



HIGH PERFORMANCE WINDOWS

COMPLETE RANGE OF WINDOWS,
DOORS & BI-FOLDS



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The Company

A proud history of quality timber window and door manufacturing

Miglas Australia is a family company that has been involved in timber window and door joinery since 1968



Anatol Miglas, director and designer



Italian C&C 5 axis machining centre

Custom designed for each project

Miglas is a custom designed window and door manufacturer using in-house CAD systems to work closely with owners, builders, architects and designers to give the best performance and design for each project.

Innovation and Energy Efficiency

Inspired by European and American energy efficient window design, Miglas was one of the first window companies to introduce double glazed windows and doors to Australia

The Miglas windows and doors have outstanding thermal efficiency and air infiltration performance making them a preferred product in prestige and energy efficient homes and buildings.

Quality materials and components

To compliment the design and manufacture, the company has sought out quality components to give the high performance of the Miglas window and door suites.

Energy efficient windows and doors are a combination of high performance components integrated to create ventilation when it is required and the best sealing and insulation when it is closed; Miglas achieve this integration with an attractive window and door system.



Compter controlled moulders

Sustainable Raw Materials

Miglas uses sustainably harvested GoodWood R hardwood from Victorian Forests or FSC imported hardwoods.

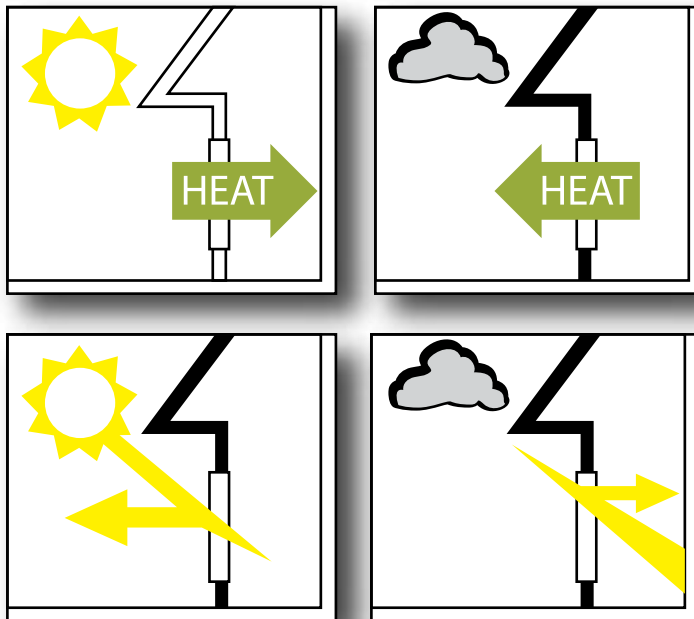
Miglas recycles waste materials with sawdust recycled in compost, timber off-cuts used for kindling and aluminium recycled.

Why are windows and doors important?

49% of heat lost from a building is through the windows and doors.

87% of the solar gain into a building is through the windows and doors.

(Source AGGA Arup Façade Engineering study based on actual case studies of otherwise insulated buildings)



Why should you use double glazed units in your windows and doors?

Double glazed window and doors can stop up to 70% of heat loss
(Using a low E double glazed unit with a U value 2.7)

Double glazed windows and doors can stop up to 77% of solar heat gain
(Using a low E double glazed unit with a U value 2.7)(Source AGGA based on glass only, NFRC 2001 and Window 5.2 software from Lawrence Berkeley National Laboratory 2006 compared to 3mm glass)

Miglas only manufacture double glazed windows and doors



Choosing the right windows and doors

Aside from the aesthetic appearance and function of the windows and doors, there are a number of performance measures that will determine the comfort and energy consumption of the window or door in use in the building fabric. In Australia the rating of windows and doors is conducted by Window Energy Rating Scheme WERS.

Cooling Improvement

The cooling improvement is a % improvement comparing the window with a generic 3mm single glazed aluminium window, the higher the % the better performance.

Heating Improvement

The heating improvement is a % improvement comparing the window with a generic 3mm single glazed aluminium window, the higher the % the better performance.

The “U” factor.

The “U” factor or thermal transmission measures how well the whole window prevents heat loss (or gain) from a dwelling through the window. The lower the “U” value the better the product is in keeping the heat transmission lower.

The “R” value used in insulation is the inverse of a “U” value.



Solar Heat Gain Co-efficient (SHGC)

The SHGC measures how well the whole window blocks the heat from the sun and is expressed as a number between 0 and 1. The lower the SHGC the better the product is at blocking the unwanted heat gain. The design of the glazing in the window will depend on the house orientation, external shading on the windows from eaves and blinds and the need to have passive solar heating in winter.

Visible Transmittance (Tv)

The Tv measures how much light comes through the glass and is expressed as a number between 0 and 1. The higher the number the higher the potential for “day lighting” of the interior of the home and the reduction of the need for artificial lighting.

Air Infiltration (AI)

The AI is a measure of the air leakage between the sash and the frame and between the glass and the frame and is measured in litres per second per square metre of window. The lower the number the more efficient the product is at reducing the air flow through the product.

Condensation Resistance (CR)

Condensation resistance is measured in European and American rating systems and measures how well a product resists the formation of condensation on the interior of the window.

Miglas Windows give excellent results in all areas of performance.

Miglas double glazed windows give excellent performance on all measures and with the correct selection of double glazing glass design will give **cooling improvements** between **33 up to 54%** and **heating improvements** between **32 up to 43%**.

The correct selection of the double glazing unit can also give a **low solar heat gain** and **high visible light transmission**.

The use of a timber frame in both the timber and Ali-Clad suites provides an excellent insulator improving the “U” value and the condensation resistance.

The positive locking and high performance seals give the lowest air infiltration values.

Window Energy Rating Scheme table

MIGLAS WINDOWS			Version 2	COOLING	HEATING	Total Window system Values - ANAC			
Window ID	Glazing	FRAME	% impr.	% impr.	Uw	SHGCw	Tvw	Air Inf.	
Aliclad Casement									
MIG-05-002a	4/14/4	Aliclad	33	37	2.257	0.608	0.457	0.07	
MIG-05-003a	4/14/4LE	Aliclad	38	40	1.841	0.569	0.42	0.07	
MIG-05-004a	4PALGy/14/4LE	Aliclad	52	31	1.843	0.429	0.253	0.07	
MIG-05-005a	4/14Ar/4LE	Aliclad	38	43	1.676	0.571	0.42	0.07	
MIG-05-006a	4PALGy/14Ar/4LE	Aliclad	53	33	1.677	0.425	0.253	0.07	
MIG-05-007a	4/12Ar/6LE54i1	Aliclad	50	36	1.627	0.452	0.275	0.07	
MIG-05-008a	4/12Ar/6LE50i1	Aliclad	50	36	1.628	0.456	0.255	0.07	
MIG-05-009a	4/14Ar/4S500	Aliclad	38	42	1.747	0.569	0.426	0.07	
MIG-05-010a	4PALGy/14Ar/4S500	Aliclad	52	32	1.75	0.427	0.257	0.07	
MIG-05-011a	4EcAd/12/4LE	Aliclad	50	33	1.785	0.448	0.32	0.07	
MIG-05-012a	4SlrE/14/4LE	Aliclad	54	31	1.791	0.406	0.288	0.07	

What does that mean?

Miglas Windows and Doors will allow the use of large windows for design and views, natural lighting, ventilation and still give both increased comfort through the seasons and lower energy consumption.

Windows

Windows fulfill a multitude of tasks: forming a part of the building design fabric, providing security and weather protection, allowing light into a home, providing views and ventilation and sealing the home from energy leakage in cold weather; Miglas windows fulfill all of these requirements.

Miglas manufactures high quality and performance windows and doors and does not recommend some window styles as it is impossible to achieve our high standards of sealing for air and water infiltration performance.

The important feature of a high performance window or door is effective seal compression to prevent air ingress or leakage, this can only be achieved with quality seals and hardware and strong sash designs available in awning and casement windows from Miglas. All windows and doors are available as solid hardwood or Ali-Clad solid hardwood and can be fitted with stainless steel or brass fly screens for fire risk areas.



Miglas Windows are available in the following styles:

Casement

Casement windows are ideal for ventilation with the casement sash opening from the side to 90 degrees and articulating to give maximum air flows for ventilation. Combined with a picture fixed window they give excellent views and ventilation.

Quality Truth window hardware gives easy opening action and multi-point sash locks provide security and a positive closure on the seals. Folding window-winder handles give a clean line for curtains and blinds.

The quality construction, window hardware and seals also provide excellent air and water sealing.

Awning

Awning windows are hinged at the top and open out from the bottom using our smooth action window-winders or electric actuators. The awning is designed to circulate air while protecting the room from light rain. Double sash locks give security and a positive closure on the seals. Folding window-winder handles give a clean line for curtains and blinds.

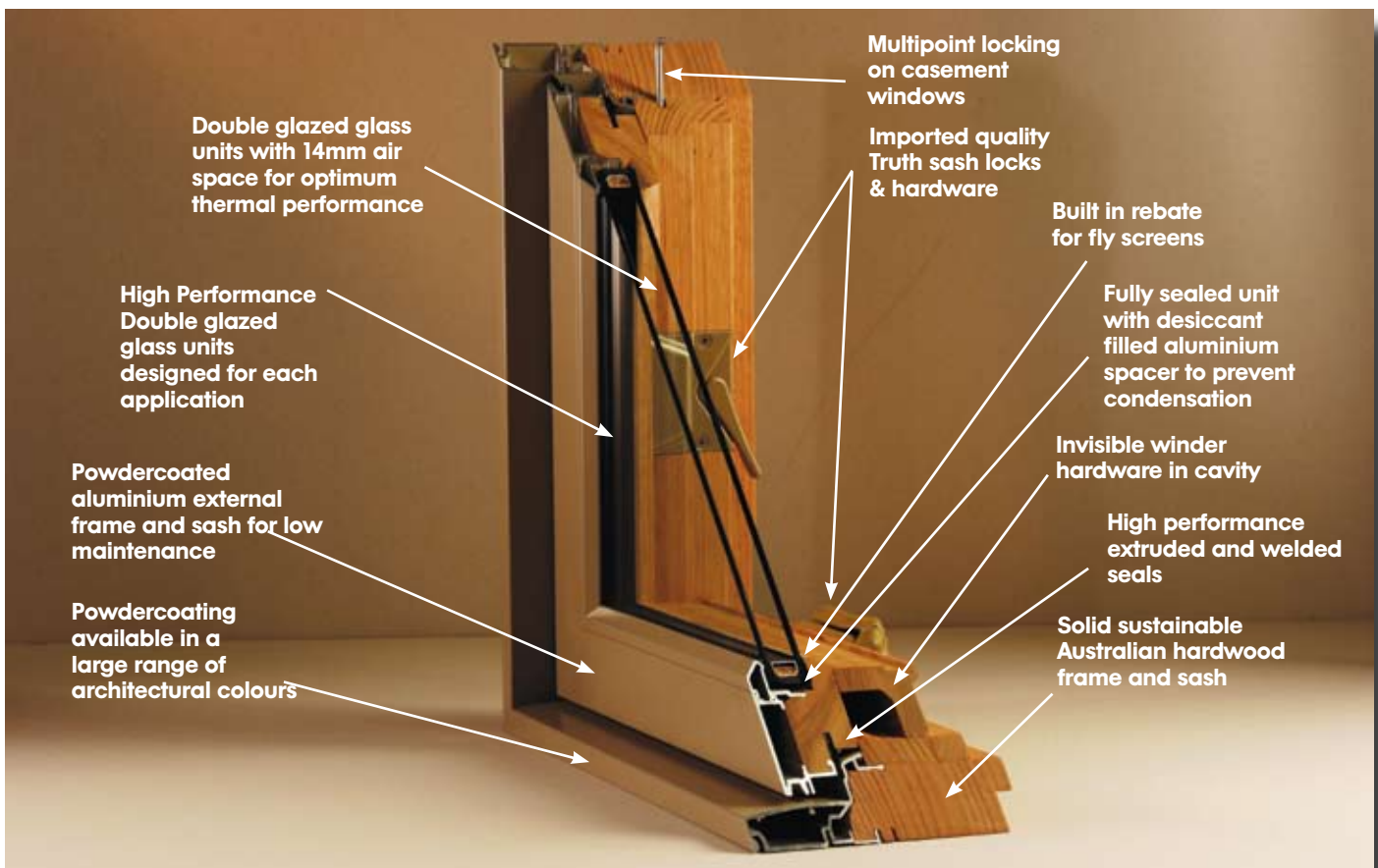
The quality construction, window hardware and seals also provide excellent air and water sealing.

Picture windows

The best way to enjoy a view or capture the light is through a large picture window. Teamed with matching casement windows, this combination gives excellent views and ventilation. Quality glazing units and frame construction is used on Miglas picture windows.

Miglas Ali-Clad windows are designed and built for high performance and use.

Compare the features of Miglas Ali-Clad windows with normal timber and Aluminium and you will see why Miglas are the best windows and doors.



Quality design, materials and construction make Miglas windows and doors the best windows for appearance and performance.

Doors

External doors have to fulfill a multitude of tasks: entry and exit, security, air and water sealing and matching the design decor of the home.

Miglas Doors fulfill all of these requirements.

- Miglas doors have the strong hardwood or aluminium clad hardwood frames for strength and stability
- Miglas doors have high quality stainless steel hinges for trouble free use and security
- Miglas doors are fitted with multi-point German locks for ease of use, home security and performance sealing
- All doors are fitted with high quality seals to reduce water, dust and air infiltration
- Doors are delivered pre-hung on the door frame for ease of installation and precision.

Miglas doors are available in the following styles:

Single and double entry doors

The doors can be solid timber and glass, combined with side lights in timber or Ali-Clad frames. Miglas can install your entry doors in the Miglas frames.

Entry door sets with side lights and high lights give an entrance statement. All doors are fitted with European multi-point locks and quality hinges for ease of opening and security.

French Double doors

The doors can be timber or timber/Ali-Clad and feature European multi-point lock sets on both the active and inactive doors for both ease of opening and excellent security. All doors have excellent air sealing due to seals and positive closure. Matching timber fly screen doors are available.

Sliding doors

Miglas sliding doors have smooth positive closure with guide rollers top and bottom and excellent sealing and security. The Miglas sliding doors have self closing timber fly screen doors that can be fitted with security mesh if required. The doors can be timber or timber/Ali-Clad.

Centre hung double doors

The centre hinged doors give a “French door look” that swings back 180 degrees and secures on the partner door. The door incorporates the self closing non derailing fly door.

The doors can be timber or timber/Ali-Clad.

Bi-fold doors

Multi unit bi-fold doors that allow opening up to enjoy outdoor living are available in timber or timber/Ali-Clad. Quality tracks and hardware are used to give ease of opening and security.



Selecting the Right Windows and Doors

When you are choosing your window and doors the important criteria to consider are:

- Design and appearance
- Light Transmission
- Vision and outlook
- Quality of construction of the frame and sashes
- Quality of hardware and seals
- Energy performance and comfort level
- Ease of operation
- Future maintenance costs
- Long term effective cost

Miglas will work with you to design and manufacture the best windows and doors for your project.

Please contact our design staff with your plans or concepts and we will work together to give your project the best windows and doors that meet all these criteria.



Projects

Miglas have the team to design and manufacture windows and doors for any project. Miglas have designed and supplied windows and doors not only for luxury homes but for ski lodges, schools, multi-unit developments and commercial buildings.

Some notable projects using Miglas windows and doors are:

- **CH2 Council House 2**, a 6 green star rated 10 storey commercial building for the City of Melbourne.
- **Walford Terraces**, an ESD 56 unit housing development in Hobart for the Tasmanian Government.
- **K2**, a 5 star rated low rise 96 unit residential complex for the Victorian Government.
- **Alto Villas** at Mt Buller for the Grollo Group.
- **Thomas Embling Hospital**, a 100 bed hospital at Fairfield for the Victorian Government.
- **Australian National University** student housing in Canberra.
- A 53 unit facility for **Western Health Hospital** in Sunshine, Victoria.
- **Koori Cultural Trust** building in Melbourne.
- **Carey Baptist Grammar School** in Kew.

Any project that requires high quality, energy efficient, beautiful windows needs Miglas Windows and Doors.

