health problems arise more frequently in air conditioned buildings than in naturally ventilated buildings. According to these studies, 90% of the interviewees prefer natural ventilation to an air conditioning system.

Healthy Building Concept

The Healthy Building Concept (HBC) offers an alternative by providing a healthy, comfortable and energy-efficient indoor climate (in accordance with the requirements of the Kyoto protocol). HBC guarantees a good air quality through natural ventilation, as well as pleasant temperatures in summer using external sun protection and intensive night ventilation. In companies, this boosts the employees' productivity and increases output. As a result, buildings constructed according to the Healthy Building Concept offer benefits to their owners, occupants and the environment.

The need for sunprotection

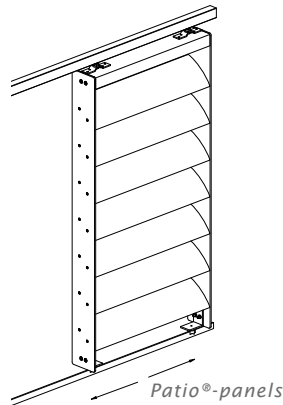
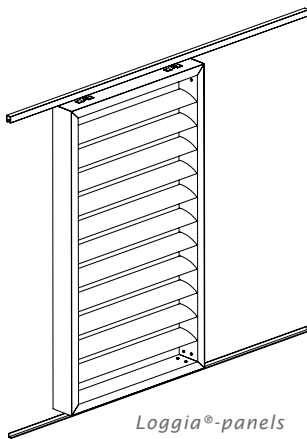
Sun-oriented buildings or homes, with large glass surfaces facing south, offer many advantages. Many people feel that the visual contact with the exterior and the natural light entering the building is very important. However, in summer, this may create less comfortable side-effects, such as overheating or annoying glare.

The efficiency of a sun protection system strongly depends on its position. An exterior sun protection system blocks sunrays before they reach the glass. Therefore it eliminates the greenhouse effect, strongly reduces undesirable heating of the building and diminishes the need to cool down the space.

Sliding panels

In reply to the growing demand for aesthetic, multifunctional façade elements, RENSON® has expanded its range of sliding panels even further. The Sunclips® and Icarus® Patio® panels are sliding cassettes, in which the blades have been screwed between vertical endcap plates. The Loggia® panels are constructed with frames fitted with aluminium blades. Different types of blades can be used with both systems. Depending on the desired enclosure and the required see-through visibility, the blades can be positioned at different inclinations and with different blade pitches.

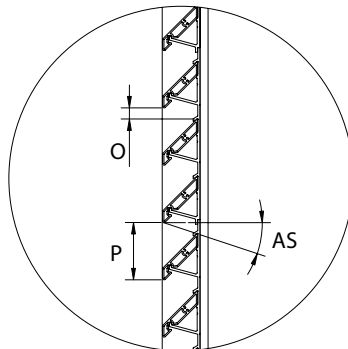
In addition to this wide range of sliding panels fitted with fixed, aluminium sun protection blades, panels with fabric or movable blades are now available as well: Loggiascreen®, Loggiascreen® 4Fix or LG.130/ICA.125M.



Applications

Multi-functional façade elements

- Sun protection
- Intensive ventilation
- Visual screen
- Fence
- Daylight control
- Insect mesh
- Partial shading



Technical features

- Extruded aluminium profiles
- Aesthetic quality finish
- Factory pre-assembled and delivered “ready-to-fit”, made-to-measure production
- Easy to operate
- High-quality accessories
- Rigid and stable

Parameters

Each type of panel is characterized by its properties in terms of visual openness and sun protection. Visual openness is represented by the parameter $OV (= O/P)$, the perpendicular visual opening; the larger OV , the more visibility through the panels.

The level of sun protection is represented by AS : the limit angle of sunray incidence; the smaller AS , the more efficient the sun protection.



Loggia®, apartments, Kortrijk (BE)



Loggia®, Callens & EMK, Waregem (BE)



Patio®, Colombe Parc Offices, Toulouse-Colomiers (FR)

Loggia® LG.040, Green Office, Meudon (FR)

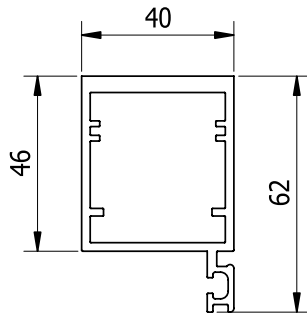


Description

Loggia® LG.040 is a frame characterized by a minimal thickness for heights up to 2,500 mm, always taking into account the local wind pressure bearing on the system. LG.040 type frames can be fitted with different types of blades: L.050.21 and L.066.21. For both blades, the angles and intervals between blades are fixed.

Finish

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



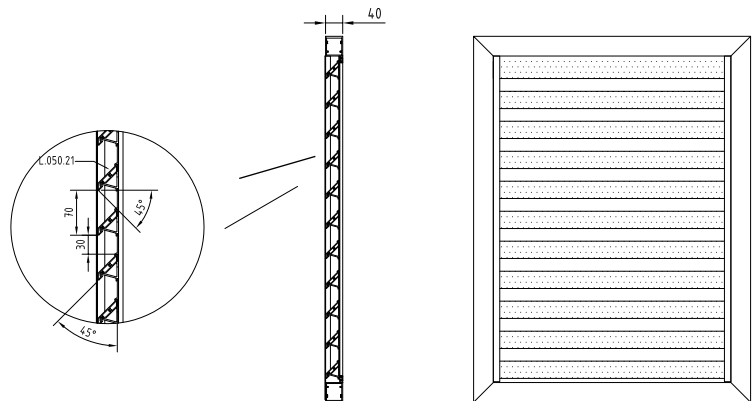
Loggia® LG.040 with blade L.050.21, Le Millenium, Lyon (FR)

LG.040 + L.050.21

Normal maximum dimensions:

Qb (*)	Typical dimension L x H (mm x mm)
650 Pa	1100 x 2600
800 Pa	1000 x 2500
1250 Pa	800 x 2320

Perpendicular visual opening OV: 42 %
Limit angle of sunray incidence AS: 45°
Blade pitch: 70 mm

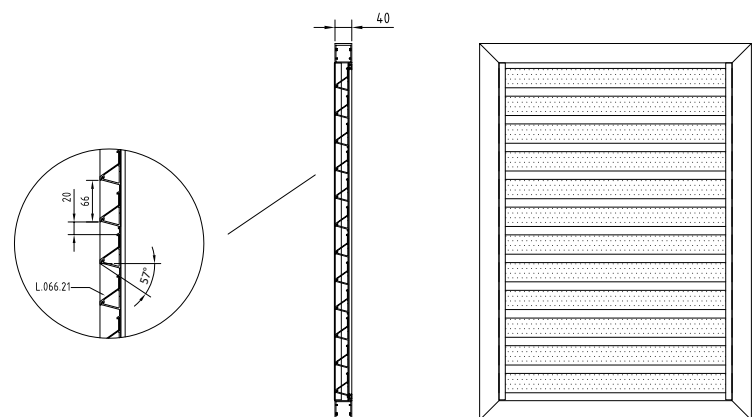


LG.040 + L.066.21

Normal maximum dimensions:

Qb (*)	Typical dimension L x H (mm x mm)
650 Pa	1100 x 2500
800 Pa	900 x 2500
1250 Pa	800 x 2240

Perpendicular visual opening OV: 30,3 %
Limit angle of sunray incidence AS: 33°
Blade pitch: 66 mm



(*) Qb: Basic wind pressure in accordance with the ENV 1991-2-4 (1995) standard

Loggia®, apartments, Kirchberg (LU)

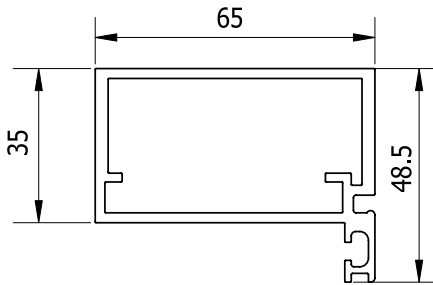


Description

The Loggia® LG.065 frame is designed for bigger heights up to 3,000 mm, always taking into account the local wind pressure bearing on the system and depending on the type of blade to be fitted. LG.065 type frames can be fitted with different types of blades: L.066.P and L.066.01. For both types of blades the angles and intervals between blades are fixed.

Finish

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



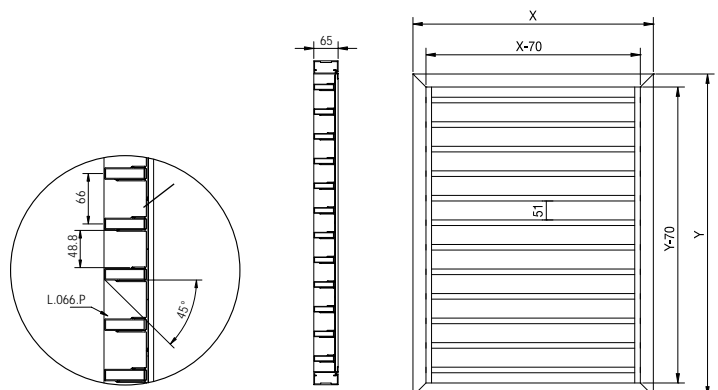
Loggia®, Centre de services intégrés de soins pour seniors, residential, Luxemburg (LU)

LG.065 + L.066P

Normal maximum dimensions:

Qb (*)	Typical dimension L x H (mm x mm)
650 Pa	1300 x 6000
800 Pa	1200 x 6000
1250 Pa	1000 x 5510

Perpendicular visual opening OV: 74 %
Limit angle of sunray incidence AS: 45°
Blade pitch: 66 mm

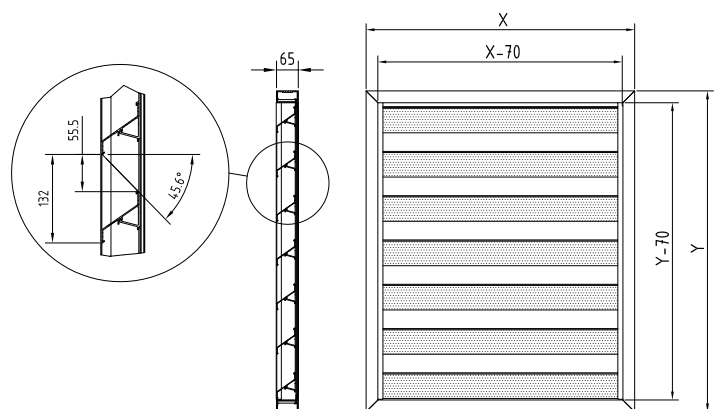


LG.065 + L.066.01

Normal maximum dimensions:

Qb (*)	Typical dimension L x H (mm x mm)
650 Pa	1000 x 3220
800 Pa	1000 x 3010
1250 Pa	800 x 2790

Perpendicular visual opening OV: 42 %
Limit angle of sunray incidence AS: 45°
Blade pitch: 132 mm



(*) Qb: Basic wind pressure in accordance with the ENV 1991-2-4 (1995) standard

Loggia® 130 with Icarus® 125, TMWV Offices, Asse (BE)

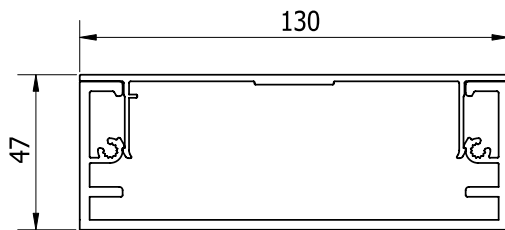


Description

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.

Finish

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



Loggia® 130 with Icarus® 125, TMWV Offices, Asse (BE)

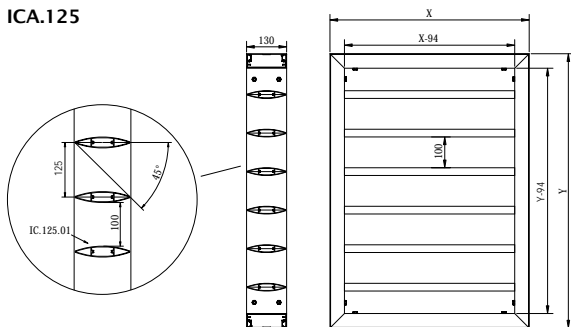
OV (%)	Angle (°)	Blade pitch	AS (°)	OV (%)
ICA.125	90	125	45	80,0
ICA.125	75	125	37	70,8
ICA.125	75	150	44	75,7
ICA.125	60	125	30	48,4
ICA.125	60	150	39	57,0
ICA.125	60	175	46	63,1
ICA.125	45	125	22	28,3
ICA.125	45	150	35	40,3
ICA.125	45	175	44	48,8
ICA.150	59	150	29	46,0

OV (%)	Angle (°)	Blade pitch	AS (°)	OV (%)
ICA.150	59	200	44	59,5
ICA.150	45	150	22	27,8
ICA.150	45	200	42	45,9
ICP.150	45	150	15	15,3
ICP.150	45	200	41	36,5
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

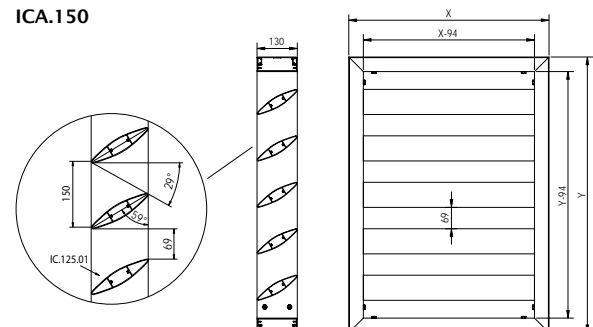
AS: Limit angle of sunray incidence • OV: Perpendicular visual opening • Definitions: see page 3

EXAMPLES

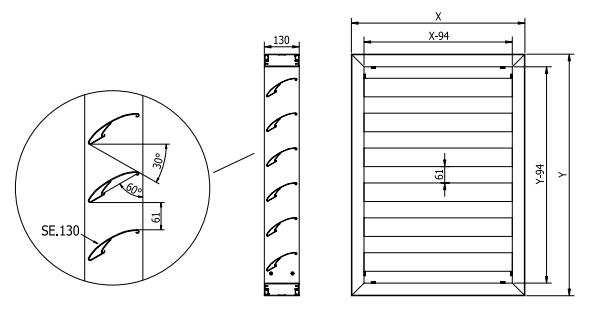
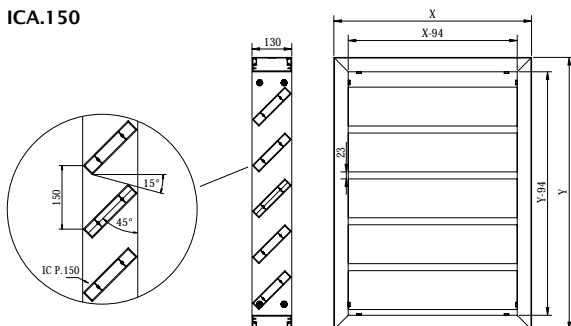
ICA.125



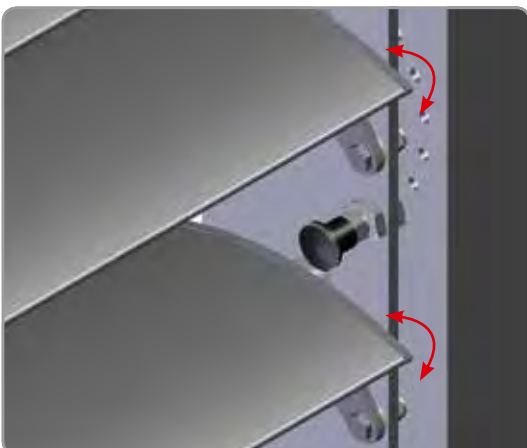
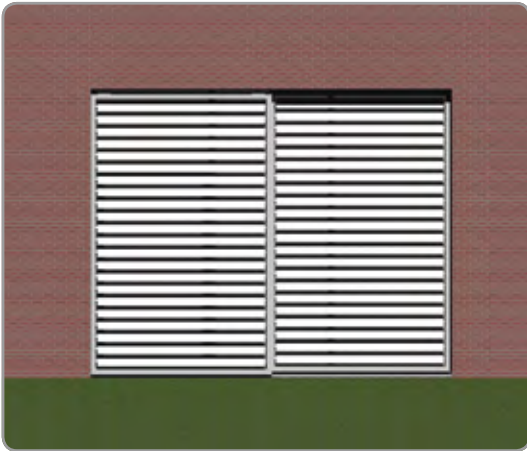
ICA.150



ICA.150



Movable louvres



To manage solar heat and natural daylight even more effectively, RENSON® has developed the Loggia® LG.130 with manually moving blades ICA.125. This system allows not only the panel to be moved in the desired position, but the blades can also be rotated into their ideal position. According to the position of the sun or the desired level of shading, the rotation can be determined.

Applications

- Sunprotection
- Intensive ventilation
- Visual screen
- Control of daylight
- Control of shading

Technical features

- Profiles in high-quality extruded aluminium
- Powder coated in all RAL colours (60-80 microns) or anodized (20 microns)
- Custom-made
- Sliding panel operated manually or by motor
- Manual tilting slats
- Blades adjustable in 15° increments (7 positions)
- Maximum dimensions on request

Materials

- Aluminium extrusion, EN AW-6063 T66 alloy

Finish

Aluminium parts:

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



Loggia®, Center of integrated care for seniors, residential, Luxemburg (LU)



Loggia® LG.040, Le Millenium, Lyon (FR)



Loggia®, Les Jardins de La Loire, residential, Nantes, Malakoff (FR)



Patio® with blade Sunclips® Evo 130, Private residence, Vilvoorde (BE)



Loggia®, Sogima-Salengro, Marseille (FR)

Loggiascreen® 4FIX



Description

Loggiascreen® 4FIX combines the properties 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 a system integrated into the top and bottom frames. Loggiascreen® 4FIX 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® 4FIX can also be used to provide privacy and protection from the wind.

Technical features

- 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
- Possible dimensions depend on the local and regional legislation and the wind load (*). Maximum panel height: 3000 mm.

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

Materials

- 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.

Finish

Aluminium parts:

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

Frames

- **Loggiascreen® 4FIX LG.040**

Frame having a depth of 40mm, suitable for normal panel dimensions and wind loads.

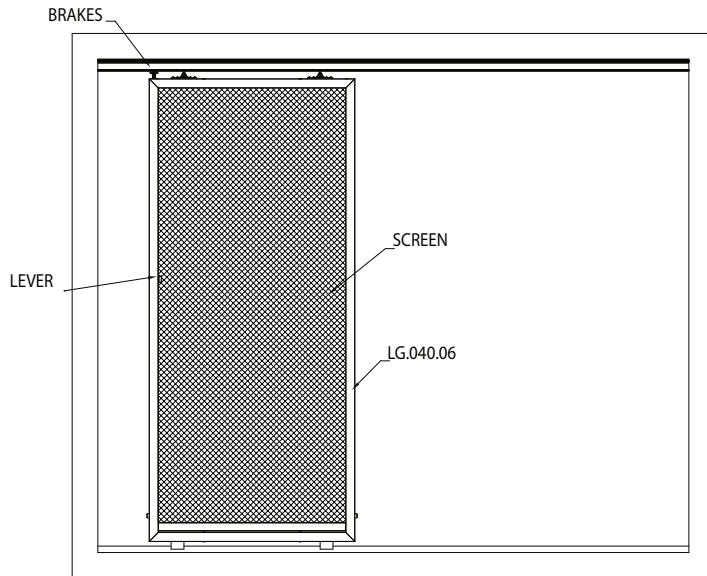
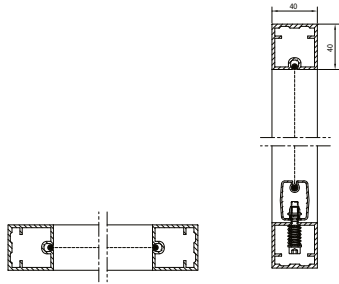
- **Loggiascreen® 4FIX LG.067**

Frame having a depth of 67mm, suitable for larger panel sizes and higher wind loads.

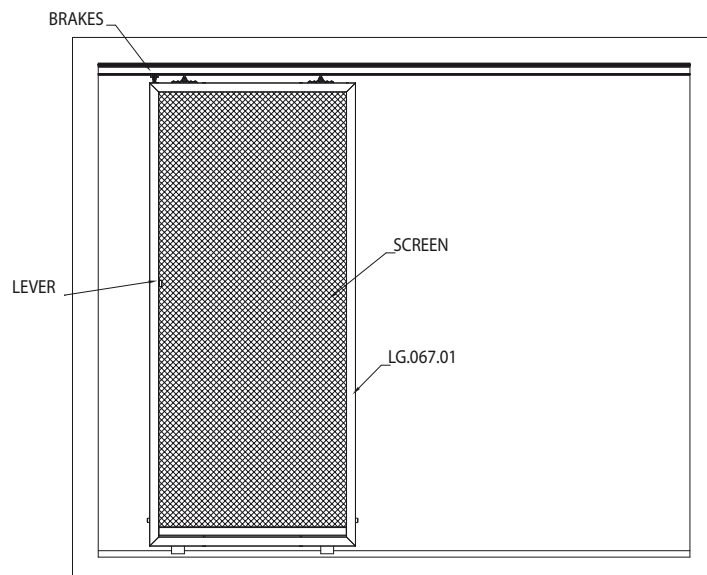
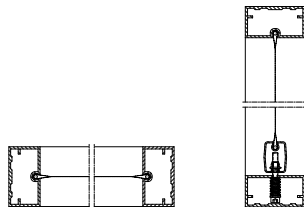


Loggiascreen® 4FIX, Residentie Reylof, apartments, Gent (BE)

Loggiascreen® 4FIX LG.040



Loggiascreen® 4FIX LG.067



Loggiascreen® 4FIX, Residentie Reylof, apartments, Gent (BE)





Description

Loggiawood® combines the qualities 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 slats providing a very natural and elegant look.

Technical features

- Finished panels with no visible fittings
- Extruded aluminium frame with anodized or powder-coated finish
- Assembled and delivered ready for fitting, custom-made in the factory
- Low maintenance:
 - High-quality wood, suitable for natural weathering
 - High quality, maintenance-free sliding panel hardware
 - Powdercoated or anodized aluminium, easy to clean
- Available in various versions:
 - Choice of wood varieties: (*)
 - Choice of slat shape (*)
 - Slat pitch and -slope can be individually selected (*)
- Suitable as a sliding or fixed panel
- Sliding systems:
 - Easy to slide
 - Symmetrical sliding
 - Manual or motor driven
- Possible dimensions depend on the local and regional legislation and the wind load (*)

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

Materialen

- Aluminium extrusion, alloy EN AW-6063 T66
- Wooden slats: WRCedar

Finish

- Aluminium components:
 - Anodised (20 microns)
 - Polyester powder coating (60-80 micron) in RAL colours
- Wood slats are untreated to allow natural weathering

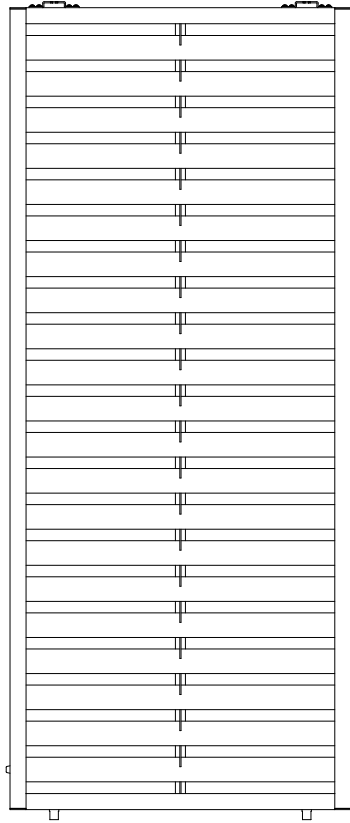
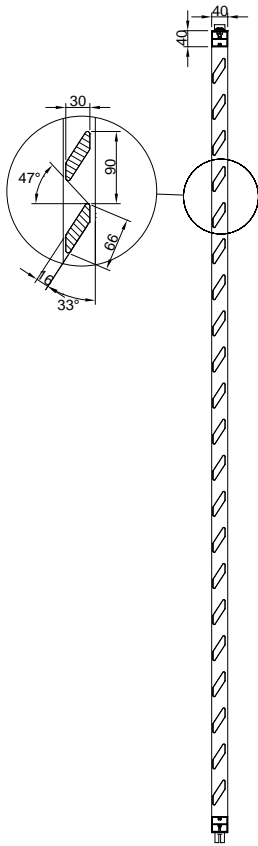
Frames

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

Lamellen

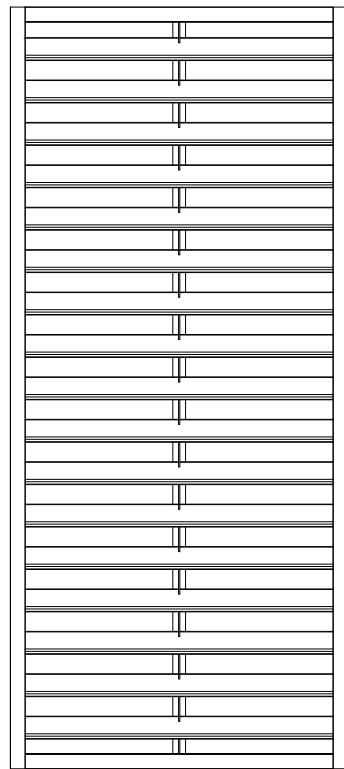
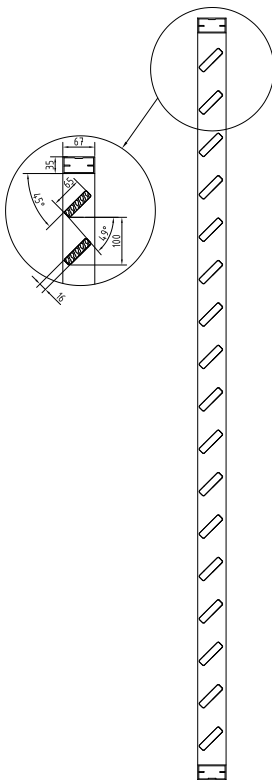
- **Loggiawood® LG.040**
 - Blade pitch : 90mm
 - Depth : 30mm
 - Blade angle : 33°
 - Limit angle of sunray incidence AS : 47°
- **Loggiawood® LG.067**
 - Blade pitch : 100mm
 - Depth : 45mm
 - Blade angle : 45°
 - Limit angle of sunray incidence AS : 49°

Loggiawood® LG.040



Logement Sous Chavort, Montmellian (FR)

Loggiawood® LG.067



Candy Wharf, Copperfield Road, London (UK)



Description

Sunclips® and Icarus® Patio® are sliding panels constructed with sun protection blades screwed between 2 flat end plates. 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 inclinations. Patio® sliding panels are notable for the elegant design of the end plates.

The maximum panel dimensions depend on the selected profiles and the local wind pressure bearing on the system.

Finish

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



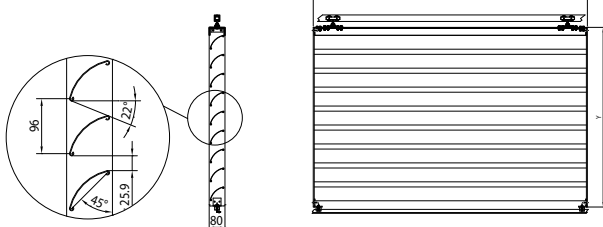
Sunclips® Patio, Residences Bergschenhof, Bergschenhoek (NL)

OV (%)	Angle (°)	Blade pitch	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

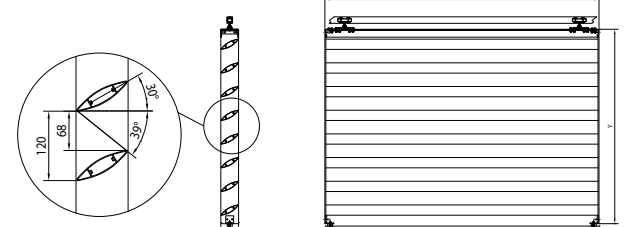
OV (%)	Angle (°)	Blade pitch	AS (°)	OV (%)
ICA.125	15	125	37	71
ICA.125	15	150	44	76
ICA.125	30	125	30	48
ICA.125	30	150	39	57
ICA.125	30	175	46	63
ICA.125	45	125	22	24
ICA.125	45	150	35	40
ICA.125	45	175	45	49
ICP.060	0	60	40	83
ICP.060	0	75	47	87
ICP.060	15	60	32	58
ICP.060	15	75	42	67
ICP.060	30	60	25	36
ICP.060	30	75	38	49
ICP.060	30	90	48	57
ICP.060	45	60	17	18
ICP.060	45	75	36	34
ICP.060	45	90	48	45

AS: Limit angle of sunray incidence • OV: Perpendicular visual opening • Definitions: see page 3

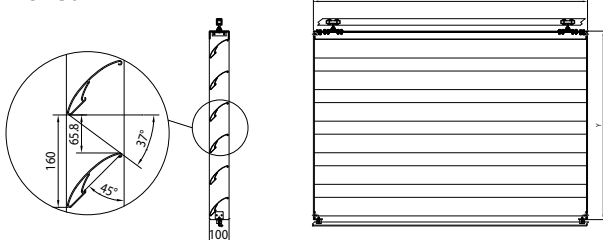
EVO.96



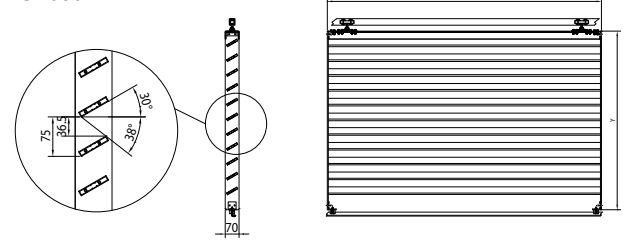
ICA.100



EVO.130



ICP.060



Sliding systems

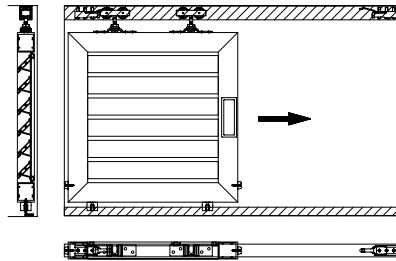


Rabobank Franeker (NL)

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

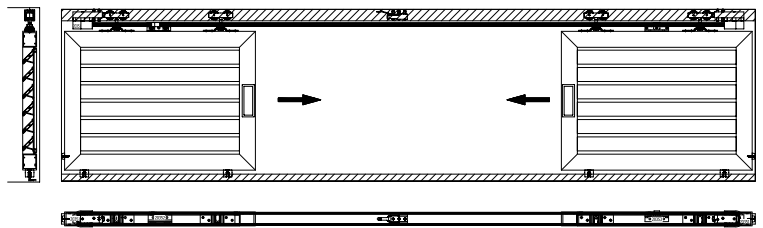
- **Individually sliding**

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



- **Symmetrically sliding**

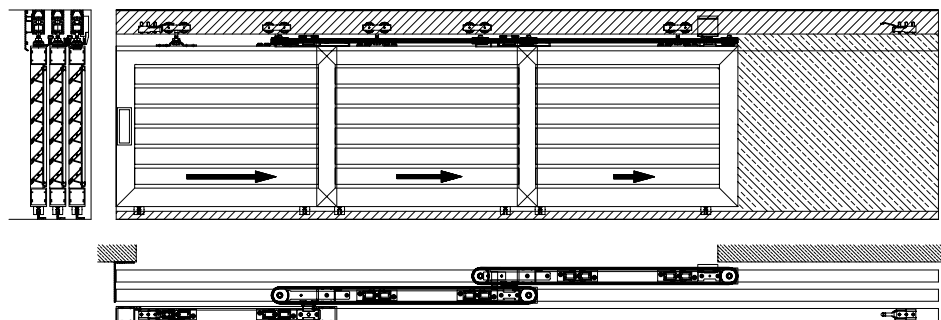
This system consists of pairs of mutually interconnected panels. The panels are connected in order to move symmetrically in relation to one another.



Apartments Faulenstrasse (DU)

- **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.



All sliding systems can be equipped with manual or powered motorised controls.

For powered motorised controls two systems are available:

- 230V motor for controls using a simple switch or to be connected to the building management system.
- 12VDC motor with respective control unit, to be connected as a unit to a 230V power supply.



Other applications

The sun protection panels described above can also be applied in other ways than sliding panels, e.g. as fixed installations or as folding systems.

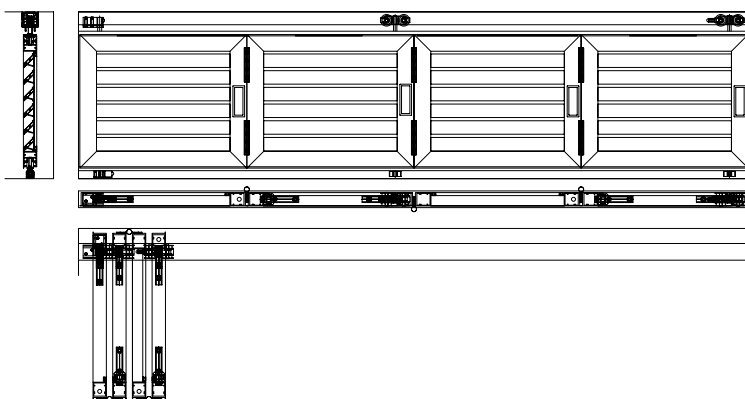
1. Fixed panels

If the moving elements do not need to be flexible, the different types of sunprotection panels can also be applied as fixed sun or wind screens.

2. Folding panels

Available with LG.040

The folding system is only available in a manually controlled version.



*Loggia® LG.040 with blade L033.01,
Jardin des Sens, residential,
Saint Martin d'Hères (FR)*



Creating healthy spaces

RENSON®: your partner in ventilation and sun protection

RENSON®, headquartered in Waregem (Belgium), is a trendsetter in Europe in natural ventilation and sun protection.

- **Creating healthy spaces**

From 1909, we've been developing energy efficient solutions assuring a healthy and comfortable indoor climate.

Our remarkable 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 40 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 65 in-the-field employees worldwide and a powerful international distribution network are ready to advise you on site. The RENSON® Experience Center 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 75.000 m².

Dealer



RENSON® reserves the right to make technical changes to the products shown.
The most recent versions of our brochures can be downloaded from www.renson.eu

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