VANTAGE DESIGN

CONTEMPORARY ALUMINIUM WINDOWS & DOORS FOR YOUR LIFESTYLE

VANTAGE® WINDOWS & DOORS

RESIDENTIAL WINDOW & DOOR SYSTEMS BY AWS

SOUTHERN OUTLET HOUSE | ARCHITECT: PHILLIP M DINGEMANSE | PHOTOGRAPHY: JONATHAN WHERRETT | WINDOWS BY: GLASS SUPPLIES

VANTAGE
ALUMINIUM
JOINERY

Quality and custom manufacture deliver superior outcomes.

From the design and testing of the window and door systems, to manufacture and delivery by over 130 fabricators across Australia, the Vantage fabricator network has built a positive and innovative reputation unsurpassed with architects, designers, builders and homeowners.

Australian designed to deliver superior performance for the varied climates and environments around the country, Vantage delivers high performance window systems that offer enormous flexibility in design.

Hallmarks of the Vantage systems are aluminium profiles that blend aesthetics and adaptability.

With market leadership and over 40 years of operation in the Australasian market, the Vantage team can be relied upon to provide you with high quality, high performance products that will stand the test of time.

Single-minded dedication to customer service and product quality is the foundation of the Vantage philosophy.

UNDERSTANDING OUR SYSTEMS

Select the ideal window and door system for your project from one of our four dedicated product ranges. Use the colour coded bars throughout this book to help you select the system you desire for your home or building project.

DESIGNER SERIES

Architecturally styled, high performance window and door systems.

Designer Series windows and doors are architecturally inspired, featuring a 102mm frame and bold sash designs to give a clean, striking aesthetic. These systems are designed to offer superior performance characteristics ideal for high-end residential applications. The strong frame and sash profiles enable you to achieve larger openings, support heavier glass panels and create windows free of transoms for an unobstructed view.

Designer Series systems combine contemporary aesthetics with superior performance offering excellent strength, very low air infiltration and high water resistance.

DESIGNER SERIES | ThermalHEART™

Thermally broken systems for improved energy efficiency.

Designer Series with ThermalHEART™ is the latest addition to the Vantage range of high performance windows and doors.

Developed in response to growing environmental concern and requirements for energy efficient building designs, Designer Series with ThermalHEART™ offers significantly improved thermal performance and energy efficiency.

Ideal for those applications where minimising cold and heat transfer is a priority, this innovative range is 32% more thermally efficient than standard double glazed windows and doors.

RESIDENTIAL SERIES

Australian designed systems for residential applications.

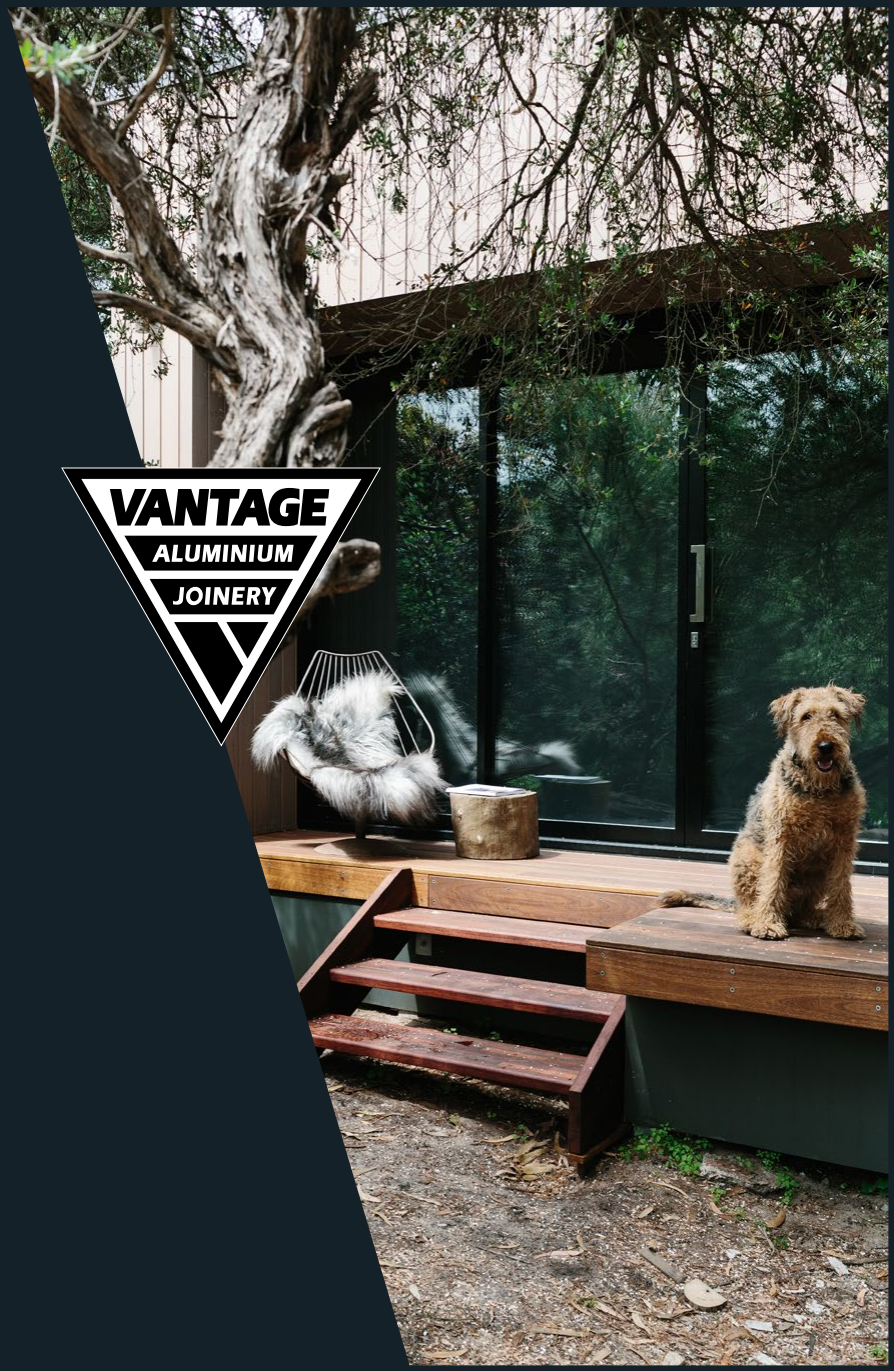
The Vantage Residential Series offers a comprehensive suite of window and door systems designed for Australian conditions. The extensive range has been developed with a focus on creating compliant, economical systems to provide necessary performance characteristics and meet the functional requirements of Australian residential dwellings.

Residential Series systems offer high water resistance and low air infiltration, conform to all relevant Australian Standards and have been fully tested and WERS rated.

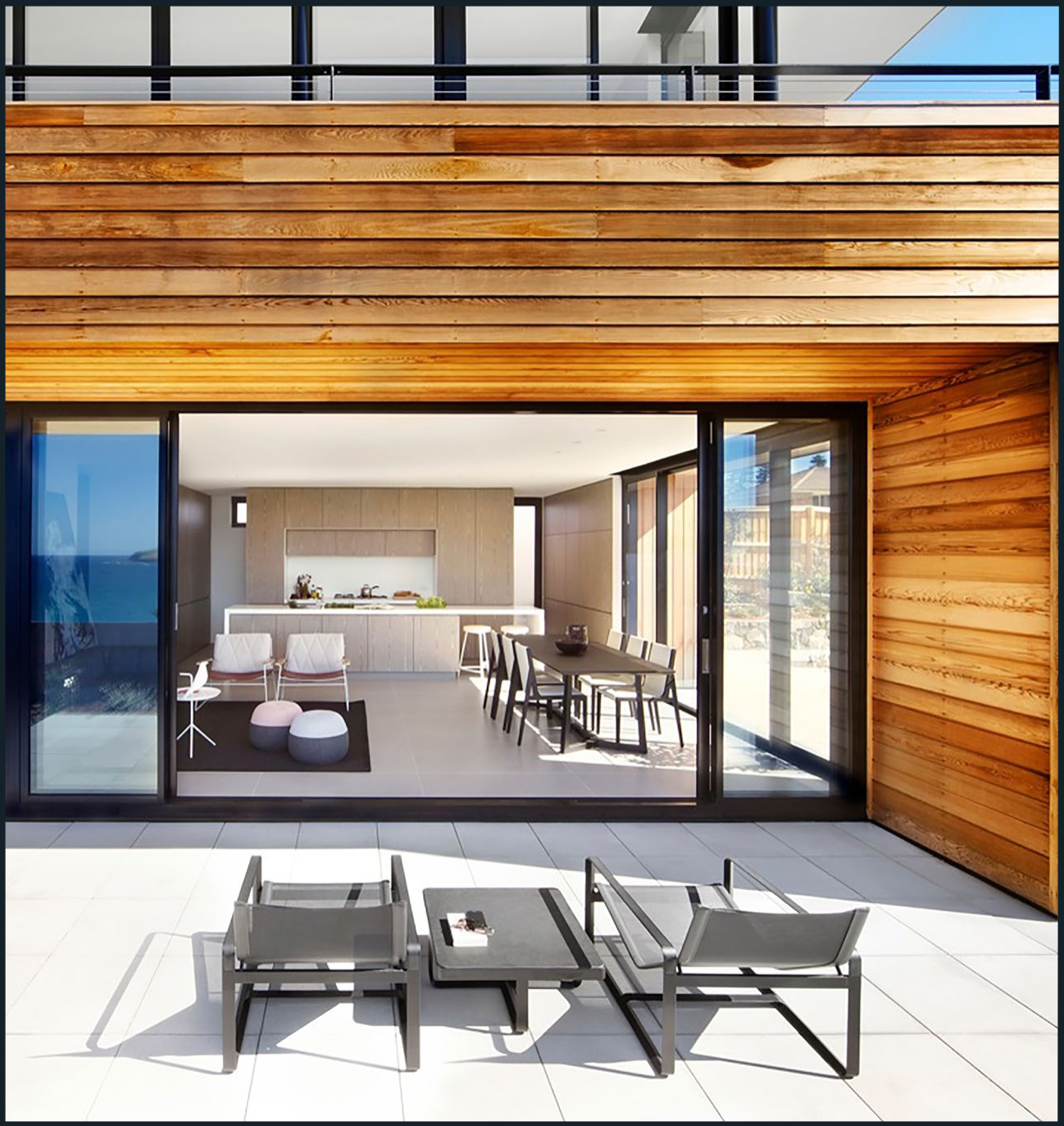
SPECIALTY

Innovative products to provide maximum sound reduction.

Within the Vantage range of aluminium window and door systems, there are a number of specialty products. The SoundOUT™ range of secondary glazing windows and doors are purposely designed to improve the acoustic performance of the building envelope. Tested in accordance with AS1191-1985 by the National Acoustic Laboratory, the SoundOUT™ range can be used to dramatically reduce sound penetration into a building.



ROSEBUD HOUSE | ARCHITECT: JAMES GOODLET - ALTERECO DESIGN|WINDOWS BY: WINDOWS BY DESIGN



COASTAL LIVING | ARCHITECT: SMART DESIGN STUDIO | WINDOWS BY: ARCHITECTURAL ALUMINIUM | PHOTOS: SHARRIN REES

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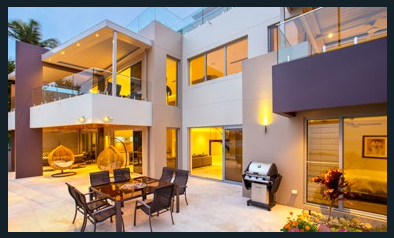
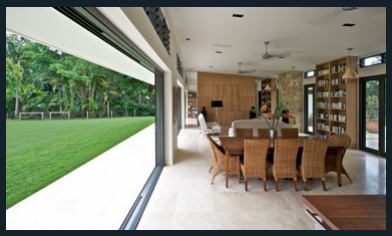




Need help selecting your windows and doors? Your local Vantage fabricator can offer expert advice and assistance. Visit our website **vantagealuminium.com.au** to locate a showroom near you.

VANTAGE WINDOWS

NORTHERN RIVERS BEACH HOUSE | ARCHITECT: REFRESH® DESIGN | PHOTOGRAPHER: DAMIEN BREDBERG

Why are Vantage windows a superb choice? The answer is simple.

These locally designed and manufactured systems cater perfectly to the Australian climate and building in conditions, offering excellent strength, durability, weather performance and aesthetics.

SUPERIOR STRENGTH

Vantage was one of the first brands to introduce a strong, wide, 102mm platform to ensure maximum frame strength and stiffness. Now this impressive foundation has found a new relevance with the industry-wide move to double glazing for thermal performance: the Vantage frame allows larger and more effective double glazed units to be installed.

STYLISH OPTIONS

Awning and casement windows come with a range of options to suit all tastes and functional requirements. Where single glazed is desired, square beads can be used for a robust contemporary appearance. Decorative glazing bars can also be applied to windows for character or contemporary glass treatments.

BEAUTIFUL BI-FOLDS

Vantage bi-fold windows have a reliable, smooth-moving bottom mounted roller system. Vantage bi-fold windows are designed to complement the bi-fold door system and both are renowned in Australia for their reliability, style and performance.

SENSATIONAL SLIDERS

'Comprehensive' is the only way to describe the Vantage sliding window range. Horizontal sliders come in standard or heavy duty profiles. Vertical sliding double hung windows are available which allow easy cleaning of the window exterior – sashes pivot inwards to allow maximum homeowner convenience.

WERS RATED

All Vantage windows are WERS rated which is the official energy rating scheme for windows in Australia.

AWNING WINDOWS

A very popular window – and for good reason. Awning windows push out effortlessly from the bottom and give ventilation with a measure of protection from unexpected passing showers. In applications where an electric winder is used, MAGNUM™ awning windows can be fitted with a rain sensor that automatically closes the window.

When closed, awning windows offer excellent resistance against air and moisture penetration. Top line energy performance and sound reduction are hallmarks of Vantage awning windows. Our heavy duty sashes can be fitted with double glazing for improved thermal performance and sound dampening.

When using Truth™ hardware, very wide awning window sashes can be fabricated.

These windows mirror traditional timber windows aesthetically and offer design flexibility, allowing highlight, single panel or multi-panel configurations. These systems are designed to accept winder hardware and flyscreens, delivering clean lines without unsightly rivets or fixings.

- Series 616 MAGNUM™ Awning Window
- Series 726 ThermalHEART™ Awning Window
- Series 516 Residential Awning Window
- Series 517 Residential Awning Window

ROSEBERY HOUSE | WINDOWS BY: ARCHITECTURAL ALUMINIUM | PHOTOGRAPHY BY: ANDREW WARN

NINE STEPS | WINDOWS BY: DLG | ARCHITECT: DE ATELIER ARCHITECTS | PHOTOGRAPHY BY SIMON DALLINGER PHOTOGRAPHER

CASEMENT WINDOWS

A stylish option that is well suited to traditional or contemporary house designs. Casement windows are ideal for directing breezes inside for better ventilation.

A superb window for above garden beds and upper storey locations, these windows can also be coupled to sliding doors and other windows seamlessly.

As with the awning window, Vantage casements offer as an option the distinctive MIRO™ or ICON™ hardware. Both MIRO™ and ICON™ offer stylish wedgeless handles for a clean aesthetic finish.

- Series 616 MAGNUM™ Casement Window
- Series 726 ThermalHEART™ Casement Window
- Series 516 Residential Casement Window
- Series 517 Residential Casement Window

ARCHITECT: ANDREW VERRI | PHOTOGRAPHY: GEOFF COMFORT | WINDOWS BY: TAYLORS WINDOW SUPPLIES

SLIDING WINDOWS

Sliding windows are an excellent choice, especially in servery situations between kitchen and outside entertainment areas. They are also the safe choice as they don't protrude onto decks or walkways.

Vantage offer a range of user friendly options for your sliding windows: single or double opening panels can be specified, along with double glazing where improved thermal or acoustic performance is required.

Because they are non-projecting, sliding windows can be fitted with exterior security screens or flyscreens.

- Series 601 MAGNUM™ Sliding Window
- Series 602 MAGNUM™ Sliding Window
- Series 504 Residential Sliding Window

PHOTO COURTESY OF DAVID REID HOMES | WINDOWS BY LIFESTYLE WINDOWS

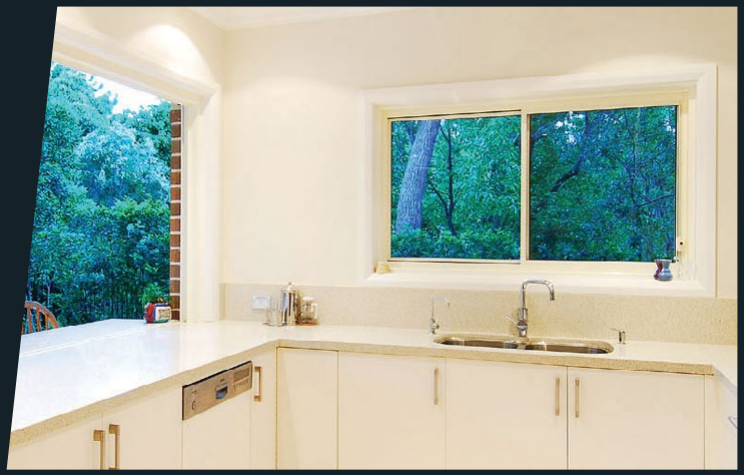


PHOTO COURTESY OF MIDCITY WINDOWS

DOUBLE HUNG WINDOWS

The Vantage double hung window lends elegance to traditional or contemporary homes. Mirroring traditional solid timber windows in appearance, the Vantage double hung window offers classic style with the functional benefits of aluminium.

Some of the practical features of these windows are that they do not protrude over decks or walkways and are a superb window for ventilation.

With a bold frame and sash, MAGNUM™ double hung windows have the proportions of timber windows with the superior functionality of aluminium. Sashes will accommodate 20mm double glazing and pivot inwards for convenient cleaning from the inside of the building. Excellent weather performance, strength, sound reduction and security are all hallmarks of Vantage double hung products.

- Series 613 MAGNUM™ Double Hung Window
- Series 514 Residential Double Hung Window

PHOTO COURTESY OF MIDCITY WINDOWS | BUILDER: TAREENA HOMES

PHOTO COURTESY OF SCOPE DOORS AND WINDOWS

BI-FOLD WINDOWS

Bi-folds are a popular and versatile window. With a wide opening to maximise views and airflow, they play a wonderful role in opening the inside to the outside. These stylish windows deliver an expansive feeling to the home.

Vantage Bi-fold windows have a reliable bottom-mounted roller system for smooth, long-term operation. Our heavy duty quad rollers run on a matching double track for optimum performance and support.

Series 546 Bi-fold Window

PHOTOS COURTESY OF MIDCITY WINDOWS | BUILDER TAREENA HOMES

SASHLESS WINDOWS

The ClearVENT™ sashless window is a very elegant addition to your home. The frameless design means there are no stiles and rails to clutter the outlook, delivering a totally unobstructed view.

This window is designed to give high and low ventilation, is simple to operate and can be latched in an open position. They are available with or without flyscreens which are attached stylishly without unsightly rivets or turnbuckles.

Two panels of glass slide silently past each other within aluminium guides which fit neatly into the perimeter frame. This window is designed to couple with all windows and doors within the Vantage range.

Series 614 ClearVENT™ Sashless Double Hung

MEREWETHER RESIDENCE | ARCHITECT: BOURNE BLUE ARCHITECTURE | WINDOWS BY: AVS WINDOWS

LOUVRE WINDOWS

The Vantage LouvreMASTER™ adjustable louvre system is designed to accept glass, cedar or aluminium blades.

Louvre windows allow you the greatest flow of air of any window when fully open. The air flow is able to be varied by changing the pitch of the louvres, or in large openings by closing some blades and leaving others open. Consider this product for breezeways or to allow natural cooling by air flow through a home.

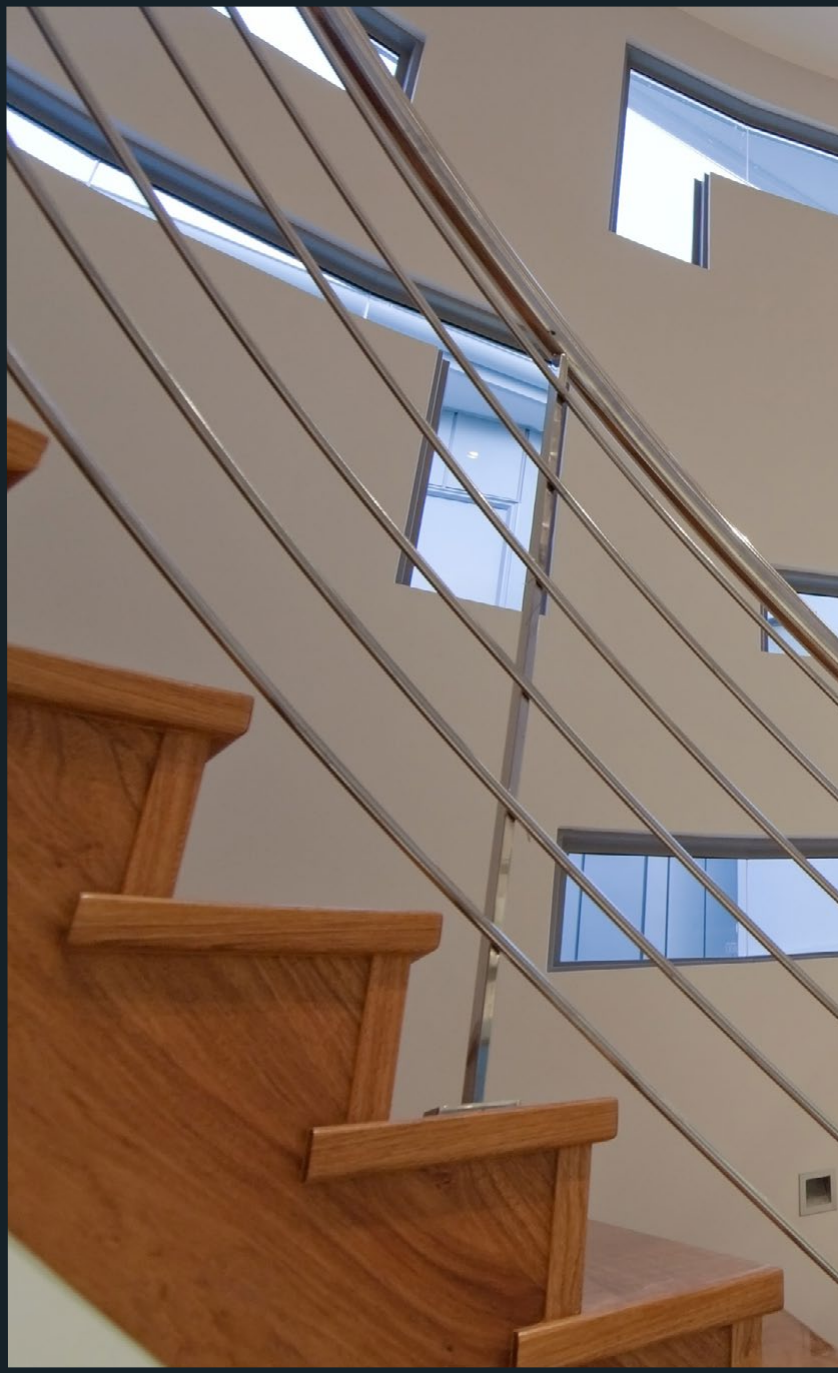
Vantage louvre windows can also be fitted with flyscreens.

Series 525 Louvre Window

BEACHFRONT BEAUTY | ARCHITECT: BHI ARCHITECTS | BUILDER: ALCAN CONSTRUCTIONS | WINDOWS BY: HANLON WINDOWS AUSTRALIA

CUSTOM WINDOWS

A variety of custom window styles are available to suit your project. Curved, raked and other unusual shaped windows can be made to suit your specific requirements.



WINDOWS & THE ENVIRONM

SPLITTERS CREEK | DESIGN/BUILT: SCOTT JAMES BUILDER | WINDOWS BY: DLG ALUMINIUM & GLAZING

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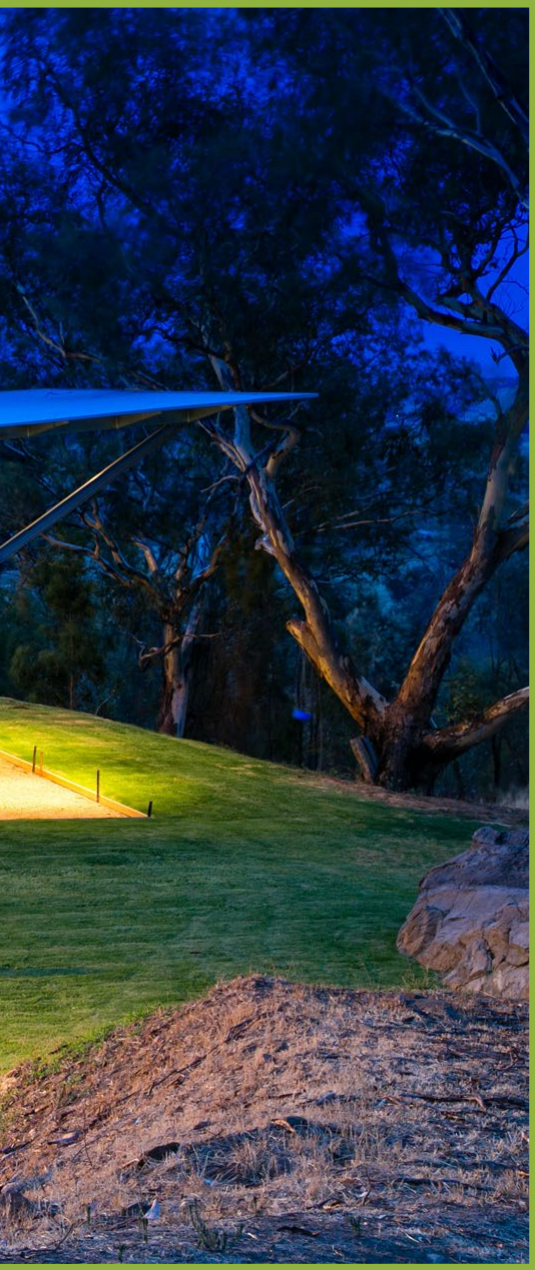


Selecting Vantage high performance windows and doors for your home will help to improve energy efficiency and comfort. AWS is committed to the development of high-performance energy efficient window and door systems and is Australia's market leader in the use of aluminium 'thermal break' technology. Our systems are tested to deliver the ultimate in weather sealing and performance.

Unlike many other systems on the market, Vantage windows and doors are purposely designed to accept double glazing. This ensures you can achieve excellent thermal performance whilst maintaining aesthetic integrity.

When you choose Vantage high performance windows and doors for your home or building project, you are minimising your energy requirements and helping to create a more sustainable future.

WERS RATED PRODUCTS

All Vantage windows and doors are WERS rated. WERS is the official energy rating scheme for windows in Australia and provides a means to understand and compare the thermal performance of windows and doors.

WINDOWS & HOME DESIGN

Giving attention to the selection and placement of windows and doors within your home will help you maximise the use of passive design principles to achieve excellent thermal outcomes. Home orientation, insulation, shading, window selection and placement are important considerations in achieving the best possible efficiency and performance for your home.

DESIGNER SERIES THERMALHEART™

The new Vantage range of 'thermally broken' windows and doors has a polyamide insulator incorporated in every aluminium profile which provides a highly effective barrier for minimising the transmission of cold and the development of condensation. When combined with double glazing, these systems offer homeowners and designers major advantages in meeting new energy efficiency provisions.

ENERGY RATINGS & WINDOWS

WERS is the Window Energy Rating Scheme for windows and doors in Australia. It enables windows to be rated and labelled for their annual energy impact on a home – similar to the rating system used on whitegoods.

For more information about WERS visit the WERS website: **wers.net**

The rating of a window is derived based on its U-Value and Solar Heat Gain Coefficient (SHGC).

U-VALUE

The U-Value is the measure of how much heat is transferred through the window. The lower the U-Value the better the insulation properties of the window – the better it is at keeping the heat or cold out.

SOLAR HEAT GAIN COEFFICIENT

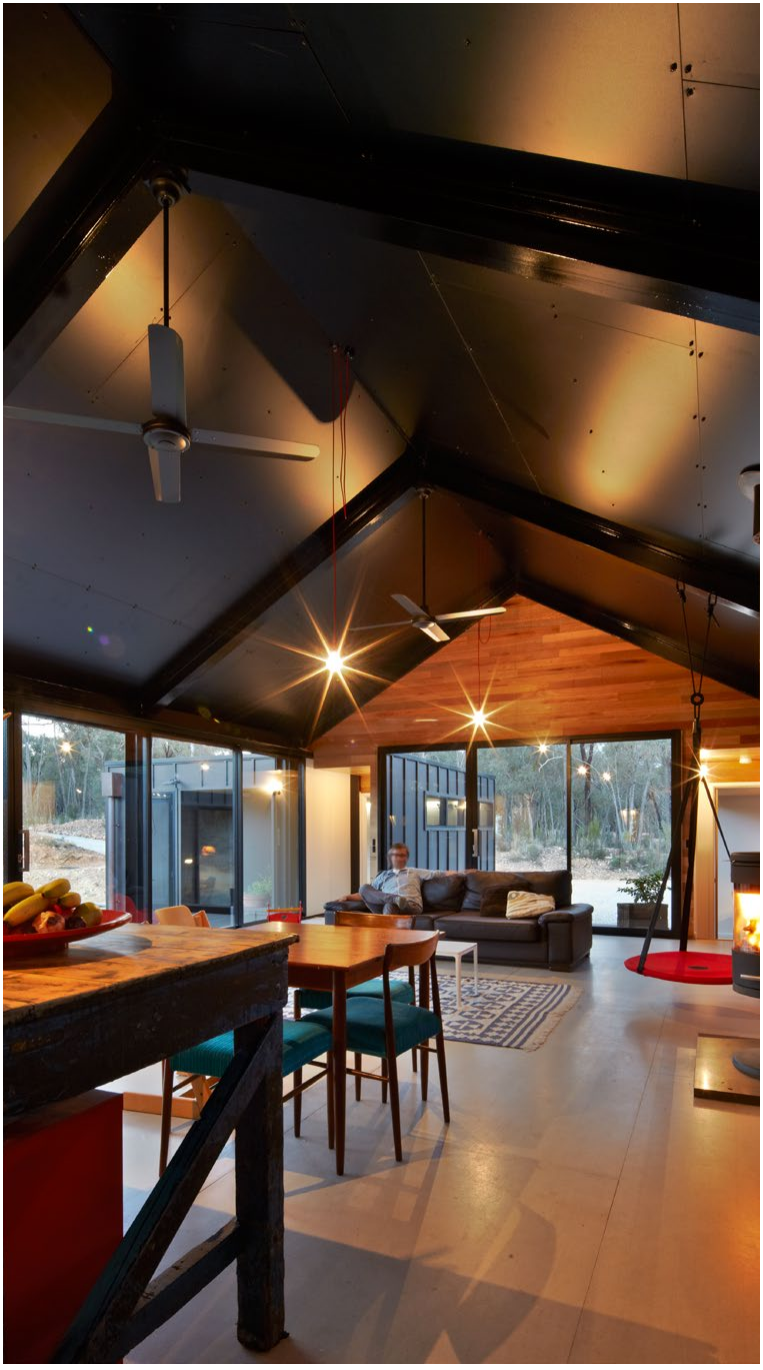
SHGC is a measure of how much solar radiation passes through the window. In a cool climate, windows which have a high SHCG allow a greater amount of solar radiation to pass through, offering free solar heating for the home.

COOLING AND HEATING STARS

Windows are rated under WERS are ranked using a 10 star scale against 17 generic window types. The generic windows range from very high performance to very low performance for heating and cooling.

A low star rating indicates poor performance whilst a high star rating indicates good performance. A 10 star rating indicates the perfect window system. In Australia, the highest performing windows typically fall between 6 and 7 stars for heating and 4 and 5 stars for cooling.

Vantage ThermalHEART™ systems fall within this range, as do many of our standard high performance aluminium window and door systems.



KOOROORK HOUSE | ARCHITECT: LUCAS HODGENS | WINDOWS BY: ACME | WINDOWS & DOORS | PHOTOS: GLEN HESTER

THE LEAKY BUCKET ANALOGY

Imagine your home were like a bucket. You have insulated the ceilings and walls to keep the house warm in winter and cool in summer.

When the bucket is filled up with water it is like filling your house up with heat in winter or air-conditioned cooling in summer.

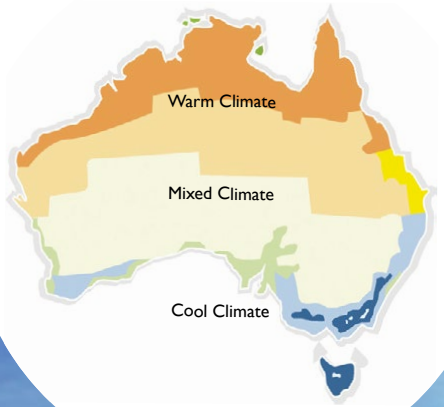
Low performing windows and doors become a weak spot in the building envelope. Like the hole in a leaky bucket, they let energy escape from your home costing you valuable dollars.

Water escapes from the bucket faster than you can pour it in. High performing energy efficient windows and doors maintain the integrity of your building envelope. They make your home easier to heat or cool and avoid wasting electricity.

CLIMATE & DESIGN

Window selection and design considerations for efficiency and comfort.

All Vantage windows and doors are WERS rated. Your local Vantage fabricator can help you select windows and doors to give you the best possible thermal performance for your project.



COOTAMUNDRA HOUSE | ARCHITECT: ANDREW VERRI | WINDOWS BY: TAYLORS WINDOW SUPPLIES | PHOTOS: GEOFF COMFORT

Consider environmental conditions when selecting your windows.

Improve the efficiency and comfort of your home by selecting appropriate frame and glass combinations. Use the guide below to find out more about the common considerations for your climate zone.

WARM CLIMATE

BCA Climate Zones 1, 2 & 3

These climate zones include areas such as Northern Australia, Darwin and Brisbane.

OVERVIEW

A warm climate is one in which the outside air temperature is typically warm and energy is often expended on cooling the building. In a warm climate the goal is to keep unwanted heat out of the building. This will help to minimise the need for air-conditioning and reduce your energy usage. Windows and doors which offer good solar protection and can minimise solar heat gain are ideal in this environment – that is windows with a low SHGC value. Their role is particularly important on east and west facing windows or windows which are unshaded. The U-Value of the window is also important; if air-conditioning is used you want to keep that air-conditioned air cool – a window with good insulating properties, i.e one with a low U-Value will assist here.

CONSIDERATIONS

- Keep solar radiation out
- Retain the coolness of air-conditioned air

Preferred U-Value: Low
Preferred SHGC: Low

OTHER FACTORS

Windows with large openable areas to facilitate crossflow ventilation will be advantageous in these climates.

SUITABLE GLASS TYPES

- Tinted
- High Performance Tinted
- Tinted Low-E
- Tinted IGU Low-E

MIXED CLIMATE

BCA Climate Zones 4 & 5

These climate zones include areas such as Sydney, Perth and Adelaide.

OVERVIEW

A mixed climate is one in which the outside air temperature may vary significantly between winter and summer and energy is expended on heating and cooling the home. In a mixed climate the goal is to stop heat entering the home in summer and reduce heat escaping from the home in winter. In these environments windows which offer a good balance between U-Value and SHGC are required. Careful glass selection subject to aspect and elevation can also help to achieve a good result in this climate.

CONSIDERATIONS

- Balance the benefits of solar heat gain in winter over keeping the building cool in summer
- Insulate against heat transfer throughout the year

Preferred U-Value: Low
Preferred SHGC: Mid-range (or ideally selected by elevation)

OTHER FACTORS

Season specific shading on windows will help to optimise performance and comfort in these climate zones.

Windows with openable areas to facilitate crossflow ventilation will be advantageous in these climates.

SUITABLE GLASS TYPES

- Tint
- Tint + Clear Low-E
- Tint + Clear IGU
- Tint + Clear Low-E IGU

COOL CLIMATE

BCA Climate Zones 6, 7 & 8

These climate zones include most of VIC, ACT and TAS as well as parts of southern NSW

OVERVIEW

A cool climate is one in which the outside air temperature is typically cool and energy is often expended on heating the home. In a cool climate the goal is to retain heat within the home and maximise the input of solar energy in cooler months. This will help to minimise the need for heating and reduce your energy usage. Windows and doors which offer good insulating properties to minimise heat loss are ideal in this environment – that is windows with a low U-Value.

Windows should also have a high SHGC to maximise the use of free solar energy to heat the home. Double glazed windows with low-E coatings are ideal in these environments.

CONSIDERATIONS

- Maximise desirable solar heat gain for most of the year
- Insulate against heat transfer throughout the year

Preferred U-Value: Low
Preferred SHGC: High (or ideally selected by elevation)

OTHER FACTORS

Season specific shading on windows will help to optimise performance and comfort in these climate zones.

SUITABLE GLASS TYPES

- Clear Low-E
- Clear IGU
- Clear Low-E IGU

DESIGNER SERIES THERMALHEART™

ThermalHEART™ is the technology that lies at the core of our thermally efficient range of aluminium windows and doors.

This innovative product range is ideal for those projects where minimising cold and heat transfer is a priority.

Designer Series ThermalHEART™ windows and doors have been shown to deliver up to 32% better thermal performance than standard double glazed windows and doors.

HOW DOES IT WORK?

HOT CLIMATE

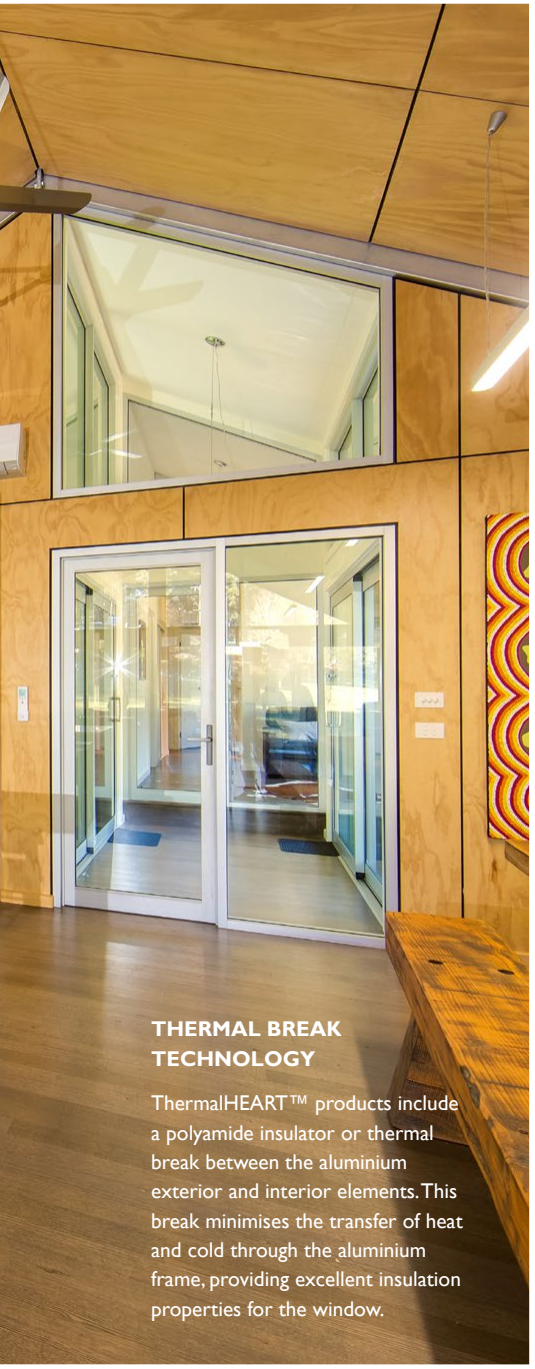
In a hot climate ThermalHEART™ products will act as a buffer against the hot outside air temperatures, minimising the transfer of heat from outside into the home. They will also help to minimise the loss of cool air from artificial cooling units, thus reducing your need for cooling and lowering your home's energy consumption.

When combined with double glazing, our Designer Series ThermalHEART™ windows and doors meet contemporary aspirations for energy conservation and comfortable interior temperatures. In terms of thermal efficiency, this new product range rates 32% better than standard double glazed windows and doors.

COLD CLIMATE

In a cold climate ThermalHEART™ windows and doors will achieve two things. Firstly they will drastically reduce the transmission of cold from the exterior environment to the interior of your home, keeping your home warmer.

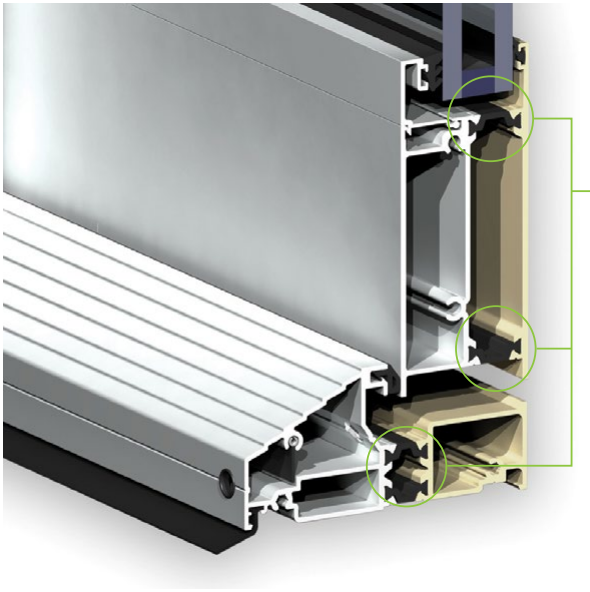
Secondly they will help to keep the warm air within your home to minimise your heating costs. Often in a cold climate where double glazing is used in standard aluminium frames and there is a significant difference between the internal and external temperatures, condensation can occur on the inside window frame. By creating a break in the aluminium frame, ThermalHEART™ products minimise condensation which can cause mould or damage your timber reveals.



THERMAL BREAK TECHNOLOGY

ThermalHEART™ products include a polyamide insulator or thermal break between the aluminium exterior and interior elements. This break minimises the transfer of heat and cold through the aluminium frame, providing excellent insulation properties for the window.

NINE STEPS | ARCHITECT: DE ATELIER ARCHITECTS | WINDOWS BY: DLG ALUMINUM GLASS & GLAZING | PHOTOS: SIMON DALLINGER



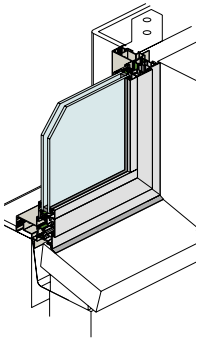
The unique thermal insulator jointing method allows a different choice of colour to complement both internal and external colour palettes, resulting in one colour on the outside and another on the inside.

The polyamide thermal break incorporated into profiles will generally show up as black. These breaks are only seen when windows or doors are in an open position and even then they are relatively unobtrusive.

Double glazing will be used as standard with Designer Series ThermalHEART™ products to obtain maximum thermal benefit from the insulated window system. A glass panel thickness of up to 32mm is possible. Typically standard double glazed panels are 24mm thick.

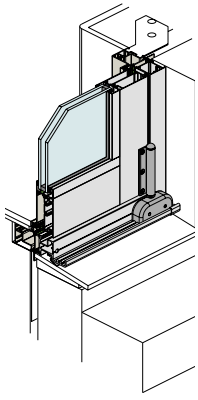
DESIGNER SERIES THERMALHEART™

ThermalHEART™ windows and doors are true energy efficient windows, with a thermally broken frame, sash, mullion and transom. Available in Awning, Casement, Bi-fold Hinged and Sliding configurations for maximum efficiency and comfort. ThermalHEART™ systems are capable of impressive product sizes, allowing the large heights and spans sought by many designers and homeowners to be achieved.



AWNING WINDOW

This window frame and sash demonstrates the dual colour capability of the Designer Series ThermalHeart™ range. The frame and sash set the theme for a flat-faced, square-edged aesthetic common to all Designer Series products. Window mullions have internal stiffening boxes rather than external fins to also improve aesthetics.



BI-FOLD DOOR

The Designer Series ThermalHEART™ Bi-fold doors and windows incorporate a reliable bottom-mounted roller system for smooth, reliable performance. Our heavy duty quad rollers run on a matching double track for optimum performance and support ensuring heavy panels operate easily.

HINGED DOOR

The Designer Series ThermalHeart™ range has been designed with flat faces for a clean, contemporary look. This mirrors the design approach adopted for standard Designer Series products. Corners have generally been squared off, with externally applied glazing beads also following a square, rather than sloped, shape.

SLIDING DOOR

The Designer Series ThermalHEART™ sliding door system offers excellent thermal performance and stacking door configurations of up to four panels in each direction. The clean bold frame design gives a modern aesthetic. Integrated screening options are available.

BEACHMERE PROJECT | DESIGN/BUILT: SOVEREIGN HOMES | WINDOWS BY: BRETTS ARCHITECTURAL WINDOW SOLUTIONS

ENERGY EFFICIENT WINDOWS CHECKLIST

Want to maximise the energy efficiency of your home? Here are some important points you should consider when selecting your windows and doors.

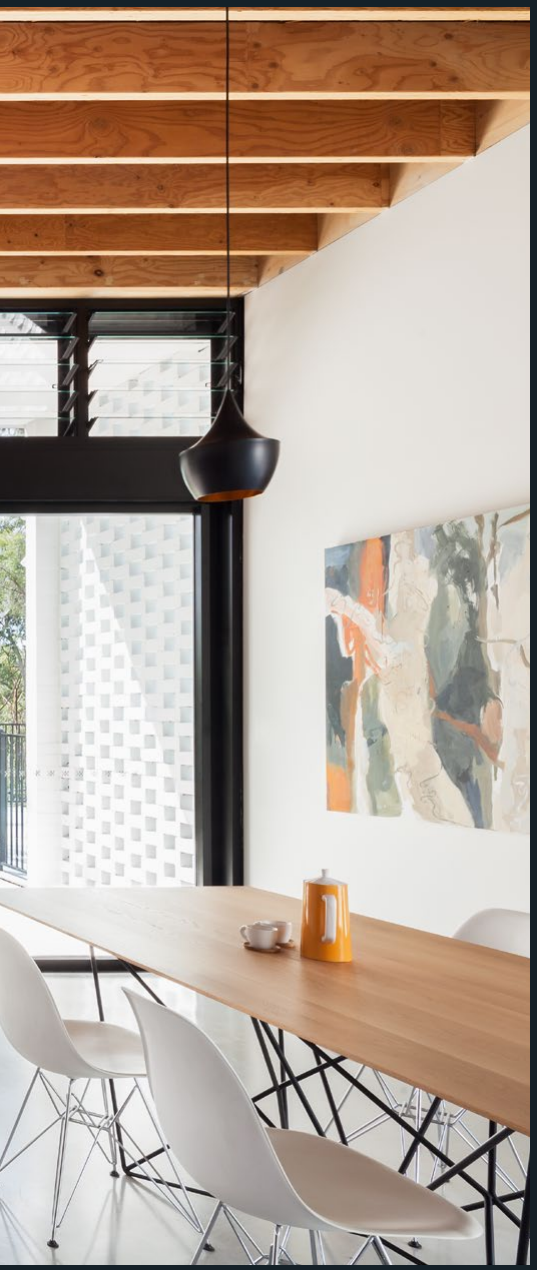
- ☐ Is the window tested in accordance with Australian Standards?
- ☐ Is the window WERS rated?
- ☐ Does the window's U-Value and SHGC suit the climate and requirements of your home?
- ☐ Are your windows and doors positioned to maximise natural cross ventilation?
- ☐ Locate your windows and doors to maximise natural daylight and warm winter sun but minimise heat gain in summer.
- ☐ Have you utilised eaves and shading to reduce summer heat gain but allow winter sun penetration?
- ☐ Have you selected a qualified installer to ensure windows are properly sealed to avoid air leakage?

NEED HELP SELECTING YOUR WINDOWS AND DOORS?

Your local Vantage fabricator can offer expert advice and assistance. Visit our website vantagealuminium.com.au to locate a showroom near you.

VANTAGE DOORS

TURRAMURRA HOUSE | ARCHITECT: JUSTIN NOXON - NOXON GIFFEN | WINDOWS BY: GREAT LAKES GLASS & GLAZING | PHOTOS: KATHERINE LU



Vantage doors have achieved an unequalled position within the Australian window industry through their strength, look, feel and functionality. At Vantage we ensure that the design and manufacture of our door systems creates products that are not just 'fit for purpose' but attractive as well.

HIGH PERFORMANCE SYSTEMS

The Vantage range of aluminium doors includes a number of high performance and thermally broken products. Consider the Designer Series and Designer Series with THERMAL HEART™ – technologies that deliver enhanced energy ratings and performance.

SUPERB SLIDERS

A slider selection is available to suit any residential application. The Designer Series doors are particularly suitable in large specialised arrangements or exposed locations, and a range of single and multi-slider configurations are possible. Consider Designer Series ThermalHEART™ Sliders – the maximum in thermal performance.

BI-FOLD BENEFITS

Vantage bi-folds have a reliable, bottom-mounted roller system for smooth, long-term operation. All Vantage® bi-fold doors will accommodate single or double glazed glass and are WERS rated. ThermalHEART™ technology is also available within the bi-fold system, offering enhanced energy efficiency. The key feature of Vantage folding door systems is that they open internal spaces to the great outdoors in dramatic style.

ATTRACTIVE ENTRANCES

A range of entry door designs are available, including the Residential Series hinged entry door and the Designer Series high performance hinged door. Traditional or contemporary touches are available as well as a range of excellent hardware options. Vantage door panels are highly stable – they don't swell or move in damp conditions as timber entry doors often do and are available in a wide range of high quality powder coat colours or anodised finishes. ThermalHEART™ technology is also available within Designer Series hinged doors.

SLIDING DOORS

Sliding doors have earned a reputation as the most versatile and practical door type for access to decks and patios. They also score highly for delivering expansive views while remaining cost effective.

Vantage sliders offer security and strength with substantial profiles. Smooth, quiet sliding is achieved through high performance rollers.

A range of configurations are available, with two-panel sliders and three-panel stacking systems very popular. Other architectural options exist such as 90° corner sliders opening wide without a corner post.

Sliders have the advantage of being able to be left partly open for ventilation without the danger of wind gusts slamming the door shut.

- Series 618 MAGNUM™ Sliding Door
- Series 731 ThermalHEART™ Sliding Door
- Series 541 Residential Sliding Door
- Series 542 Residential Sliding Door

WONTHAGGI HOUSE | BUILDING DESIGNER: ASHLEY BEAUMONT | BUILDER: ECOLIV SUSTAINABLE BUILDINGS | WINDOWS: TALUM WINDOWS |

MAGNUM™ SLIDING DOORS

MAGNUM™ sliding/stacking doors are the natural choice where wide opening sliding doors are required.

MAGNUM™ sliding doors are available with up to four sliding panels in each direction. Cavity sliding doors are also becoming a popular choice. A MAGNUM™ Cavity sliding door gives you a clear unobstructed opening with up to four panels sliding neatly into a cavity, away from view when open.

Another configuration is to have eight panels, providing an expansive opening with three panels sliding against one jamb and three panels sliding against the other.

90° corner sliding configurations can also be achieved, with doors stacking away from a 90° corner junction with no central mullion, as illustrated right.

Series 618 MAGNUM™ Sliding Door

Series 731 ThermalHEART™ Sliding Door

WINNER

2009 AWA DESIGN AWARDS
"Most Innovative Window System"

PHOTO COURTESY OF PORTLAND ALUMINIUM & GLASS

HINGED DOORS

Hinged doors in aluminium and glass are ideal in any situation, from front doors to utility doors. They can be supplied in standard configurations or follow a more developed design approach.

The door stiles and rails are substantial and strong, and come with many upgrade options: decorative glazing bars, choice of attractive hardware, highlights, sidelights and adjacent windows in a range of configurations.

Bottom rails are available in standard size to match the rest of the door, or can be made deeper with the addition of a rail extender that gives a more traditional appearance.

Weathering is achieved through a sill drainage system and backing seal design.

Highly secure door locks are available through the Vantage exclusive hardware ranges ANDO™, ICON™ and MIRO™.

- Series 548 Hinged Door
- Series 729 ThermalHEART™ Hinged Door
- Series 549 Residential Hinged Door

THE POPLARS | ARCHITECT: MORRISON DESIGN PARTNERSHIP | WINDOWS BY: SUPERIOR WINDOWS | PHOTOS: URBAN ANGLES

NINE STEPS | ARCHITECT: DE ATELIER | WINDOWS BY: DLG ALUMINIUM & GLAZING | PHOTOGRAPHY BY SIMON DALLINGER

FRENCH DOORS

The Vantage French door system is a masterpiece of design. This is a very elegant door suite that is suited to individual application or inclusion in a folding door system.

Wide top and bottom rails and optional colonial glazing bars reflect the true French door style. The 113mm high rails can be widened by a further 85mm, providing a classic appearance, especially when used on the bottom rail.

Rebated stiles where the French doors close together give a flush appearance and provide superior weather protection.

The clean elegant appearance of Vantage French doors is enhanced by the unobtrusive positioning of flush bolts locking the 'lazy' door panel. For the main opening door we recommend a more secure three-point locking system.

- Series 548 Hinged Door
- Series 729 ThermalHEART™ Hinged Door
- Series 549 Residential Hinged Entry Door

THE VILLAGE AT YERONGA | ARCHITECT: MCNAB DEVELOPMENTS | WINDOWS BY: QUEENSLAND WINDOWS

ROSEBERY HOUSE | WINDOWS BY: ARCHITECTURAL ALUMINIUM | PHOTOGRAPHY BY: ANDREW WARN

BI-FOLD DOORS

Smooth, reliable operation and superb design are the hallmarks of the Vantage bi-fold door system.

Vantage bi-folds have a reliable bottom-mounted roller system for smooth, reliable performance. Our heavy duty quad rollers run on a matching double track for optimum performance and support – this ensures heavy panels operate easily. Vantage bi-folds are available to a maximum panel height of 2.6m. Alternatively, 3m panel heights can be achieved through the utilisation of AWS Commercial bi-fold products.

Where you have an uneven number of panels, it is a good idea is to include a hinged door in a bi-fold door set, this allows convenient exit or entry without opening up the bi-fold.

- Series 548 Designer Series Bi-fold Door
- Series 730 ThermalHEART™ Bi-fold Door

PHOTO COURTESY OF AVS WINDOWS & DOORS

PHOTO COURTESY OF SUPERIOR WINDOWS

RETRACTABLE SCREENS

The S1E Eco-Screen™ from Centor Architectural is a revolutionary product providing eco-friendly retractable insect screening and solar control with fingertip operation.

This innovative screening system can be used in conjunction with Vantage bi-fold and sliding doors.

S1E allows homeowners to have complete control of their living environment and can be installed in single or bi-parting configurations. S1E retracts horizontally and discreetly into its frame when not in use – a revolutionary solution for those who refuse to compromise on style.

Single units will span openings of up to 3.9m wide and are available as insect screens, sun control fabrics or combination units.

For openings wider than 3.7m and up to 7.4m wide, a bi-parting system is used.

Centor™ retractable flyscreens can be fitted behind sliding and bi-fold doors from the Vantage range

PHOTO COURTESY OF SCOPE DOORS & WINDOWS

FlowTHRU™

Integrated Stainless Steel Threshold Drain

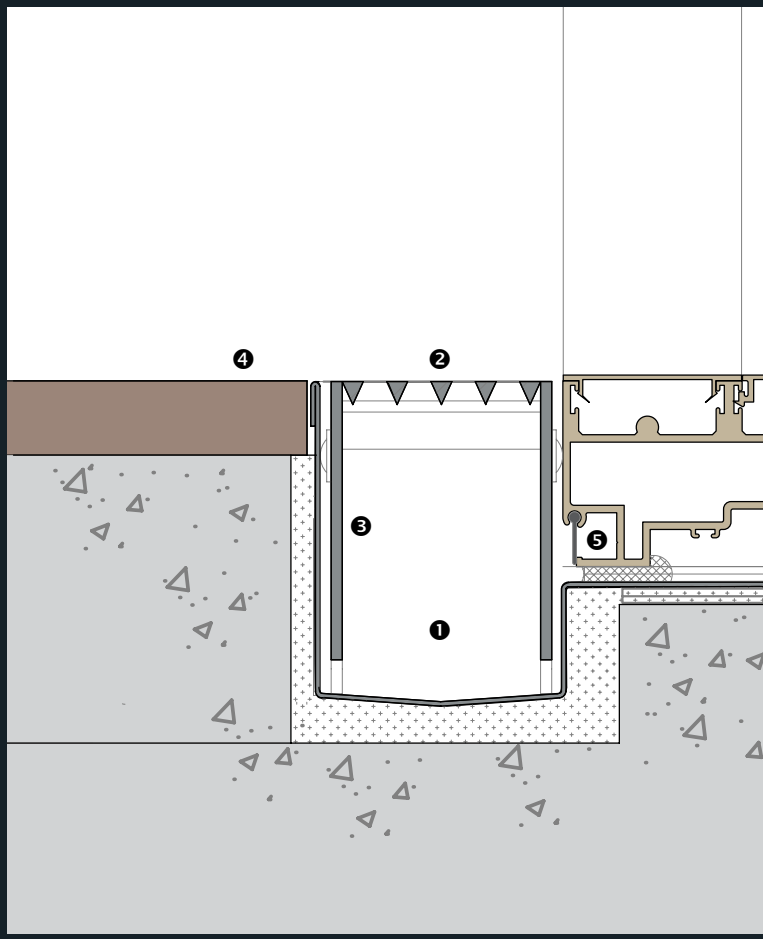
The FlowTHRU™ Integrated threshold drainage solution is designed to offer a practical solution for applications where a flush sill threshold is required. A flush sill threshold allows internal and external floor surfaces to have the same finish level with no elevated threshold to create a trip hazard or interrupt the space. Visually a flush sill threshold allows internal and external living spaces to transition seamlessly and creates a great sense of space. From a practical perspective, a flush sill threshold allows improved accessibility and reduces the risk of trips and falls.

Drainage is a critical element with this type of installation, as the water performance of sliding, hinged and bi-fold door systems is impacted when a flush sill is used. The FlowTHRU™ integrated threshold drainage solution addresses these issues allowing the doors to drain into a recessed stainless steel trough and catering for water run-off from the door panels. This ensures there is no water seepage around the sill and minimises the risk of internal floor surfaces becoming wet, protecting carpet, timber and other internal floor finishes.

The trough is fitted with an architecturally styled stainless steel grate featuring ACO™ Heelsafe® Anti-Slip surface, complying with AS 4586 for slip resistance.

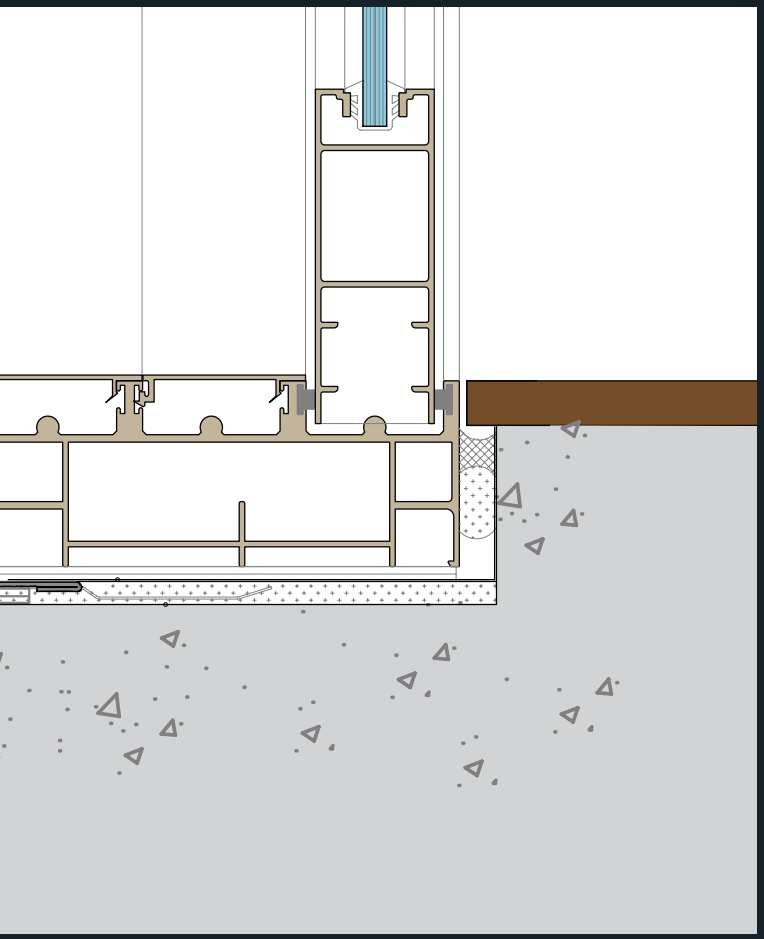
The FlowTHRU™ Integrated threshold drainage solution has been tested to ensure performance in even the harshest of environments and is the only fully tested integrated threshold drainage solution for Vantage, Elevate™ and ThermalHEART® door systems.

The FlowTHRU™ system is compatible with a range of Vantage, Elevate™ and ThermalHEART® door single and multi-panel door systems up to 15m in length and suitable for use in residential or commercial applications. For applications greater than 15m length please contact AWS for a custom solution.



FEATURES

1. Stainless steel trough accepts sliding and bi-fold door threshold
2. Heelsafe® Anti-Slip surface complies with AS4586 for slip resistance
3. Removable grate insert for easy cleaning and maintenance
4. Maintain the same finished floor level from inside to outside
5. Water drains out of sill recess into trough.



COMPATIBLE WITH:

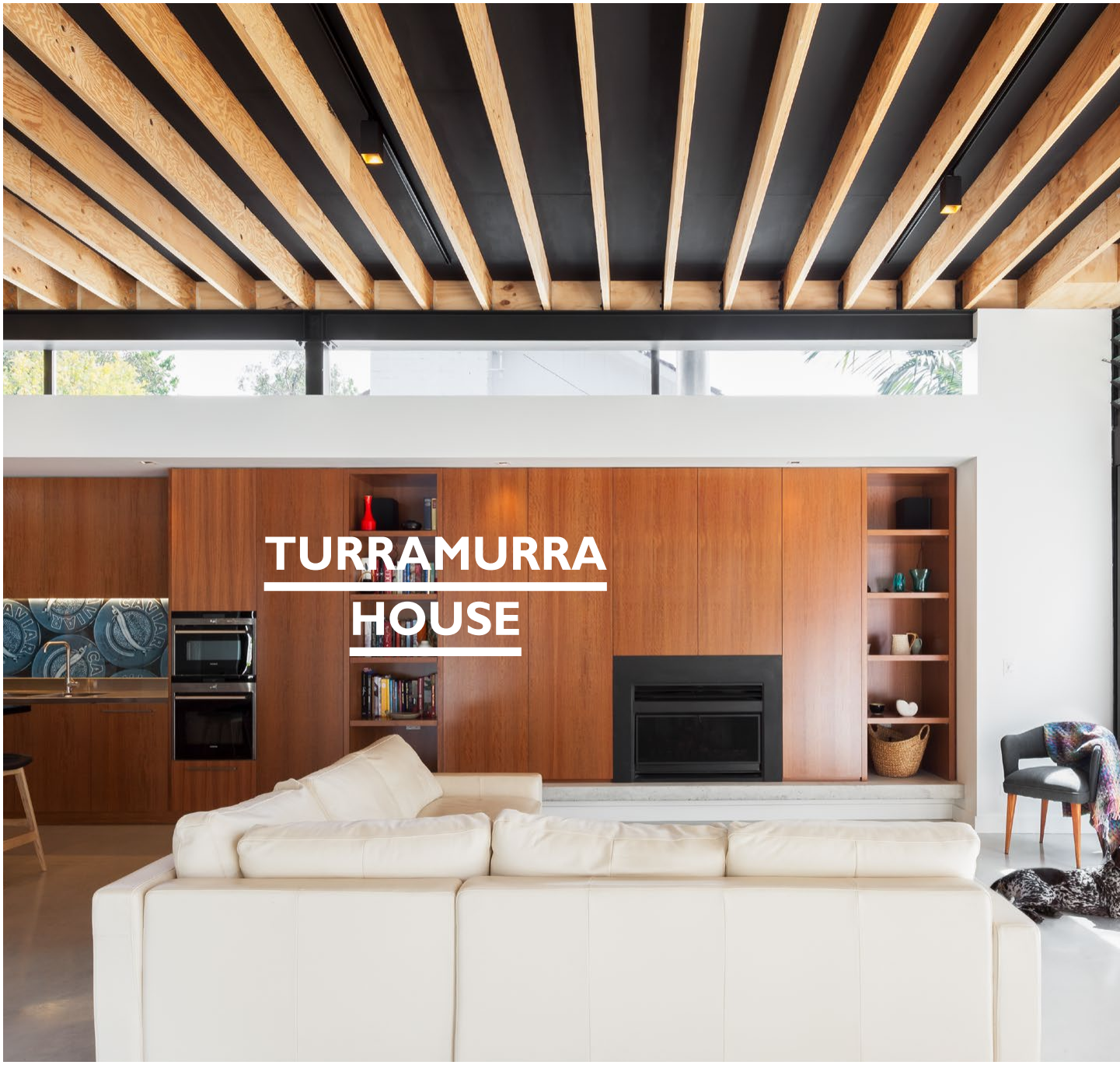
- Series 618 MAGNUM™ Sliding Door
- Series 731 ThermalHEART™ Sliding Door
- Series 542 Residential Sliding Door

The FlowTHRU™ Integrated threshold drainage solution by AWS incorporates an architecturally styled stainless steel grate for maximum durability. The grate can be easily removed for cleaning and maintenance.

HOME FEATURES

TURRAMURRA HOUSE | ARCHITECT: JUSTIN NOXON - NOXON GIFFEN | WINDOWS BY: GREAT LAKES GLASS & GLAZING | PHOTOS: KATHERINE LU

The Australian architectural landscape has changed dramatically over the past 10 years. Large open lifestyle areas and passive design principles have become prominent features. Energy efficiency has become a major consideration. The following pages showcase the use of Vantage aluminium windows and doors in the creation of three sensational private residences.


TURRAMURRA
HOUSE

TURRAMURRA HOUSE | ARCHITECT: JUSTIN NOXON - NOXON GIFFEN | WINDOWS BY: GREAT LAKES GLASS & GLAZING | PHOTOS: KATHERINE LU

Sydney's North Shore suburb of Turramurra is commonly known for its leafy outlook and suburban nature. Architects Noxon Giffen were engaged to design a four bedroom freestanding home in this suburb to act as a framework for a young, growing family to live and evolve.

The client's brief to Architect Justin Noxon was to replace the 1960s bungalow with a modern, bold home. The clients wanted a home that expanded the views of the bush reserve setting. The backyard is surrounded by scribbly gums, which was to be framed from the indoors.

The main challenges architects faced during design was the sloping, north-facing orientation of the site alongside the stringent construction requirements that related to this bushfire rated zone.

Instead of bunkering this home down due to bushfire regulations, this project was required to open up to its leafy surrounds and enable protection through careful design and materials choices.

The architect wanted a home that allowed for a generously scaled living area which connects to the outdoors through large windows and doors that embrace the bushland to the rear. This required a glazing system that was able to be durable, be made in large sizes and have a bushfire rating.

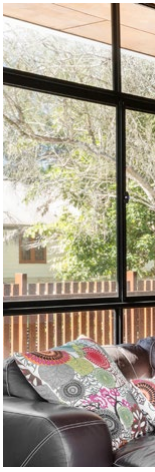
Vantage Series 618 large sliding doors were used at the rear of the house to connect the indoor living with the great outdoors. LouvreMASTER™ louvre windows fitted in with Series 600 commercial framing were installed above the sliding doors to ensure cross ventilation and allow for more light to seep through the home.

The completed project has a sense of elegant drama which responds perfectly to the drama of the scribbly gums in the backyard. It is a simple response to the environment and complexity of the site, with the attempt to feel the magnitude of the landscape throughout the home.

Watch the Designer Notes for this project.

TURRAMURRA HOUSE | ARCHITECT: JUSTIN NOXON - NOXON GIFFEN | WINDOWS BY: GREAT LAKES GLASS & GLAZING | PHOTOS: KATHERINE LU

NORTHERN RIVERS BEACH HOUSE



NORTHERN RIVERS BEACH HOUSE | ARCHITECT: REFRESH® DESIGN | PHOTOGRAPHY BY DAMIEN BREMBERG, COURTESY OF REFRESH DESIGN

Located near South Golden Beach, the architectural brief for this project was to design a contemporary yet cost-effective home that is well connected to nature. It was to feature subtropical open-plan living in a temperate climate. The owners wanted the home to integrate with the environment whilst still making an architectural statement.

The highly desired relaxed and comfortable beachside living is supported by a sense of openness in the house, but at the same time a feeling of privacy and protection. A minimalist palette of finishes and colours create a very calming and welcoming atmosphere, precisely what the owners wanted to achieve.

Vantage, the AWS residential brand, was chosen for this project due to its elegant and sleek joinery and also the renowned quality of the products. The hardware available to complement this range includes slimline handles which make them ideal for architectural projects.

There was a door opening 3.8m wide by 2.7m high for a sliding door but the clients did not have the budget for a commercial door. Series 542 DStacker™ sliding door can accommodate a sliding door of that size which is both cost-effective and robust. Series 542 was used throughout the home because it suited the budget and lifestyle requirements of the owners.

Refresh* Design were able to explore the unconventional concept of a cantilevered structure, with both ends overhanging and counterbalancing each other. This was needed due to the restraints of a small site area and restrictions due to flood risk.

Window Makers were able to successfully educate all parties on the products that would be best suited to this project including the importance of natural light and ventilation.

AIA HOUSE OF THE YEAR 2015
Gold Coast/Northern Rivers
Regional Awards

MODULAR HOUSE

This compact modular home was prefabricated in a factory and designed to complement its surroundings and suit the site in Wonthaggi, Victoria. Even though the home is prefabricated, it is very modern and built to an extremely high standard.

Designed as a 'one bedroom weekender' home with an 8 star thermal rating, this home pushes the boundaries of sustainability. Building designer Ashley Beaumont made sure sustainability and thermal efficiency were at the forefront of the project's build.

From the very beginning the project was environmentally conscious. Prefabrication in a controlled factory environment means there are less site and noise disturbances. Also, the prefabrication process reduces construction wastage by up to 52 per cent.

There is no MDF in the joinery, low chemical paints were used, and solar hot water systems and solar panel unit systems were implemented. Windows and doors are double glazed to maximise thermal efficiency and contribute to the 8 star thermal rating.

Cross flow ventilation is an important design feature when building a home. It involves replacing warm air with cooler air via a path so that cool air can push warm air out. Because of this, Ecoliv Sustainable Buildings ensured that there was enough cross flow ventilation throughout the home.

The MAGNUM™ Series 618 Sliding Door was used to connect the indoors to the

outside deck. When opened, both areas are connected by the pop of colour that features both inside and outside, yellow.

Custom made Series 504 Sliding Windows were used numerous times for the project. This product ensures natural light and ventilation in the home, a particularly important design feature.

The outside design of the home consists of light wood and bright white features. The black windows and doors make a statement – a nice contrast to the lightness of the rest of the external appearance.

SOLUTION FOCUSED

AWS is committed to offering architects, designers, builders and homeowners window and door solutions which not only provide light and ventilation, but help to create unique living spaces protected from harsh environmental elements. All Vantage aluminium window and door systems are tested to meet and exceed Australian Standards.

BUSHFIRE RATED SYSTEMS

AWS has developed and tested an extensive range of Vantage and ThermalHEART™ aluminium windows and doors to meet and exceed BCA requirements for compliance under Australian Standard AS3959-2009 for windows and doors in a BAL-40 bushfire zone.

SOLUTIONS FOR SOUND

A wide range of Vantage and ThermalHEART™ aluminium windows and doors have been tested by the National Acoustic Laboratories and will provide improved acoustic performance to minimise noise infiltration into the building envelope.

SAFE4KIDS™ SYSTEMS

To comply with recent changes to the Building Code of Australia, windows in elevated applications must be fitted with opening restrictors to reduce the risk of falls from elevated openings.

CYCLONE TESTED SYSTEMS

A number of Vantage window and door systems have been tested for compliance with the requirements for windows and doors in region C and D cyclone conditions.

SOLUTIONS FOR YOUR PROJECT

The Building Code of Australia is becoming increasingly stringent, demanding exceptional performance of compliant products. AWS is committed to delivering an extensive suite of window and door systems which comply with the BCA and all relevant Australian Standards.

Throughout our literature and website, products which meet the specific requirements of the BCA for bushfire zones, extreme weather conditions, elevated openings and noise abatement are identified with the tags illustrated below to assist you in selecting the ideal window or door system for your project. Delivering peace of mind always.

CYCLONE
TESTED + CERTIFIED

Cyclone tested Vantage window and door systems meet and exceed the requirements for windows and doors in cyclone regions C & D under the BCA and AS1170-2002.

BAL40
TESTED + CERTIFIED

BAL-40 tested and certified products meet requirements for windows in BAL-40 zones under AS3959-2009, the Australian Standard for construction in bushfire-prone areas.

SAFE4KIDS
TESTED + CERTIFIED

Vantage SAFE4KIDS™ products have been tested to comply with the requirements set out by the BCA for operable windows in elevated applications.

AS2047
TESTED + CERTIFIED

All Vantage window and door systems meet or exceed the requirements of AS2047 for materials, construction, strength, water and airtightness.

ACOUSTICS
PERFORMANCE TESTED

Vantage window and door systems which are acoustics tested have been assessed by the National Acoustic Laboratories for the abatement of airborne sound transmission.

IMPORTANT NOTE | When ordering Vantage windows or doors for bushfire applications, cyclone regions or applications where SAFE4KIDS™ features are required, ensure you inform your fabricator up-front. Products must be manufactured specifically to comply with requirements for these applications.

TESTED SYSTEMS

The table below illustrates which Vantage window and door systems have been tested and/or certified under each relevant standard or industry code of practice.

Residential Series	Series 504 Sliding Window	•	•	•		•
	Series 514 Double Hung Window	•		•		•
	Series 516 Awning Window	•	•	•		•
	Series 517 Awning Window	•	•	•		
	Series 541 Sliding Door	•		N/A		•
	Series 542 DStacker™ Sliding Door	•	•	N/A		
	Series 549 Entry Door	•	•	N/A		
Designer Series	Series 525 Louvre Windows	•		•		
	Series 546 Bi-fold Window	•				
	Series 548 French Doors	•	•	N/A		
	Series 548 Bi-fold Doors	•	•	N/A		
	Series 602 Sliding Window	•	•	•	•	•
	Series 613 Sashless Double Hung Window	•		•		
	Series 614 Double Hung Window	•		•		•
	Series 616 Awning Window	•	•	•	•	•
	Series 618 Sliding Door	•	•	N/A	•	•
ThermalHEART™	Series 726 Awning Window	•	•	•		•
	Series 729 Hinged Door	•	•	N/A		
	Series 730 Bi-fold Door	•	•	N/A		
	Series 731 Sliding Door	•	•	N/A		•
Specialty	Series 531 SoundOUT™ Sliding Window	N/A	N/A	•		•
	Series 532 SoundOUT™ Casement	N/A	N/A	•		•
	Series 533 SoundOUT™ Sliding Door	N/A	N/A	N/A		•

AS2047
TESTED + CERTIFIED

TESTED TO AS2047

Systems for weather and structural performance.

Under requirements set out by the BCA, windows and doors must meet the minimum mandatory specifications set out in AS2047. These specifications are designed to ensure all window and doors installed into Australian buildings offer appropriate strength, integrity, water resistance, airtightness and performance.

The Vantage window and door testing laboratory is fully accredited and has one of the largest pressure booths in the industry. Weather conditions can be simulated through manipulation of air and water spray flow, and remote monitoring of air leakage and deflection of windows and doors is also possible. This laboratory ensures that Vantage window and door systems can be tested and researched to ensure compliance with building codes and relevant industry standards.

AS2047 TESTING REQUIREMENTS

All Vantage windows and doors undergo the following performance testing to ensure compliance with AS2047.

AS4420.2 Deflection Test
Positive and negative wind pressures are applied to the face of the window to test the maximum deflection under wind load.

AS4420.3 Operating Force Test
To verify that an opening sash is capable of opening and closing without undue effort.

AS4220.4 Air Infiltration Test
The air leakage of a window is tested to ensure energy and acoustic efficiency.

AS4420.5 Water Penetration Resistance Test
To verify that no water leaks through the window into the building.

AS4420.6 Ultimate Strength Test
Negative and positive wind pressures are applied to the window to at least 1.5 times the design wind pressure to ensure it does not fail in unusual wind conditions.

Water Penetration Resistance Testing

Deflection Testing

BAL40
TESTED + CERTIFIED

BAL-40 RATED SYSTEMS

Tested and certified bushfire solutions from AWS.

Many Australian homes are located in areas prone to bushfire attack. Changes to the BCA in 2011 and the inclusion of AS3959-2009 have increased the stringency around the selection of windows and doors along with other building materials for new build or renovation projects in bushfire-prone areas. These changes are intended to reduce the risk of loss of life or damage to property in bushfire areas.

If you currently live, or plan to build, in a bushfire-prone area, there are many precautions you can take to help protect your home and maximise your safety. One of these is the correct selection and installation of bushfire rated window and door systems.

AWS now offers Australia's largest range of BAL-40 bushfire rated windows and doors.

BUSHFIRE ATTACK LEVEL

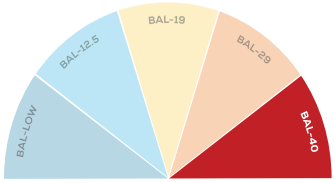
In the Australian Standard AS3959, they have classified different bushfire intensity levels that a home may experience during a bushfire. These are referred to as Bushfire Attack Levels, or BALs for short.

There are six bushfire attack levels in total:

- BAL-FZ Flame Zone
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-Low

These individual levels are based on:

1. The region where you live.
2 The vegetation type around your property.
3. The distance from your home to individual vegetation types.
4. Slope on the property.



BAL-40 is currently the highest bushfire attack level where Vantage window and door systems can be used.

Bushfire Attack Level (BAL)	BCA requirement for Vantage windows to comply
BAL-LOW	Standard window and door products may be used at this level. There are no specific performance requirements.
BAL-12.5	Standard windows and doors can be used if completely protected by compliant bushfire shutters. **or** Standard windows and doors can be used if completely protected (fixed and opening sash) by an external bronze or aluminium screen with maximum aperture of 2mm. **or** Vantage BAL-40 windows and doors can be used. Window opening must be fitted with internal or external steel, bronze or aluminium screens. There is no requirement to screen BAL-40 tested doors at this level.
BAL-19	Standard windows and doors can be used if completely protected by compliant bushfire shutters. **or** Standard windows and doors can be used if completely protected (fixed and opening sash) by an external steel, bronze or aluminium screen with maximum aperture of 2mm **or** Vantage BAL-40 windows and doors can be used. Window opening must be fitted with internal or external steel, bronze or aluminium screens. There is no requirement to screen BAL-40 tested doors at this level.
BAL-29	Standard windows and doors can be used if completely protected by compliant bushfire shutters. **or** Vantage BAL-40 windows and doors can be used. Window opening must be fitted with internal or external steel, bronze or aluminium screens. There is no requirement to screen BAL-40 tested doors at this level.
BAL-40	Standard windows and doors can be used if completely protected by compliant bushfire shutters. **or** Vantage BAL-40 windows and doors can be used. Window opening must be fitted with internal or external steel, bronze or aluminium screens. There is no requirement to screen BAL-40 tested doors at this level.
BAL-FZ	Standard windows and doors can be used if completely protected by compliant bushfire shutters.

SAFE4KIDS
TESTED + CERTIFIED

SAFE4KIDS™ WINDOWS

Restricted openings to protect children.

Injury and death of children as a result of falls from windows are a tragic and preventable occurrence. The Building Code of Australia (BCA) has been updated in 2013 to establish regulations for the installation of windows with restricted openings in applications where there is a risk of injury or death from accidental falls.

AWS supports this initiative and has undertaken extensive research and development projects to allow the supply and installation of compliant window and door systems that will reduce the risk of injury.

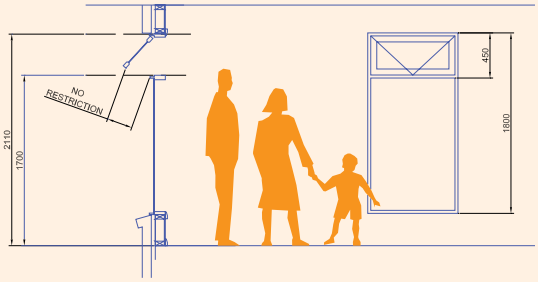
When installing into applications which are deemed by the BCA to require the installation of guards or restricted openings, Vantage Aluminium Windows and doors can be fitted with restricted opening chain winders, buffer stops and restricted opening latches.

All Vantage windows identified as SAFE4KIDS™ meet BCA requirements without the need for application of security grills or robust screens.

CASE 1

No openings within 1700mm of the floor.

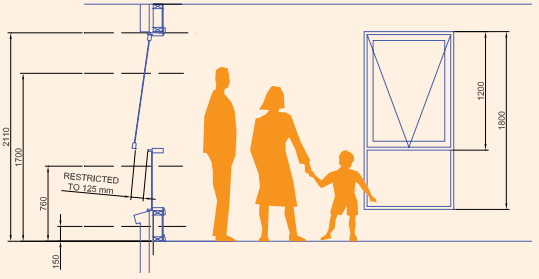
No restrictions apply.



CASE 2

Opening within 1700mm of the floor and climbable element between 150mm and 750mm above the floor.

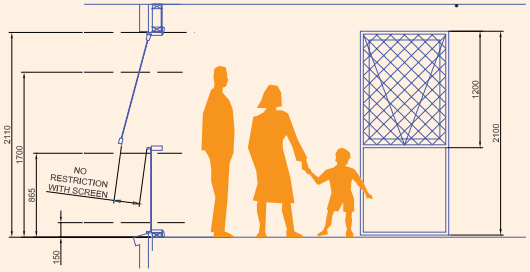
Openings must be restricted to 125mm or fitted with a non-removable robust screen.



CASE 3

Opening between 865mm and 1700mm above the floor; and no climbable element between 150mm and 760mm above the floor.

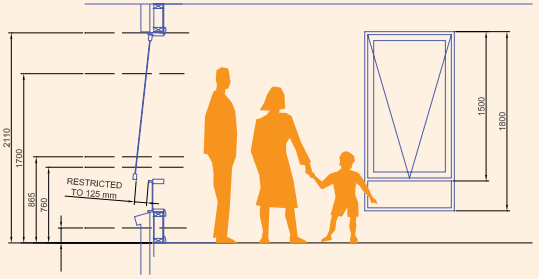
Opening must be restricted to 125mm; or fitted with a removable robust screen.



CASE 4

Opening within 865mm of the floor; and climbable element between 150mm and 760mm above the floor.

Opening must be permanently restricted to 125mm; or fitted with a non-removable robust screen.



ACOUSTICS
PERFORMANCE TESTED

ACOUSTICS TESTED

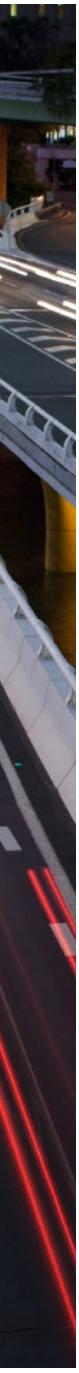
High performance noise solutions.

Modern day lifestyle and the proximity of our homes and offices to roads, airports and industry has placed an increased level of importance on the ability to control external sounds in our homes.

There is a significant body of evidence supporting the notion that noise pollution can have detrimental impacts on our individual health and wellbeing. The inevitable build-up of stress and lack of sleep caused by noise pollution has been linked to a host of physical and mental health issues.

Windows and doors are among the many building products that can significantly impact the way your home or building envelope is insulated from external sounds.

AWS have tested a large range of Vantage and ThermalHEART™ systems for acoustic performance. In most cases, products are tested with a number of glass options.



Rw VALUES

The acoustic performance of a window or door system is measured as an Rw value. The higher the value the better the system is at insulating against noise.

The following pages provide you with Rw values for a wide range of Vantage, Elevate™ and ThermalHEART™ systems.

100dB

EQUATES TO

NEARBY AIRCRAFT TAKING OFF

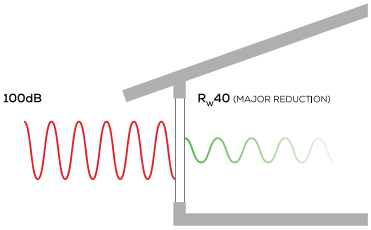
JACKHAMMER 2M AWAY

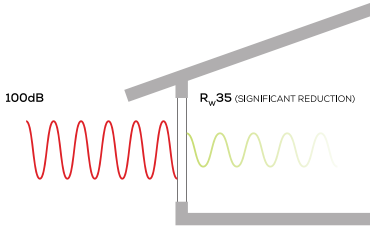
NEARBY HEAVY TRAFFIC/HORNS

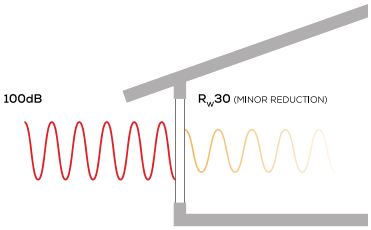
SOUND LEVELS

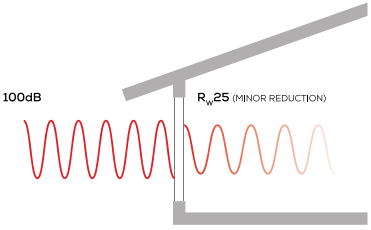
Sound levels are expressed in decibels (dB). The higher the dB rating, the stronger the sound.

When we consider sound reduction and building materials, we refer to an Rw value. Rw values indicate how effective a product is at reducing decibels of sound transferred through the building material. Where there is 100dB of sound on the outside, the Rw value measures the significance of the reduction in decibels inside.









CYCLONE
TESTED + CERTIFIED

CYCLONE TESTED

Solutions for extreme weather.

Cyclones are a major natural hazard affecting the eastern, northern and western coastlines of Australia.

Strong winds generated during severe tropical cyclones can cause extensive property damage and turn airborne debris into potentially lethal missiles. Tropical cyclones generally hold enormous amounts of moisture and can produce heavy rainfall over extensive areas. These extreme weather conditions place enormous stress on the building envelope. It is critical windows and doors in cyclone regions C and D are manufactured to perform under these conditions.

To ensure the suitability of Vantage windows and doors for these applications, AWS have undertaken extensive strength and impact testing on Vantage systems. We are proud to offer a range of region C and D cyclone tested residential systems to the market.

WIND CLASSIFICATIONS

Every house in Australia is wind classified based on the wind region and site conditions. In cyclone region C and D there are four wind classifications: C1, C2, C3, C4.

The table below illustrates the relationship between the wind classification and the design wind speed.

Wind classification	Design wind speed, V_h	
	m/sec	km/hr
C1	50	180
C2	61	220
C3	74	266
C4	86	310

CONSIDERATIONS FOR WINDOWS

A common problem observed during cyclones is windows and doors being broken by the impact of flying debris. This allows strong winds into the house causing internal pressures which may in turn reduce the structural integrity of the building envelope.

Additionally, inadequate strength or poor installation may result in windows being pushed in or blown out.

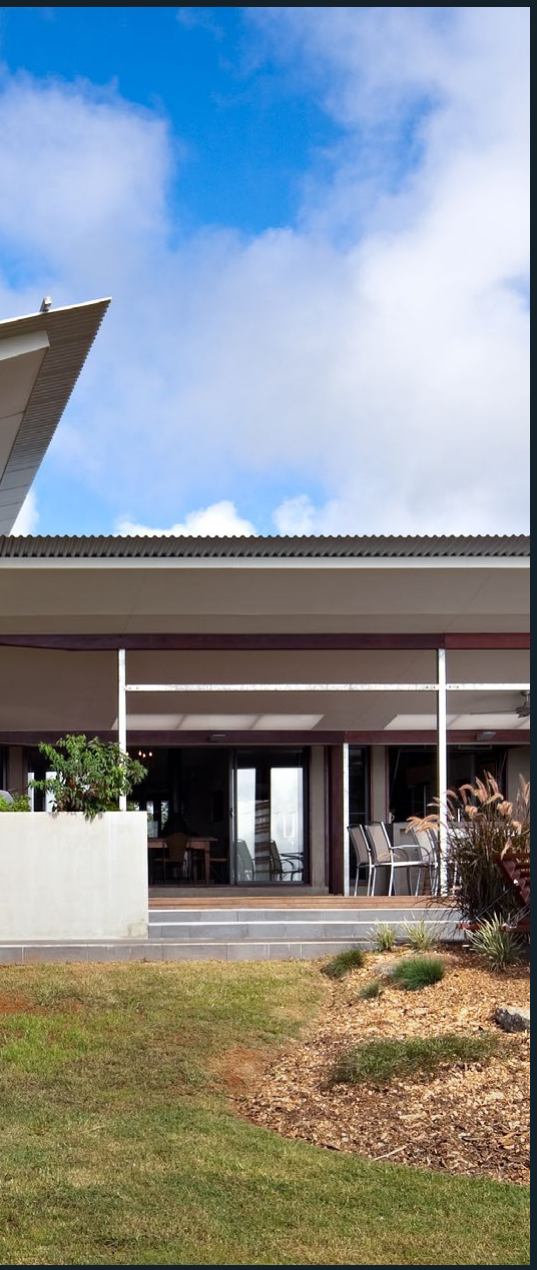
To address these issues, Vantage windows and doors tested to meet and exceed requirements for regions C and D incorporate:

- Extra strong frame, sash components and meeting stiles
- Heavy duty hardware and seals.
- Strong impact resistant glass.

These products have been tested to withstand pressures of 660Pa water and 10,600Pa ultimate. In addition, products are subjected to impact testing of 39M/s for region D and 29M/s for region C.

GENERAL INFORMATION

PHOTOGRAPHY: CFJ PHOTOGRAPHY | ARCHITECT: SPARKS ARCHITECTS | WINDOWS BY LIFESTYLE WINDOWS



Choosing a Vantage supplier for your windows and doors is only part of the aluminium joinery decision. You need to spend time considering the additional questions of colour, hardware, style, glass and product configuration. This section provides information that will enable you to make an informed decision.

CHOOSE THE COLOUR

Handy hints for choosing the right colour for your joinery. Whether you want to complement your house colour or contrast with it, Vantage offers over 80 powder coat and 10 anodising tones to choose from.

THE RIGHT GLASS

Choosing the glass for your windows and doors carefully can pay big dividends in interior comfort levels. See this section for data on how various glass options will optimise heat, light and sound levels in your home.

WINDOW & DOOR HARDWARE

Options include the sleek MIRO™ range of matching hardware or standard window and door handles. Don't forget that custom colouring your hardware to the joinery always gives an attractive result. The unique ANDO™ range is also available for maximum durability and a clean modern look.

SYSTEM PORTFOLIO

Vantage offers a range of windows and doors to suit the requirements of your project and budget. Choose from Designer, Designer with ThermalHEART™ or Residential systems to meet your needs.

TYPICAL CONFIGURATIONS

To make it easy for you we've miniaturised many of the more common window and door configurations that are available. Use these as a starting point for your project or consult your local Vantage fabricator with your own design ideas.

YOU CHOOSE THE COLOUR

Choosing a colour for your window and door systems requires careful thought. All Vantage windows and doors are made to order so you have complete freedom to choose the perfect colour and finish for your project.

Vantage windows and doors can be finished using one of two surface finishing options:

POWDER COATING

- Powder coating is a baked-on coating that is tough and durable and comes in a wide range of colours.
- The Vantage Colour Book contains swatches for our standard range of powder coat colours and is available from your local Vantage fabricator.
- It offers a wide colour selection and highlights some of the most popular Vantage powder coat colours.
- When you select a powder coat colour from the Vantage standard colour range, matching window and door hardware is easy and affordable.

ANODISING

- Anodising is an electrochemical treatment available in a range of colours, including standard finishes of natural silver, bronze and black.

ROSEBUD HOUSE | ARCHITECT: JAMES GOODLET - ALTERECO DESIGN | WINDOWS BY: WINDOWS BY DESIGN

OUR ADVICE

- For a joinery colour that complements the house cladding, it is common to choose a tone a few shades up or down from the cladding colour.
- Choosing the same colour as the house can give a very clean look, especially in white or cream tones.
- Remember, however, that the colour of joinery you choose now may limit options in the future if you want a change of house colour.
- Contrasting joinery colours are popular and natural tones such as darker greens, blues, greys or black are often chosen.
- Dark or black joinery against a light coloured house, especially in a plaster finish, can look very sharp and attractive.
- Matching the joinery colour to the roof or fascia for a unified look is also popular.
- It's important to remember that the joinery colour impacts on the inside view and so can influence interior colour schemes. A good option can be to choose a neutral joinery colour that preserves flexibility for interior selections, e.g. white, cream, grey, taupe or black.

For more information, head to **awsaustralia.com.au/vantage/colour**

THE RIGHT GLASS

FOR HEAT, LIGHT & SOUND

POLE HOUSE | ARCHITECT: F2 ARCHITECTURE | WINDOWS BY: BRADFORDS GLASS & ALUMINIUM | PHOTOS: MATT LORD

Glass is the only building material that not only insulates us from temperature extremes, it can also control the passage of light and heat into and out of our homes.

Australians looking to transform their homes should consider changes that impact the long-term comfort, value and performance of their property. Glass does all three – it's the only building material that insulates us from temperature extremes, can control the passage of light into our homes and regulate heat into and out of our homes.

There are three key considerations when thinking about windows and glazing for your home: natural light, solar heat gain and thermal conductivity. Understanding local climatic conditions will also allow you to best determine your optimal glass selection.

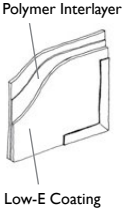
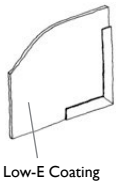
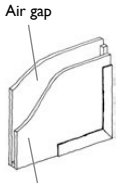
Performance glass can be utilised to overcome site limitations and demanding window orientation so that you can enjoy your views without compromising window size and your home's energy efficiency.

Selecting the right performance glass not only provides a great view and natural light but controls UV and glare too. Benefit from the natural warming effect of solar heat during winter whilst minimising its impact during summer by insulating your home against excessive heat loss or gain.

Create the perfect windows for your home by combining energy efficient glass with other options including specialty glass to reduce noise or provide protection from extreme weather (and intruders.)

GLASS TYPES

The table below is designed to help you compare the bands of performance of some popular glass configurations. It is a guide only and does not seek to show absolute performance data.

GLASS CONFIG	GLASS TYPE (*Examples used are Viridian unless specified otherwise*)	ATTRIBUTES	GLARE REDUCTION	SOLAR HEAT REDUCTION	INSULATION
	Ordinary Glass	Glass thickness 4mm – 6mm			
 Produced with colour right through the glass	VFloat™ Toned	Glass thickness 4mm – 6mm Toned offers up to 32% greater solar heat reduction than ordinary glass. Supertoned offers up to 59% greater solar heat reduction than ordinary glass.			
	VFloat™ Supertoned				
 Polymer Interlayer Low-E Coating	SmartGlass™ S1 Clear	6.38mm Grade A safety glass. Up to 39% better insulation than ordinary glass. Green and grey offer up to 41%, Neutral up to 40% greater solar heat reduction than ordinary glass			
	SmartGlass™ S1 Grey / Neutral				
 Low-E Coating	SmartGlass™ SP10 Clear – Polaris	Glass thickness 4mm – 6mm SmartGlass offers up to 39% better insulation than ordinary glass. Low E insulation with a choice of solar protection performance for residential applications.			
	SmartGlass™ SP30 Neutral – Panoramic SmartGlass™ SP35 Grey – Dusk				
 Air gap Low-E Coating	LightBridge™ Clear	Unit thickness 12mm – 32mm LightBridge is a range of high performance insulating glass units (IGUs) developed specifically for residential building applications. Constructed with low-e glass and inert gas fill as standard, a high insulating factor is assured, whilst maintaining a very high level of visual clarity and visible light transmission levels.			
	LightBridge™ Toned				

First step in solar heat reduction for sunny climates.

Greatly reduced glare and solar heat reduction for hot climates or demanding orientations, with no improvement in insulation.

Insulation with lower solar heat reduction for passive solar heating in cooler climates on northern orientations.

Adding a tint or tone to the glass decreases glare and improves solar heat reduction for increased comfort in demanding orientations.

Superior insulation for hot and cold climates with improved solar heat reduction for greatly improved comfort without sacrificing visible light.

High solar heat reduction, superior insulation in hot and cold climates, and improved glare reduction for greater comfort in hot climates or demanding orientations.

The performance indicated in the table is that of the highest performing product in that category for that characteristic, performance will differ by product. For detailed glass performance data visit viridianglass.com. ™ is a trade mark of CSR Building Products Limited. Reproduced with permission of Viridian. Not all products are appropriate for all applications and some may require special assessment or processing in certain environments.

HARDWARE

Hardware is one of the defining features of windows and doors. The form and function of handles and latches provide a tactile experience that can considerably enhance the appearance and usability of your windows and doors.

At Architectural Window Systems we have developed three unique hardware ranges designed to complement the aesthetic styling of Vantage window and door systems.

Unity of design and consistency of performance shape the look and feel of the ANDO™, ICON™ & MIRO™ ranges of window and door hardware. Achieving a family likeness within each range was a priority, hence the visual theme – smooth, sleek lines for ANDO™, square contemporary styling for ICON™, and elegant curves for MIRO™.

ANDO™

Developed to complement the modern design and clean lines of the Architectural Series, the ANDO™ range brings a fresh and sleek look to residential windows and doors.

Available across the range of window and door applications and in a wide variety of finishes, ANDO™ hardware offers a family appearance providing consistency throughout your project.

The ANDO™ range includes:

- ANDO™ Twin point sliding door lock
- ANDO™ Slimline sliding door lock
- ANDO™ Single point sliding door lock
- ANDO™ Sliding window mortice lock
- ANDO™ Sliding door 'D' handle
- ANDO™ Hinged door lock
- ANDO™ Bi-fold activator
- ANDO™ Double hung lock
- ANDO™ Chainwinder

icon

ICON™

The ICON™ hardware range is a fully integrated range of 316-grade stainless steel hardware for aluminium windows and doors.

The range offers superior weathering performance and outstanding durability making it suitable for all environments.

Developed for use with our high performance window systems, ICON™ incorporates a square-edge, rectilinear look which complements the lines of Designer Series windows and doors.

The ICON™ range includes:

- ICON™ Flush pull
- ICON™ Sliding door 'D' handle
- ICON™ Sliding door lock
- ICON™ Hinged door lock
- ICON™ Bi-fold operator
- ICON™ Casement latch
- ICON™ Sliding Window Lock

MIRO™

The MIRO™ range of window and door hardware is a blend of contemporary design and function. It offers a unified look from window to door.

The smooth, ergonomic MIRO™ shapes offer good aesthetics as well as a comfortable hand grip. Secure and convenient locking features have been included.

MIRO™ hardware is manufactured from die-cast zinc and available in a range of contemporary powder coat finishes to match or contrast your aluminium joinery.

The MIRO™ range includes:

- MIRO™ Sliding door lock
- MIRO™ Sliding door 'D' handle
- MIRO™ Hinged door lock
- MIRO™ Bi-fold operator
- MIRO™ Casement latch
- MIRO™ Double hung lock
- MIRO™ Cam handle

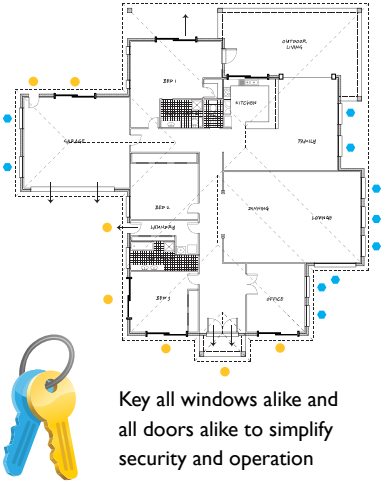
PHOTO COURTESY OF WINDOWS BY DESIGN

Residential project security can be complex; reducing the number of key combinations for a project can simplify this and improve operability for end users.

The Vantage range of window and door hardware is designed to ease the complexity of home security. A range of keying options are available.

Depending upon the products and hardware specified, it is possible to achieve a single key solution for your project.

In almost all instances, Vantage window locks can be keyed alike, as can Vantage door locks, offering one key to operate all Vantage windows within your project and one key to operate all Vantage doors. This simplified approach brings security and peace of mind to end users.



Key all windows alike and all doors alike to simplify security and operation

HARDWARE COMPATIBILITY

ICON™, ANDO™ and MIRO™ hardware is compatible with most Vantage systems. To simplify your selection process, the table below indicates the compatibility of hardware with each Vantage system.

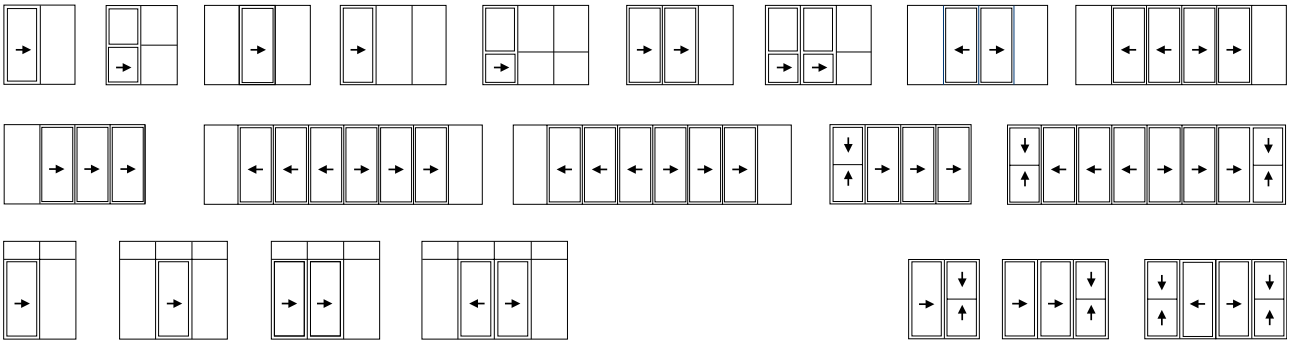
	RESIDENTIAL SERIES					DESIGNER SERIES							THERMALHEART™			
	514	516	517	541	542	546	548	549	601/2	613	616	618	726	729	730	731
	D/hung	Awning	Awning	Sliding	Sliding	Bi-fold	Bi-fold	Hinged	Sliding	D/hung	Awning	Sliding	Awning	Hinged	Bi-fold	Sliding
ANDO™																
Single Point Sliding Door Lock				•	•							•				
Twin Point Sliding Door Lock				•	•							•				
Slimline Sliding Door Lock				•	•							•				
Sliding Door Handle (with mortice lock)												•				•
Bi-fold Operator						•	•								•	
Locking Lever Handle (2-point)							•	•						•	•	
Locking Lever Handle (4-point)							•	•						•	•	
Sliding Window Lock									•							
Chainwinder		•	•								•		•			
Double Hung Window Lock	•									•						
MIRO™																
Single Point Sliding Door Lock				•	•							•				
Sliding Door D-pull (with mortice lock)												•				•
Bi-fold Operator						•	•								•	
Lever Handle (2-point)							•	•						•	•	
Lever Handle (4-point)							•	•						•	•	
Lever Handle (with lever compression lock)							•	•						•	•	
Wedgeless Window Fastener/Cam Handle		•	•								•		•			
ICON™																
Twin Point Sliding Door Lock				•	•							•				
D-pull with ISEO Lock												•				•
Flush Pull (with mortice lock)												•				•
Bi-fold Actuator						•	•								•	
2-Point Hinged Door Lock							•	•						•	•	
Multi-point (4) Hinged Door Lock							•	•						•	•	
Lever Compression Hinged Door Lock							•	•						•	•	
Wedgeless Window Fastener/Cam Handle		•	•								•		•			

Please note: ICON™, ANDO™ and MIRO™ hardware is not compatible with the following: Series 501/503, Series 502/504 Series 514 or Series 613. ICON™ and MIRO™ hardware is not compatible with Series 601/ 602.

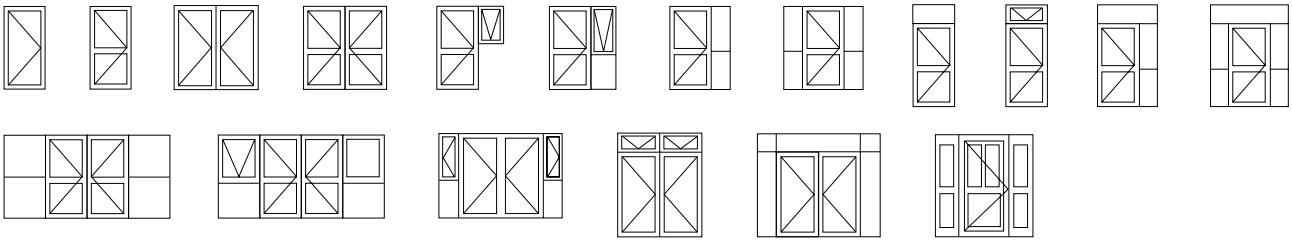
TYPICAL CONFIGURATIONS

Below are some typical configurations for Vantage windows and doors. These pages should be used as a guide only, there are many more options available. Talk to your local Vantage fabricator to create the ideal configuration for your project.

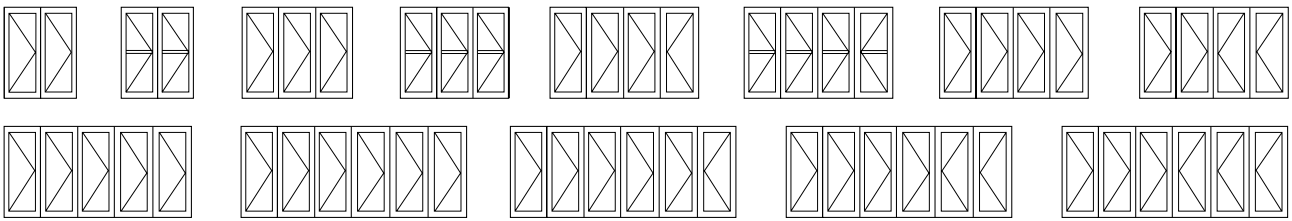
SLIDING DOORS



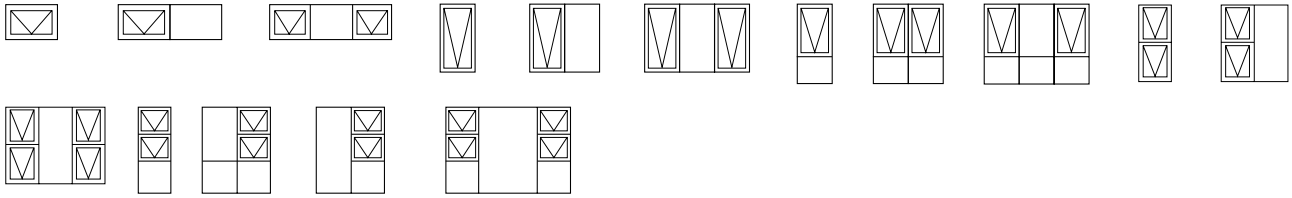
HINGED, FRENCH & ENTRANCE DOORS



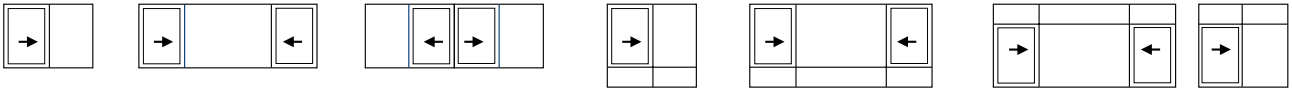
BI-FOLD DOORS



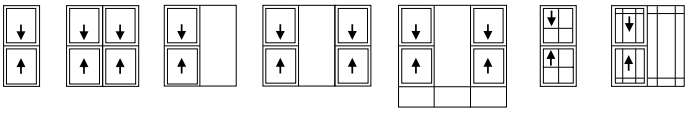
AWNING WINDOWS



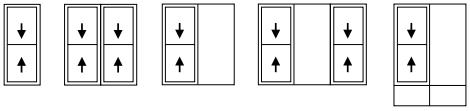
SLIDING WINDOWS



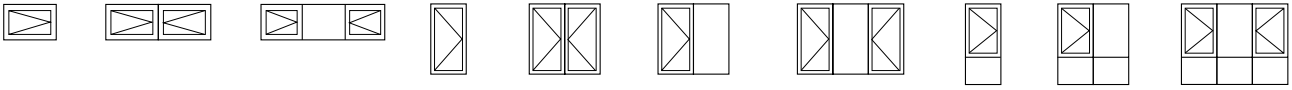
SLIDING WINDOWS



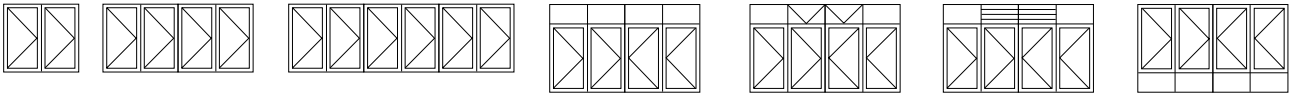
CLEARVENT™ WINDOWS



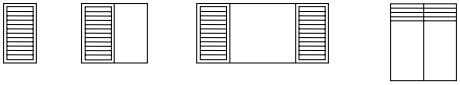
CASEMENT WINDOWS



BI-FOLD WINDOWS



LOUVRE WINDOWS



KEY

Fixed pane of glass with aluminium frame.

Opening window (∨ points to lock slide)

Hinged door (> points to lock slide)

Sliding door or window (→ indicates opening direction)

SYSTEM PORTFOLIO

Need help selecting your windows and doors?

Your local Vantage fabricator can offer expert advice and assistance. Visit our website **vantagealuminium.com.au** to locate a showroom near you.

DESIGNER SERIES

Series 525 – LouvreMASTER™ Adjustable Window

Series 546 – Bi-fold Window

Series 548 – High Performance Bi-fold Door

Series 548 – High Performance Hinged Door

Series 601 – MAGNUM™ Sliding Window – Beaded Fixed Light

Series 602 – MAGNUM™ Sliding Window – Double Sash Design

Series 613 – MAGNUM™ Double Hung Window

Series 614 – ClearVENT™ Sashless Double Hung Window

Series 616 – MAGNUM™ Awning & Casement Window

Series 618 – MAGNUM™ Sliding Door

DESIGNER SERIES | ThermalHEART™

Series 726 – ThermalHEART™ Awning Window

Series 729 – ThermalHEART™ Hinged Door

Series 730 – ThermalHEART™ Bi-fold Door

Series 731 – ThermalHEART™ Sliding Door

RESIDENTIAL SERIES

Series 502-504 – Residential Sliding Window – Double Sash Design

Series 514 – Residential Double Hung Window

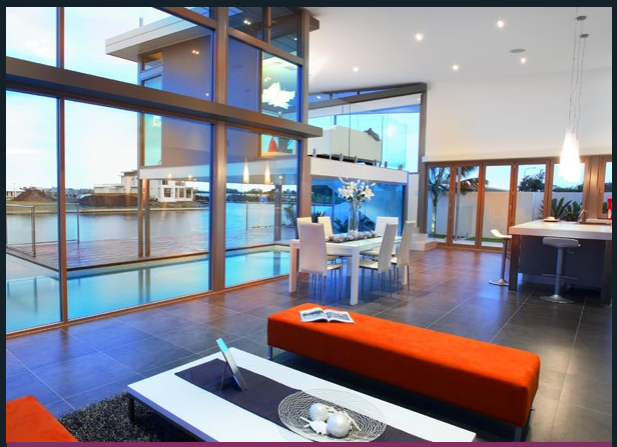
Series 516 – Residential Awning Window (50mm frame)

Series 517 – Residential Awning Window (102mm frame)

Series 541 – Residential Sliding Door

Series 542 – DStacker™ Sliding Door

Series 549 – Entry Door



SPECIALTY

Series 531 – SoundOUT™ Secondary Sliding Window

Series 532 – SoundOUT™ Secondary Casement Window

Series 533 – SoundOUT™ Secondary Sliding Door

THE VANTAGE FABRICATOR NETWORK

Across the country there are over 130 dedicated and highly trained licensed manufacturers of the Vantage Aluminium Joinery range.

These privately owned and independent businesses compete within the residential and commercial construction markets.

AWS takes great pride in ensuring the efficiency of our network and maintains a close relationship with our licensed manufacturers. This commitment offers you a high level of confidence in selecting or specifying products from the Vantage or AWS Commercial range of products.

The Vantage network is capable of supplying high performance window and door systems for all types of construction projects from new and renovated residential dwellings to high rise, commercial and industrial projects.

Our network is made up of highly trained professionals who can consult to you regarding all aspects of windows and doors, from energy ratings and glass selection to choice of surface finishes and hardware.

Vantage fabricators are located throughout Australia in city and regional areas. To locate a Vantage fabricator who can assist you with your project please visit our website:

VANTAGEALUMINIUM.COM.AU and click on **"Fabricators".**

SENSATIONAL SHOWROOMS

Vantage showrooms have long been regarded as some of Australia's best. Our network of highly skilled window and door fabricators are ready to assist you in selecting the ideal window and door systems for your project.

Vantage showrooms are located across Australia – each one is different and unique, but they all share one thing in common – they offer you the opportunity to see and experience Vantage systems in a relaxed environment with access to a team of qualified professionals who can help you make an informed decision about all aspects of your windows and doors.

Our showrooms feature products from our Residential, Designer, Thermally Broken and Commercial ranges. They also showcase a range of hardware, colour and glass options.

Making the right choice about windows and doors for your home is an important decision. Vantage showrooms give you access to the products, tools and advice you need to make a decision which will enhance your lifestyle for years to come.

To locate your nearest showroom, find your local supplier via the handy fabricator search bar on vantagealuminium.com.au

PHOTOS COURTESY OF TABERNER GLASS

AWS
ARCHITECTURAL WINDOW SYSTEMS PTY LTD

ABN 48 067 950 903
vantagealuminium.com.au
specifyaws.com.au

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or email marketing@awsaustralia.com.au

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PO BOX 311 Liverpool NSW 1871, Australia