What we do...

uin2 designs and manufactures a wide range of extruded aluminium louver windows. Its models are CE marked according to EN 14351-1, achieving high technical performance and an aesthetic design. Our range of different windows and its versatility, allow us to customise each product according to your requirements.

Building: Alcovega
Place: Alcobendas, Madrid
Architect: Aguirre & Newman
Building contractor: Necso
Installation firm: Hiberlux
Project description: Windows operating with electric drive system. Panels with Low E glass to minimize solar radiation transmission. The glass thickness is 16 mm.

How we do it...

uin2, in its 20 years of existence, has evolved developing and innovating in new window models and searching for new constructive solutions, including always in its models the exclusive uin2 sealing system.

Our windows are own manufactured under ISO 9000 quality standard, in order to offer the maximum technical performance and guarantees.

The relation with our clients, employees, suppliers and partners and the monitoring of architectural and sector trends, allow us to stay up dated and offer windows that fulfill the needs of our clients.
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**Building:** High school *El Salvador*  
**Place:** Mutxamel, Alicante  
**Architect:** D. Antonio Gomi Bernal  
**Building contractor:** Construcciones Villegas  
**Installation company:** Construcciones Metaícas Barceló
Why should I choose a uin2 window?

**Exclusive uin2 hermetic sealing system**

uin2 has developed a hermetic sealing system with vertical seal flaps that guarantee a high level of sound insulation, water-tightness and air impermeability, as the trials based on the UNE-EN 14351-1:2006 standard have proven.

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**Thermal Insulation**

Aluminum sections with thermal break allow achieving great thermal insulation in indoor spaces. Incoming heat is thus reduced in summer, as well as outgoing generated heat in winter. The building is therefore more energy-efficient and this leads to energy saving.

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**High ventilation level without invading indoor space**

uin2 windows offer a greater ventilation area than other windows in the market of the same size.

In addition, uin2 windows allow you to set pivot points of the panels anywhere along their sides so that no indoor space is invaded.

The opening process of uin2 windows start with the lateral displacement of vertical seal flaps followed by the rotation of the louvers. uin2 windows offer a ventilation of up to 60 cm² per metre of height by keeping the only vertical flaps displaced. uin2 windows can therefore offer a certain degree of ventilation while, at the same time, providing insulation in rainy or windy conditions outdoors.

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**Light and solar radiation control**

uin2 panels can be customised with glass or other materials depending on the needs of each building. Furthermore, incoming radiation can be regulated thanks to their tilt, leading to reduced heating or cooling costs.
This line has been developed with the idea of offering high benefits in thermal and sound insulation, as well as weather tightness; resulting in a product spectrum that leads to the energy-saving of buildings.

The window’s models that belong to the Climate Line are uin2.1, uin2.RT, and the new model uin2.RT-1.

A windows Line that stands out for its reduced framings, its wide glass-surface, great luminosity and minimalist design.

This line includes the uin2.Glas-eco and the uin2.Glas-stil models.
Product range - Climate Line

**uin2.1**

Window with the most reduced aluminium profiles and frames louvers, resulting in a wide glass area.

Besides, this window offers high performance in air tightness and sound insulation thanks to its exclusive uin2 vertical seal flaps.

**uin2.RT**

Window that includes thermal break profiles and the exclusive vertical seal flaps.

It offers a high performance in thermal insulation and weather tightness.

**uin2.RT-1**

This new product has both thermal insulation and aesthetic design of slim aluminium sections.

It reaches optimal ventilation and has a large glass area.
Product range - Solar Line

uin2.Glas-eco
Window with an all-glass appearance mounted in side-sleeves and with ideal air ventilation attributes and luminosity.

Both stepped and overlapping louvers are available.

uin2.Glas-stil
Window mounted in stainless steel brackets, giving a smooth, flush surface appearance. This model includes vertical seal flaps, in order to offer a good performance in weather tightness and sound insulation.

Both stepped and overlapping louvers are available.
Applications

Windows uin2 can be installed in any type of building. Both their technical performance and their design make them ideal for particular locations such as the ones described in this section.

Stairwells

uin2 windows comply with the requirements of the CTE (Spanish regulatory body for construction) on safety in case of fire and against risk of falls.

Space Constraints

uin2 windows offer a design in which panels open entirely towards the outside in order not to invade any usable floor space. This allows you to make the most of the space.

Building restoration
Place: Barcelona
Architectural firm: B720 Arquitectos
Building contractor: Gran Vilamarí, S.A.
Applications

Hard to reach areas

Automatic or manual remote actuation devices can be installed allowing for an easy control of windows which are found high up or are difficult to reach.

uin2 windows are an ideal solution for ventilation in areas such as light shafts, skylights, indoor gardens, indoor swimming pools, verandas, sports centres and many more.

Building: Nursery school
Place: Sant Celoni, Barcelona
Head architect: Jaume Coris Veray
Other project team architects: Perixol 6 Arquitectos (Pere Ramos y Eduard Prats)
Building contractor: Imaga Proyectos y Construcciones S.A.

Separator for Indoor Spaces

Solar Line products have minimalist frames and provide plenty of light. When installed as a separator between two indoor areas, they make the room feel more spacious.

There is a range of different glasses available which allow you to define the design you wish in each space and create different ambiances.
Applications

Curtain walls

uин2 rotating louvers combined with fixed elements of the façade provide spaces with a high degree of natural ventilation and render them a glazed and uniform appearance.

The wide range of materials and glasses that can fill the panels allow the façade to meet solar control, insulation and design requirements.

Double-Skin façade

The high luminosity design of Solar Line models gives building envelopes a state-of-the-art look.

uин2 models included in double-skin façades offer the performance required by this type of building solution both from a technical and a design perspective.

Office Building
Place: Valencia
Architect: Serrano-Díaz Arquitectos S.A.
Building contractor: Aldeasa
Installation firm: Albaniquel, SAL
Product description: electric operating window. Panels filled with “Trespa”, and installed as a double-skin façade.
Customisation

Dimensions

The uin2 windows can be attached using vertical and horizontal frames which allow you to cover any opening.

The client, with the assistance of our technical and design service, can customise the dimensions of both window and louvers. In the following chart it is shown the number of louvers that the windows may have according to its dimensions.

<table>
<thead>
<tr>
<th>Number of louvers</th>
<th>Window height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>353 - 619</td>
</tr>
<tr>
<td>2</td>
<td>620 - 885</td>
</tr>
<tr>
<td>3</td>
<td>886 - 1.152</td>
</tr>
<tr>
<td>4</td>
<td>1.153 - 1.418</td>
</tr>
<tr>
<td>5</td>
<td>1.419 - 1.692</td>
</tr>
<tr>
<td>6</td>
<td>1.693 - 2.011</td>
</tr>
</tbody>
</table>

The information in this chart is standard to all the models and can vary slightly according to them. Furthermore, should you need a special design, our design and technical department advises you on how to carry it out.

Building: High school
Place: Vilanova del Vallès, Barcelona
Architect: Joan Fabregat Pla
Building contractor: Contratas y Obras
Project description: windows installed with profile adaptor among each other to cover all the opening façade. Manual operation window with hand-crank drive system.
Customisation

Glazing or alternative types of filling

The wide variety of glass types, that can be installed in the un2 windows, allows to fulfill the needs on every façade, in terms of: solar and light control, acoustic and thermal insulation, safety, appearance, light, among others.

The compatible glass types for each window’s model, are specified in the section: Technical information summary.

Paint finishes

The finish can be anodized or powder coated to a RAL colour

Building: Pablo Gar-gallo museum
Place: Zaragoza
Building contractor: Estructuras Aragon, S.A.
Architect: D. Angel Peropadre Muniesa
Project description: Skylight designed by Hiberlux Firm. It is complemented with electric operating un2 windows. They are installed in all the perimeter of the skylight for optimum ventilation.
Customisation

Manual operation
The manual mechanism designed by uin2, can be installed in any of the chosen sides (either left or right) and at the desired height of the window.

Remote manual operation
The windows installed in high height can be controlled through a hand-crank drive system.
In the case of protruding surfaces the system includes a deflection device.

Electric operation
The opening and closure operation can be made through an electric actuator, activated through a switch, a remote control, or through a home automation system that controls it.
The motor can be installed in the frame either hidden or seen.

Other possibilities
Fixed and mobile panels can be combined.
The pivot points of the panels can be located anywhere along their sides. This design prevents the louvers from invading any indoor space when they are completely open.
Complements such as a fall arrest tube or an insect proof net can be added.
# Technical information summary - uin2.1

<table>
<thead>
<tr>
<th>Technical information</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>% ventilation area (1)</td>
<td>78%</td>
</tr>
<tr>
<td>Glass thickness</td>
<td>Double glass with a maximum thickness of 22mm</td>
</tr>
</tbody>
</table>

## Test according to standard UNE-EN 14351-1

- **Air permeability (UNE-EN-12207)**
- **Watertightness (UNE-EN-12208)**
- **U Value (ISO-EN 10077-2) (2)**
- **U Value (ISO-EN 10077-2) - profiles only (2)**
- **Resistance to wind load (UNE-EN-12210)**
- **Sound insulation (2)**
- **Capability to withstand loads in the security mechanisms (UNE-EN 12210-1)**

## Performance

- **Class 3**
- **Class 7A**
- **4.1 (W/m²K)**
- **5.7 (W/m²K)**
- **Class 5 C**
- **27 (-1,+2)dB**
- **Limit Value: 350 N (APT)**

| Hazardous materials | NPD |

## Notes

1. Dimensions of the window: 1.200 mm height and 1.800 mm width
2. The thickness and type of glass used for these tests is a double glass of 20 mm
Technical information summary - uin2.RT

Technical information
- % ventilation area (1)
- Glass thickness

Results
- 72%
- Double glass with a maximum thickness of 28mm

Test according to standard UNE-EN 14351-1
- Air permeability (UNE-EN-12207)
- Watertightness (UNE-EN-12208)
- U Value (ISO-EN 10077-2) (2)
- U Value (ISO-EN 10077-2) - profiles only (2)
- Resistance to wind load (UNE-EN-12210)
- Sound insulation (2)
- Capability to withstand loads in the security mechanisms (UNE-EN-1063-1-2)
- Hazardous materials

Performance
- Class 3
- Class 7A
- 3.1 (W/m²K)
- 3.5 (W/m²K)
- Class 4C
- 27 (-1;-2)dB
- Limit Value: 350 N (APT)

Notes
(1) Dimensions of the window: 1.200 mm height and 1.800 mm width
(2) The thickness and type of glass used for these tests is a double glass of 22 mm
Technical information summary - uin2.RT-1

<table>
<thead>
<tr>
<th>Technical information</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>% ventilation area (1)</td>
<td>74%</td>
</tr>
<tr>
<td>Glass thickness</td>
<td>Double glass with a maximum thickness of 28mm</td>
</tr>
</tbody>
</table>

The CE marked tests are in process.

Notes

(1) Dimensions of the window: 1.200 mm height and 1.800 mm width

<table>
<thead>
<tr>
<th>Technical information</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>% ventilation area (l)</td>
<td>86%</td>
</tr>
<tr>
<td>Type and glass thickness (uin2.Glas-eco model)</td>
<td>Glass of 8 mm</td>
</tr>
<tr>
<td>Type and glass thickness (uin2.Glas-stil model)</td>
<td>Toughened glass of 8 mm</td>
</tr>
</tbody>
</table>

**Test according to standard UNE-EN 14351-1**

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air permeability (UNE-EN-12107)</td>
<td>NPD</td>
</tr>
<tr>
<td>Watertightness (UNE-EN-12208)</td>
<td>NPD</td>
</tr>
<tr>
<td>U Value (ISO-EN 10077-2)</td>
<td>NPD</td>
</tr>
<tr>
<td>U Value (ISO-EN 10077-2) - profiles only</td>
<td>NPD</td>
</tr>
<tr>
<td>Resistance to wind load (UNE-EN-12216)</td>
<td>Class 3 C</td>
</tr>
<tr>
<td>Sound insulation</td>
<td>NPD</td>
</tr>
<tr>
<td>Capability to withstand loads in the security mechanisms (UNE-EN-2013)</td>
<td>Limit Value: 350 N (APT)</td>
</tr>
<tr>
<td>Hazardous materials</td>
<td>NPD</td>
</tr>
</tbody>
</table>

**Notes**

(1) Dimensions of the window: 1.200 mm height and 1.800 mm width
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