

Light · Air · Space

At Breezway, we believe buildings should be designed to work with nature, rather than sealing up and fighting against it. Altair® Louvre Windows allow air conditioning and artificial lights to be turned off letting natural light and fresh air to cool and ventilate the building. It's a simple change in philosophy but one that can bring about significant change.

Natural Ventilation

Altair Louvres maximise natural light and fresh ventilation by offering:

- Ventilation through the whole window area.
- Ventilation no matter which direction the wind is blowing.
- Maximum ventilation through large or unusually shaped window spaces.
- The Altair Powerlouvre Window can be integrated into a building management system to open/close based on current weather conditions, time of day or even the season.

"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.)

In scientific studies, increased natural ventilation has been shown to:

- Decrease energy use.
- Maintain or improve occupant comfort.
- Increase the health of building occupants.
- Increase the learning outcomes and productivity of building occupants.



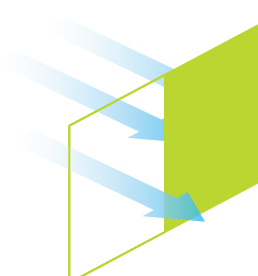
Fixed Window

0% fresh air



Awning Window

12% - 30% fresh air depending on wind direction



Sliding Window

40% maximum fresh air



Altair Louvre Windows

90% fresh air regardless of wind direction

Solar Control

When it comes to solar control, Altair Louvres:

- Can achieve a Solar Heat Gain Coefficient between 0.3 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.

All windows can use tinted glass to reduce the solar heat gained through windows.

"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)

breezway®



Sealing

Altair Louvre Windows provide tight sealing due to:

- The 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 to blades when fully closed.

The living hinge and patented clip design of the Altair Louvre help it to seal tightly enough to achieve ratings that are 50% better than the standard required for residential windows.

Insulation

Altair Louvre Windows can achieve low U-values.

For example:

- Single glazed Altair Louvres with Low E coatings achieve good U-values that are better than many 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.

While double glazing can give lower U-values than monolithic glass with a low e coating, in many cases double glazed windows have higher (worse) U-values than monolithic glass with a low e coating.



Surf Life Saving Australia Headquarters: Altair Louvres reduce the reliance on air conditioning in an office environment.



Karinya Residential Home: Altair Louvres maximise natural light and ventilation in residential applications.



St Paul's Grammar School: Altair Powerlouvres control airflow into school buildings to help stimulate young minds.

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

(Carnegie Mellon; 2004)

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