



CREASHADE  
SUN SHADING SOLUTIONS



Creating healthy spaces



# Sliding panels

Structural aluminium sunprotection  
Loggia® | Patio®

## Summary

|                       |    |
|-----------------------|----|
| Introduction          | 2  |
| Sliding panels        | 3  |
| Loggia®LG.040         | 4  |
| Loggia®LG.065         | 6  |
| Loggia®LG.130         | 8  |
| Movable louvres       | 10 |
| References            | 11 |
| Loggiascreen® 4fix    | 12 |
| Loggiawood®           | 14 |
| Patio® sliding panels | 16 |
| Sliding systems       | 18 |
| Control               | 19 |
| Other applications    | 19 |

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

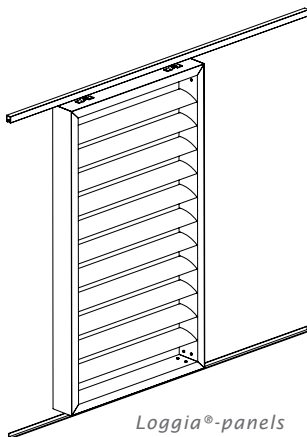
Sun-oriented buildings or homes, with large glass surfaces facing south, offer many advantages. Many people feel that the visual contact with the exterior and the natural light entering the building is very important. However, in summer, this may create less comfortable side-effects, such as overheating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

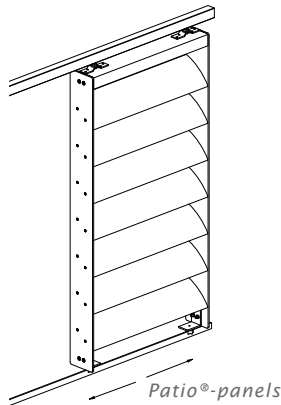
# Sliding panels

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.



Loggia®-panels

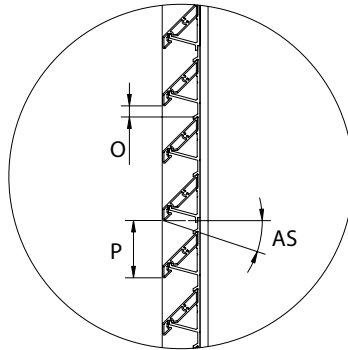


Patio®-panels

## 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)*

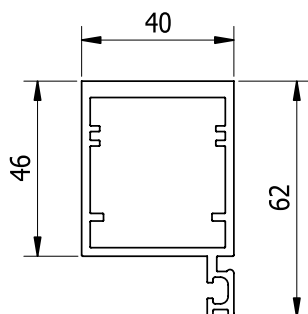


## Description

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))



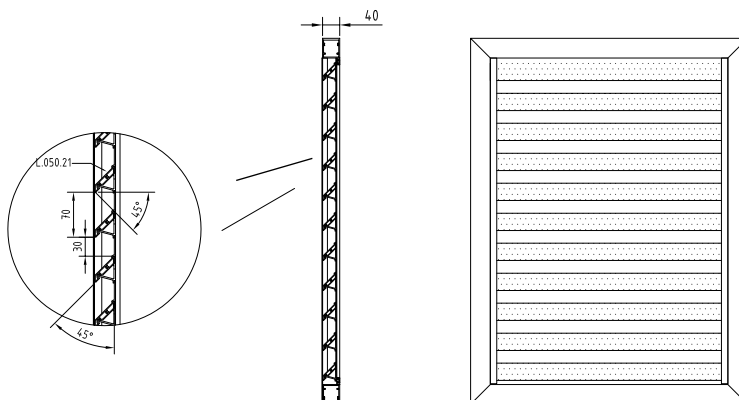
Loggia® LG.040 with blade L.050.21, Le Millenium, Lyon (FR)

### 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

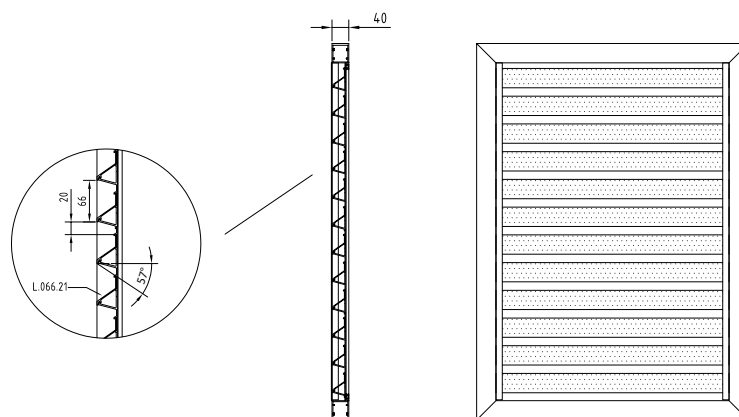


### LG.040 + L.066.21

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)*

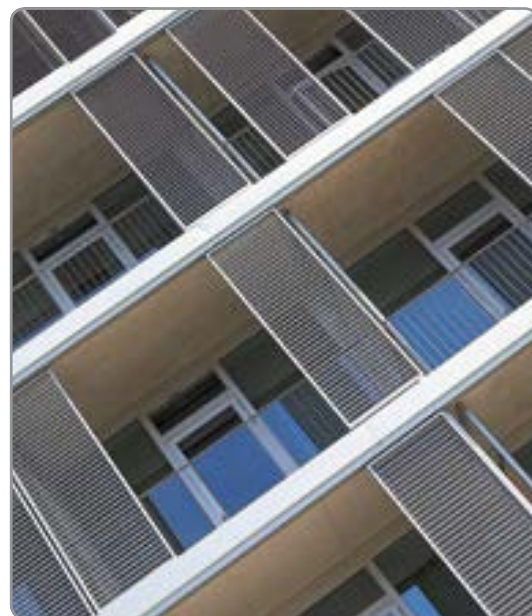
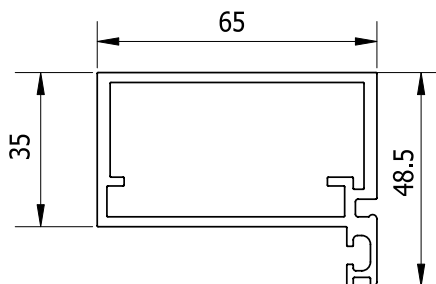


## Description

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))



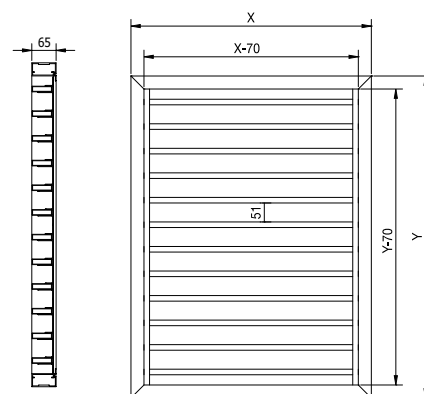
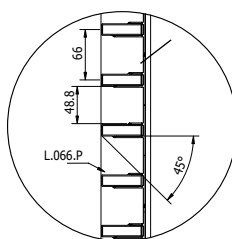
Loggia®, Centre de services intégrés de soins pour seniors, residential, Luxembourg (LU)

## 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

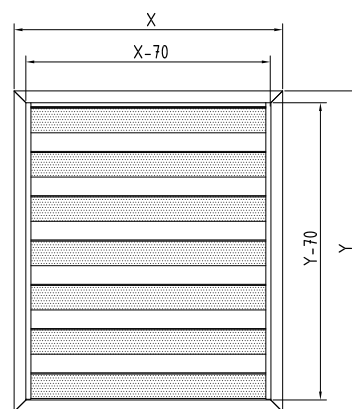
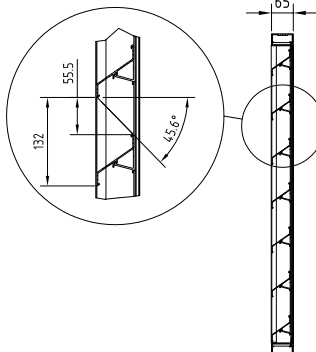


## LG.065 + L.066.01

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)*

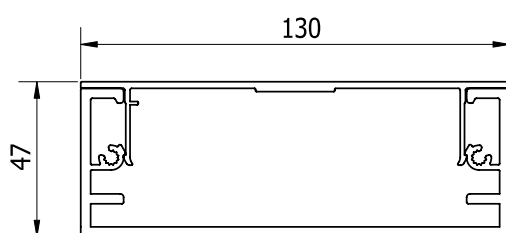


## Description

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)

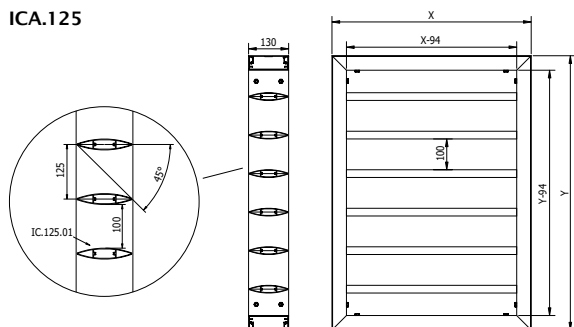
| OV (%)  | Angle (°) | Blade pitch | AS (°) | OV (%) |
|---------|-----------|-------------|--------|--------|
| ICA.125 | 90        | 125         | 45     | 80,0   |
| ICA.125 | 75        | 125         | 37     | 70,8   |
| ICA.125 | 75        | 150         | 44     | 75,7   |
| ICA.125 | 60        | 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   |

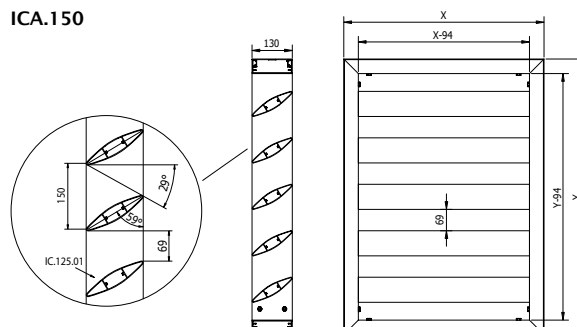
AS: Limit angle of sunray incidence • OV: Perpendicular visual opening • Definitions: see page 3

## EXAMPLES

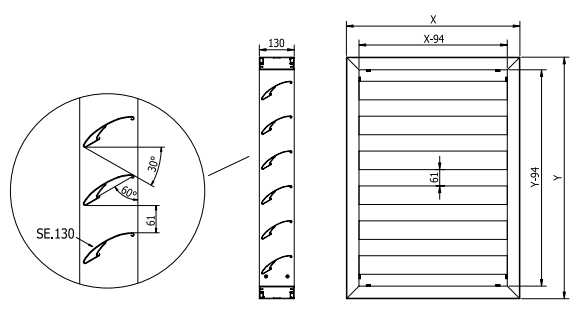
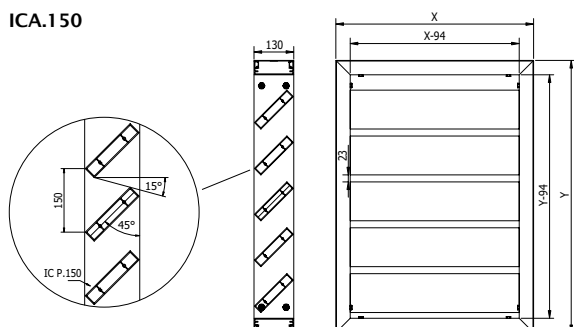
### ICA.125



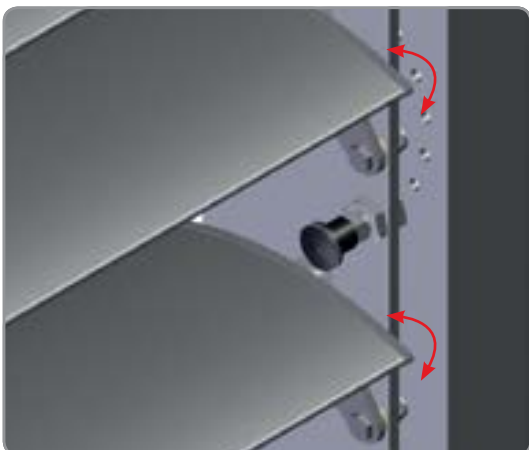
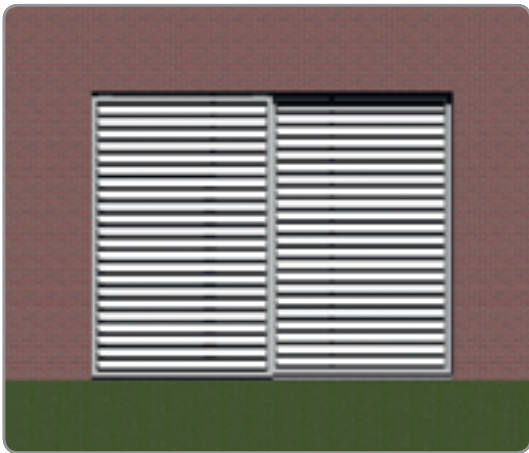
### ICA.150



### 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)*



## 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

## 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))

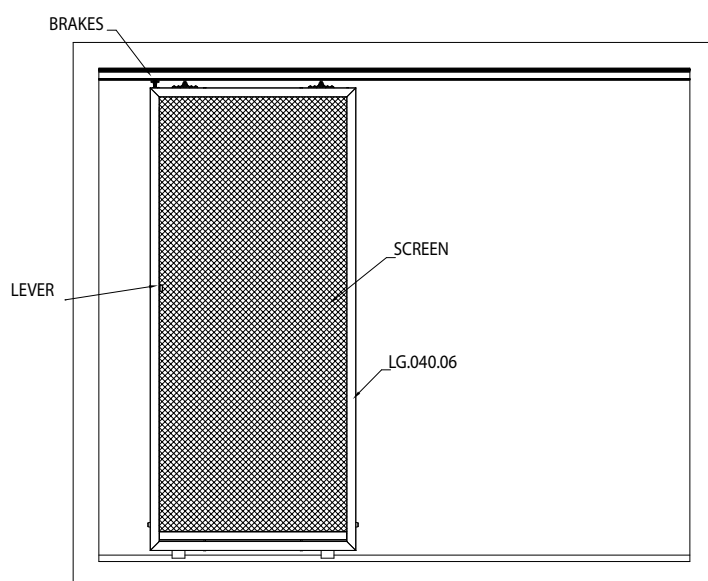
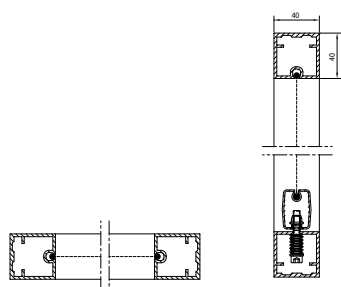
## Frames

- **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.

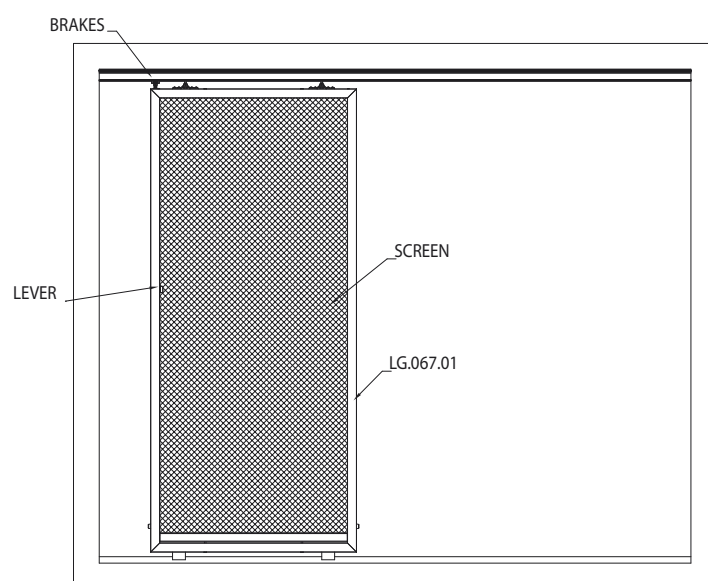
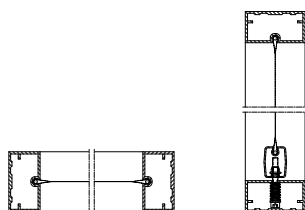


*Loggiascreen® 4FIX, Residentie Reylof, apartments, Gent (BE)*

**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 with 100mm pitch 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: WRCedar
- 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

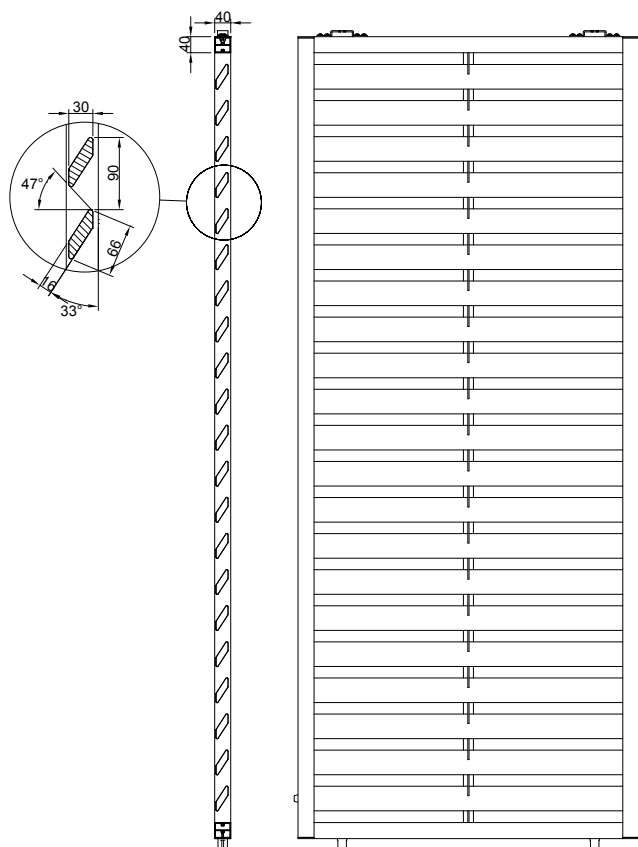
## Frames

- **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.

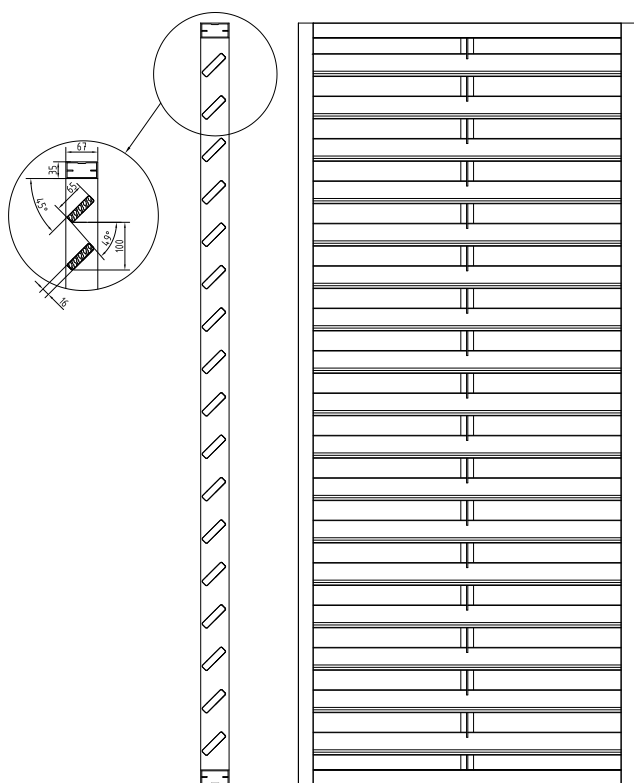
## Lamellen

- **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



Loggiawood® LG.067



Logement Sous Chavort, Montmellian (FR)



*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))



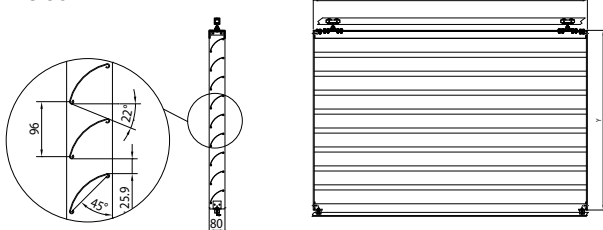
Sunclips® Patio, Residences Bergschenhof, Bergschenhoek (NL)

| 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     |

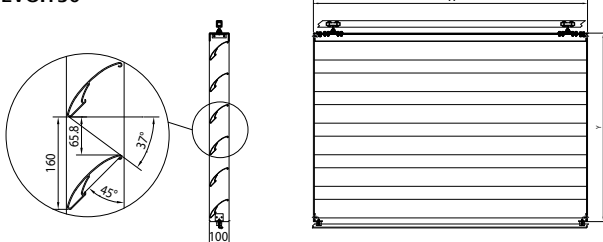
| OV (%)  | Angle (°) | Blade pitch | AS (°) | OV (%) |
|---------|-----------|-------------|--------|--------|
| ICA.125 | 15        | 125         | 37     | 71     |
| ICA.125 | 15        | 150         | 44     | 76     |
| ICA.125 | 30        | 125         | 30     | 48     |
| ICA.125 | 30        | 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

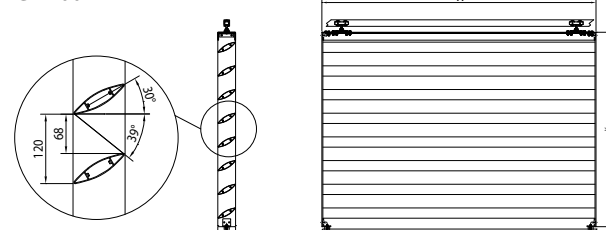
### EVO.96



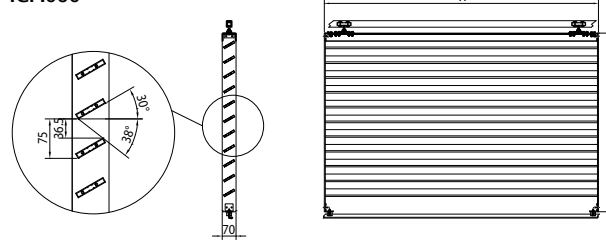
### EVO.130



### ICA.100



### ICP.060



# Sliding systems

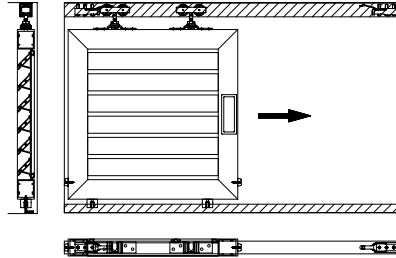


*Rabobank Franeker (NL)*

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

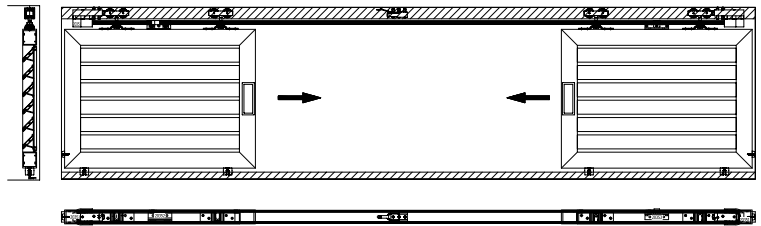
- **Individually sliding**

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



- **Symmetrically sliding**

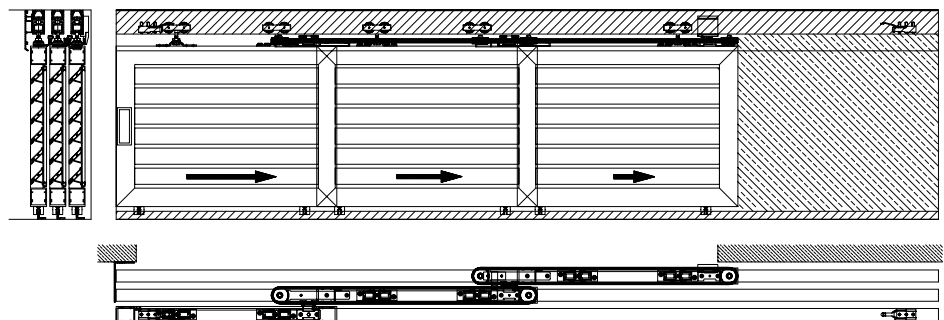
This system consists of pairs of mutually interconnected panels. The panels are connected in order to move symmetrically in relation to one another.



*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.

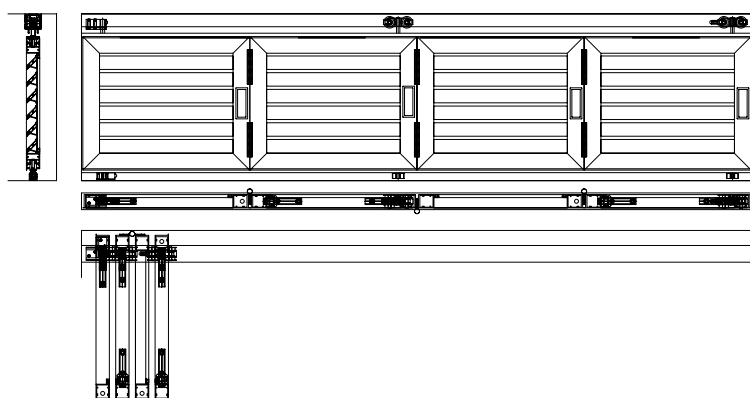
### 1. Fixed panels

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)*



Cherfan Draperies S.A.R.L., Jal El Dib Main Roan, P.O.Box 60-367 Beirut Lebanon

T + 961 4 710061 F + 961 4 719061 E [info@creashade.com](mailto:info@creashade.com) W [www.creashade.com](http://www.creashade.com)

Canada Branch: Creashade Canada Inc., 505 Industrial, Road Unit B2, Ottawa, Ontario K1G OZ1

T + 1 613 627 3959 M + 1 613 794 0097