

Function by Design



windoor®

C r e a t i n g l i v i n g s p a c e

Windoar's development team work constantly to update design, maximizing function and quality

The latest developments to our popular glazed balcony Windoor System 1000 are demonstrated within this brochure. By featuring detailed technical information, highlighting flexibility of use and the quality of the system, whether you are an architect, design engineer, contractor or resident, we hope you will find this literature a useful tool when considering an enclosed balcony system.

Windoar System 1000 is a complete glazing system for balconies. The system is very flexible, which allows the architect/contractor to be creative whilst at the same time, considering the buildings existing architecture. Design, quality and functionality are the main characteristics of the Windoor System 1000.

The system contains many unique design features and details registered and patented throughout Europe.

The elements are storey height with the following design options:

Example 1: Balustrade section with low level opaque panels and handrail. Upper level fanlights. Unframed folding glass, sliding to the left.

Example 2: As example 1, except folding glass is framed.

Example 3: Full height opening with integrated Juliet balustrade.

Example 4: As example 3, except folding glass is framed. Alternative balustrade design with handrail.

In essence, the opening sections can be sliding or folding and framed or unframed.



Example 1



Example 2



Example 3



Example 4



Flower boxes

Flower boxes can be supplied as a system accessory. Manufactured in powder-coated aluminium with PVC insert, it includes fittings for interior or exterior mounting. Externally mounted flower boxes have integral drainage. Any surplus water runs off the outside of the balcony.



Window boards

Window board accessories can be mounted above or below sliding panels. Fixed with stainless steel brackets they can be in natural wood or coloured finish according to the design or required use of the internal environment.



Glass roof

Top balconies can be delivered with a glazed roof, utilising 8 mm tinted, toughened safety glass. The weather-proof flashing is fitted to the adjoining building. The solution allows a good influx of natural daylight and solar gain.



Roof drainage

Glazed roofs can be supplied with aluminium roof guttering and outlet which can be linked to existing drains or alternative outlets.



Low level infill panels

The low level infill panels are available in 4 mm to 9 mm safety glass, solid insulated composite material or as a 20 mm double glazed unit. The most popular panels are 6.76 mm laminated safety glass in Opaque. This provides a comfortable influx of light onto the balcony.



Beading for panels

The standard beading used for the mounting of the panels is PVC beading in the colour RAL 7021. Another option is to carry out the mounting with lacquered aluminium beading with EPDM rubber strips.



Sliding sunshades

This attractive design feature provides effective shading to the balcony. The sliding sunshades are mounted externally and can be positioned anywhere across the full width of the balcony throughout the day. The range of finishes include coloured lacquer, or oiled hardwood to enhance the façade.



Additional fittings

Suspension fittings are available for a range of additional features, including Venetian blinds, shades, etc. The fittings are clipped onto the profiles without the use of screws or other mechanical fixings.



Ventilation stays

Stainless steel stays are supplied to secure the first opening glass in a semi-open position.



Trickle vents

Additional permanent ventilation can be supplied by using trickle vents. The strip is made of powder coated dark grey aluminium. (RAL 7021)



Hand rails

Powder coated aluminium handrails are available in a variety of designs and colours. A slender co-ordinated reinforcement post will support the handrail where required.



Fan lights

Top hung fanlights are used for additional ventilation. Made from 6 mm toughened safety glass they have an over centre opener. The design ensures no interference with internal blinds.



Louvre panel

Powder coated aluminium louvre ventilation panels can be incorporated if required.



Opening restrictor

With an opening of approximately 100 mm, restrictors can be supplied to offer child protection and additional ventilation.



Slide guide

An unobtrusive slide guide is fitted at the head of the system to ensure smooth operation.



Locking block

Fitted as standard, locking blocks prevent the folding glass sections from being opened from the outside.



Sliding gear

Folding glass is suspended from the head by using sealed ball bearing rollers. This provides friction-free movement and prolonged durability.



Bottom lock fittings for folding glass

A bottom locking function is also available for full length panels. Top quality components ensure secure engagement, stability and prolonged durability.



Corner detail

All flashings are bespoke and designed to fit each system. They are colour co-ordinated with no visible fixings. The unique EPDM gasket allows thermal expansion providing an ideal solution for harsh environments.



Corner joints

Corners are assembled using powder coated cast aluminium corner joints. These enable water-tight joins of the horizontal and vertical profiles.



Drainage

Window uses a drainage system in the bottom guide profile for folding/sliding glass sections. The effective drainage system is not visible from the outside.



End piece

Intermediate horizontal profiles are joined to the verticals by pre-formed junction pieces.



Parking of folding glass

Folding glass can be opened through 90°. The open glass is secured by a strong elastic strap and stainless steel wall fittings.



Trickle vents for double glazed units

Additional trickle vents can be supplied with double glazed folding glass. These are supplied in co-ordinated powder coated aluminium.



Sliding glass section

The 6 mm toughened glass sliding panels sit in separate runners. They each slide along the full width of the elevation, but do not turn in. Supplied as standard in dark grey powder coated aluminium (RAL 7021), various colour options are available.



Profile design

The Window System 1000 has been designed to meet the demands of wind load. This high level of strength allows us to offer a solution suitable for all balconies, regardless of span.



Safe and easy to operate



1 The locking block is slid to the side.



2 The second glass pane is pulled away from the first, releasing the first pane.

The unique Windoor System 1000 was designed fundamentally to be safe and secure. The system is not easy for a child to operate, and provides a level of security proven through many years of safe installations and satisfied clients.



3 This first pane is turned inwards through 90°. Subsequent panes are then slid into the resulting space (opening position). As each pane is slid into the opening position, it can then be turned inwards. All panes can be turned inwards, providing a completely open balcony.



4 Once the required number of glass panes are parked against the wall, they are secured with the strong elastic strap.



5 The folding glass panes can be cleaned from the inside. This is easy, convenient and above all, safe!



Designed for low maintenance

Aluminium profiles

The horizontal top and bottom profiles must be kept clean and free from impurities. This can be done using a small brush and/or by rinsing the profile with clean water. Any impurities run out of the drain holes along with the water.

Aluminium profiles can be cleaned with tepid water and, if necessary, mixed with mild detergent. Avoid the use of scouring powder, pot scourers or other scouring agents. Never use very acidic or alkaline detergents.

Fittings/function

Windoor recommend that the operation of the system is checked at least once a year. Wheels, steering arm and top profiles should be sprayed lightly with silicone spray. Never use lubricants that contain oil or grease.

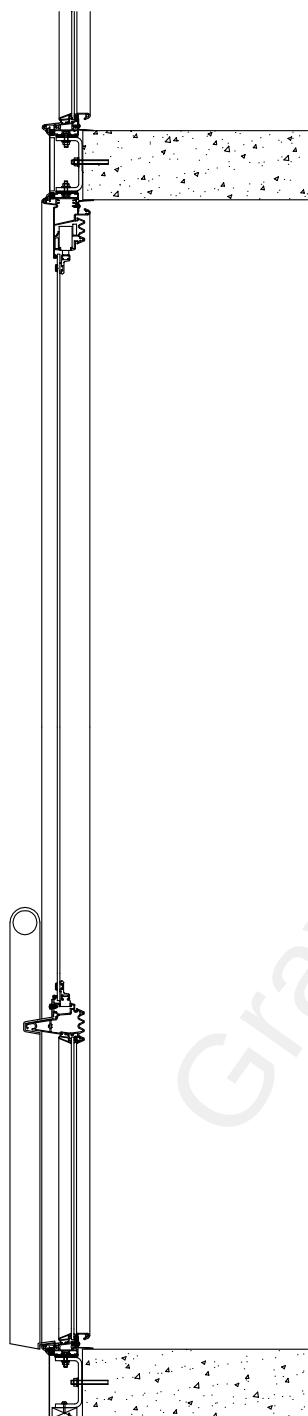
Glass

The glass must be cleaned regularly. Never use boiling water as this can cause the glass panes to fracture. Never use scouring detergents on glass!

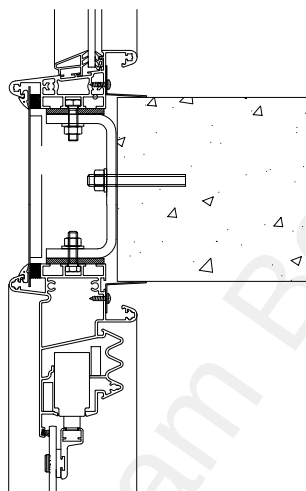
Installation

The system is secured to the building at the top and bottom of the system (on floor slabs which are stable). The details show an example of installing hot dipped galvanized steel brackets, secured with resin anchors. A similar solution can be designed for balconies of steel or timber construction.

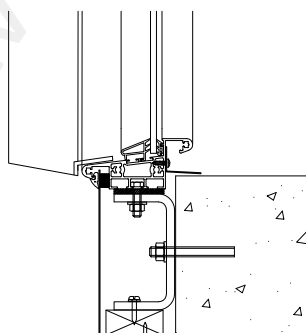
The junction between balconies is made good using powder coated aluminium or composite board up to 6 mm thickness. An EPDM gasket will hold it in place.



*Windoor System 1000,
vertical section*



*Windoor System 1000,
head/intermediate detail*



*Windoor System 1000,
cill detail*





Arium

The flexibility of the Windoor System 1000 means it can be installed so that the glazed element of the balcony is built outwards from the main façade of the building. Equipped with end walls and a roof, this design style results in a fantastic spatial effect on the balcony, making it feel much larger.

The bays are always equipped with folding glass sections and can therefore be opened completely, and again, the glass panes can be cleaned from inside the balcony.

The Arium can be supplied with a covered bottom section or as a complete bay that is mounted directly on an existing concrete parapet.

Testing & Documentation

Documentation

Windoor attaches great importance to the verification of the quality and operation of our products. All systems have been tested in accordance with international standards at recognised testing facilities.

Low level infill panel

The system meets the requirements of EN 12600, which relates to safety of glass covering with regard to falling hazards.

Folding glass section

The system has been tested through more than 10,000 opening/closing cycles. The system is also load tested up to an additional 80 kg.

Imposed load

A range of tests have been carried out on the system, simulating wind loads up to 3000 pa.

Sound reduction

The system has been soundtested. 6 mm unframed sliding glass provides a reduction of approximately 17 db. Mounting of vertical sealing strips on sliding glass sections can increase the reduction further.

