

# Designing with Breezway Louvre Windows



*breezway*<sup>®</sup>

# Breezway Background

Breezway Australia Pty Ltd has been designing and manufacturing louvre windows from its Brisbane base since the 1930's.

The company has led the resurgence of louvre windows over the last fifteen years and today is at the forefront of louvre window technology and design. The inventions have led to today's high performance, architecturally designed Altair Louvre Window Products and we are continually focused on updating, improving and releasing new innovative products to market.



## Locally Manufactured

Breezway maintains a direct presence with service agents in every state of Australia. However, Brisbane remains the primary manufacturing centre with custom-made orders manufactured on short lead times after order placement.

Altair Louvre Windows are available as a complete window system or in componentry for easy installation into timber or flat commercial frames and are available from a highly respected network of distributors, window fabricators and window dealers.



## Maximise Ventilation

Most Architects and Building Designers understand the benefits of natural ventilation and try to maximise it in their designs, science shows significant benefits too:

*Increased outdoor ventilation rates and natural ventilation significantly reduces respiratory illness, flu's and absenteeism by 9-20%.*

(Fisk/LBNL 2000 as quoted by Vivian Loftness in Green Cities 2008 keynote address)

*Controlled studies in 1999 and 2000 showed that as ventilation rates increase, children perform school work with greater speed. And the performance of adults was also shown to improve with higher ventilation rates.*

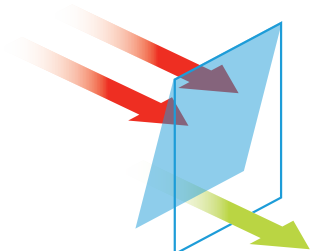
(Wargocki, P., D.P. Wyon et al. 1999 & 2000)

*Energy savings for a mixed mode (hybrid) system are on average 59%.*

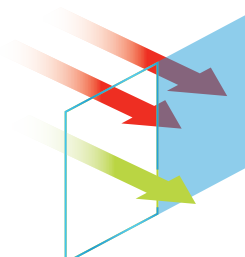
(Carnegie Mellon; 2004)



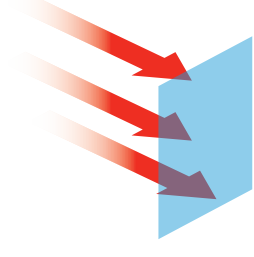
**LOUVRE WINDOW**  
90% Fresh Air  
(Regardless of wind direction)



**AWNING WINDOW**  
12%-30% Fresh Air  
(Depending on wind direction)



**SLIDING WINDOW**  
40% Fresh Air



**FIXED WINDOW**  
0% Fresh Air

# Breezway Product Benefits



## Maximised Ventilation

Open twice as wide as regular windows.



## Widths up to 1289mm

Maximise natural light and ventilation.



## Outstanding Thermal Resistance

Comparable to double glazing and thermally broken frames.



## Unbeatable Sound Reduction

Excellent sound acoustics to reduce outdoor noise.



## Optional Security Bars

Choice of aesthetics and unobstructed views.



## Widest Customising Options

Frames, Blades, Handles, Automation, Colours, Security.



## Extensive Testing

80 years of louvre window experience.



## Easy to Install

Fully assembled frames or componentry.



## Short Lead Times

Locally manufactured.



## 10 Year Warranty

7 years for moving parts and 3 years for electrical components.

## Bushfire Prone Areas

Altair® Louvre Windows fitted with stainless steel mesh screens have passed bushfire testing (AS 1530.8.1-2007) to BAL-29 conditions at the CSIRO.

Altair Louvres have also passed BAL-40 testing in an Alspec frame fitted with Invisi-Guard stainless steel mesh screens.



## Fall Prevention

Clauses 3.9.2.5 and D2.24 of the Building Code of Australia detail the situations in which openable windows require fall prevention measures and the requirements that windows in these situations must meet.

Breezway has a number of solutions that can be applied to the Altair Louvre to meet these Building Code clauses. Importantly, the Fall Prevention solutions also continue to provide a good level of ventilation so the room remains comfortable and the need for air conditioning is greatly reduced.



## SOLAR CONTROL

Altair® Louvres:

- Can achieve a Solar Heat Gain Coefficient (SHGC) between 0.1 and 0.72 using glass blades.
- Can use timber or aluminium blades to completely block out the sunlight while still allowing maximum ventilation through the window.
- Can reduce SHGC when using metal mesh screens.

## SEALING

Altair® Louvre Windows provide tight sealing due to:

- The patented living hinge design that prevents water and air penetration between the clips and the channels.
- An over centre locking mechanism which applies strong locking pressure between blades when fully closed.

## THERMAL INSULATION

Altair® Louvre Windows can achieve low U-values. E.g.

- U-values ranging from 2.4 to 6.9. Comparable to many uPVC double glazed windows.
- In extremely cold climates, louvre-fixed lite-louvre combination windows are a good way to achieve good ventilation and very low U-values.
- Altair Louvres with metal mesh screens have WERS ratings which reduce the window's U-value as glass blades and screens act in a similar way to double glazing.

## PERFORMANCE

- Up to 620Pa Water Penetration Resistance.
- Up to 8,800Pa Ultimate Wind Pressure.
- Cyclone Proven with wind speeds up to 290kmh.
- Compliant with Fall Prevention Requirements.
- WERS rated.
- BAL-29/40 rated

# Product Offer

Altair® Louvre Windows are available from leading window and door manufacturers.

The Altair Louvre has been designed to be compatible with most timber and aluminium windows so it will match neatly with other windows and doors in your building.

## Powerlouvre™ Window System



- Superior aesthetics with no exposed motors or control rods.
- Available with Easyscreen or Innoscreen System, or Altair Componentry.
- Easy installation (remove the complexity of sourcing special trades).

**TIP:** Ideal for out-of-reach locations or as floor-to-ceiling feature windows.

## Apptivate® Control Unit



- Touch-sensitive wall switch for Powerlouvre Windows.
- Control from a compatible smartphone.
- Automatic operation in response to in-built temperature sensor and timers.

## The Stronghold® System



- Add strength and safety to your building.
- Compliant with Fall Prevention Standards.
- Altair Louvre blades retained by pin that passes through clip, bearing and blade.
- Can be screened and offers privacy or shading when using aluminium blades.

## Dualair™ Component System



- Secondary glazed unit for commercial framing.
- Outstanding thermal performance.
- Highest water penetration resistance.
- Reduced installation costs.
- Compatible with the Powerlouvre Window and Stronghold System.
- Fixed lite bays available.

**TIP:** Ideal for projects with High Rw or low U-value ratings.

## Easyscreen™ Window System



- High performance frame with external screening (sub-framing available).
- Compatible with the Powerlouvre Window and Stronghold System.
- Variety of handles and barrier options including keylocks and security bars.
- BAL-29 Bushfire compliant with metal mesh screens.
- Fixed lite bays available.

## Innoscreen® Window System



- High performance frame with internal screening (sub-framing available).
- Compatible with the Powerlouvre Window and Stronghold System.
- Safer screen installation and cleaning on multi-levels.
- Fixed lite bays available.

**TIP:** Retain the external 'louvre look' when screened. Good solution for sporting halls and aged care facilities.

## SL2® Window System



- Suits narrow frame applications or installation into concrete block construction.
- Screening not available.

**TIP:** Perfect for above or beside doors on internal walls to circulate ventilation throughout the building.

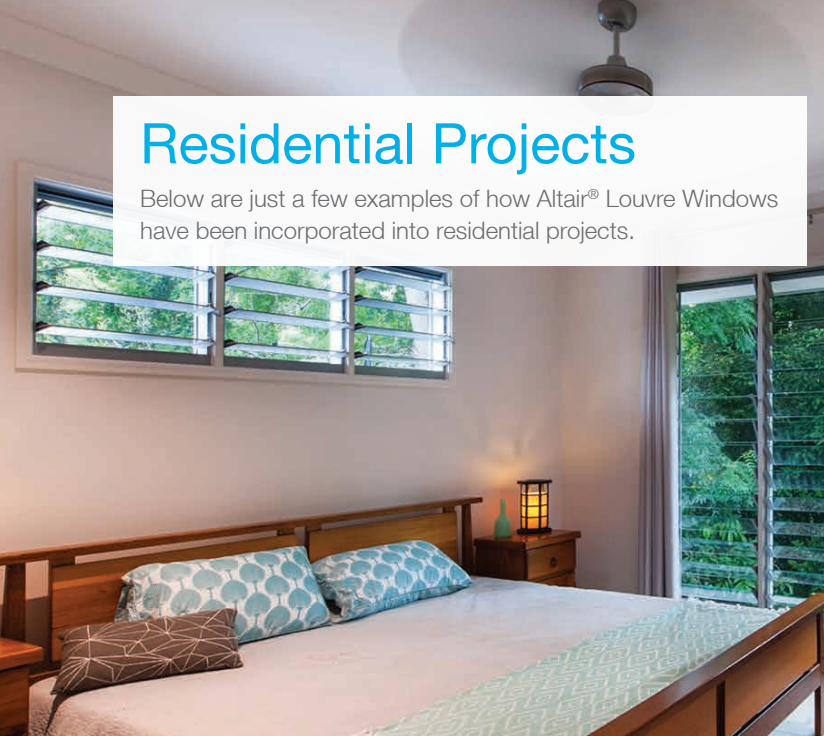
## Altair® Louvres in Other Frames



- Window manufacturers can install Altair Components within their aluminium, timber or UPVC frames.
- Suitable for residential or commercial applications.

## Residential Projects

Below are just a few examples of how Altair® Louvre Windows have been incorporated into residential projects.



### Dreamcatcher House, Green at Heart Architects, QLD

The design maximises views and the requirement for privacy has been addressed through orientation, private courtyard entry and by using Breezway Louvres with aluminium blades for bedrooms and private areas.

AWARD WINNING



### Beyond House, Ben Galloway Architects, VIC

Internal planters and cleverly placed openable windows (internal and external) including Breezway Altair Louvre Windows help bring the external environment in from beyond.

AWARD WINNING



### Bundaroo House, Tziallas Omeara Architecture Studio, NSW

A gallery of Breezway Louvres provide cross ventilation in this thermally efficient house.

## Commercial Projects

Below are just a few examples of how Altair® Louvre Windows have been incorporated into commercial projects.

### Mother Teresa College, Parry & Rosenthal Architects, WA

Manual and powered Altair Louvre Windows with the Stronghold System are incorporated into the design of the classrooms, multi-purpose and administration building to assist with creating a light and spacious area for the students and other users to enjoy.

AWARD WINNING

### Australia Towers, Bates Smart Architects, NSW

Vertical slots of Altair Louvre Windows with the Stronghold System have been used in the facades to encourage natural airflow through the apartments and communal spaces.

AWARD WINNING

### Chrismont Winery, M G Design & Building, VIC

Breezway Louvres frame spectacular uninterrupted views of the vineyards at King Valley.

AWARD WINNING

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