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: Glass Supplies

Quality and custom manufacture deliver superior outcomes.

From the design and testing of the window and door systems, to manufacture and delivery by over 200 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 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 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, ideal for high-end residential applications. 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. This provides 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 — Designer: James Goodlet, Altereco Design — Windows: Windows By Design

Wonthaggi House — Building Designer: Ashley Beaumont — Builder: EcoLiv Sustainable Buildings — Windows: Talum Windows

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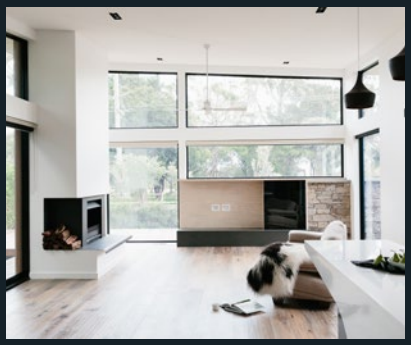
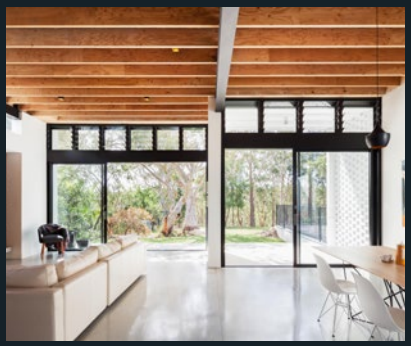
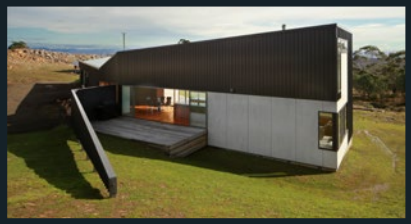
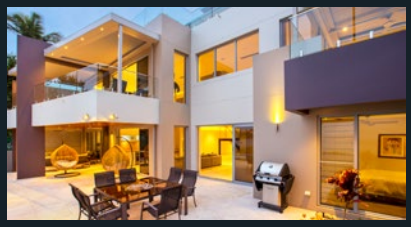
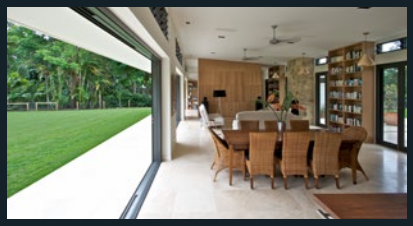




Special Features.







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.

Bundaroo St — Architect: Tziallas Omeara Architecture Studio — Windows: Hanlon Windows — Photography: Tom Ferguson

Vantage® windows are locally designed and manufactured systems that 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, higher performance 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.

WERS RATED.

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

BEAUTIFUL BI-FOLDS.

Vantage® bi-fold windows have a smooth-moving bottom-mounted roller system. They are designed to complement the bi-fold door system; 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.

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.

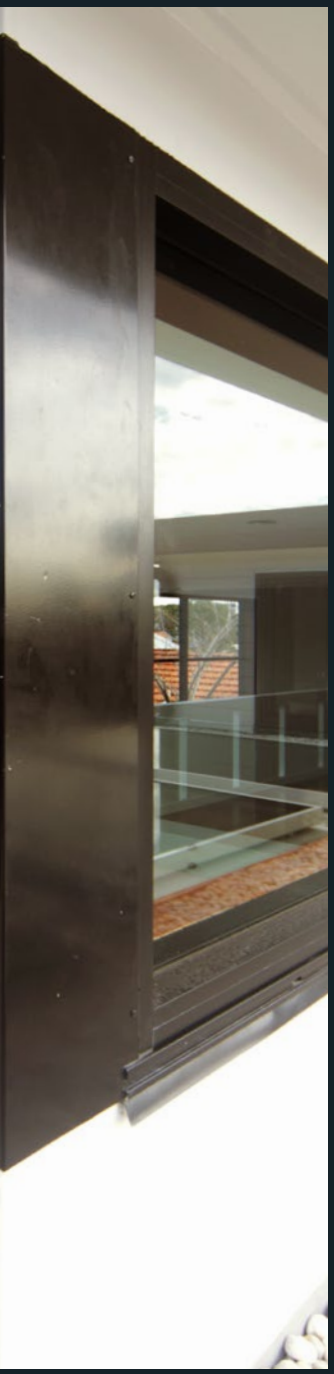
When closed, awning windows offer excellent resistance against air and moisture penetration. Top line energy performance and sound reduction are hallmarks of Vantage® awning windows. Our heavy duty sashes can be fitted with double glazing for improved thermal performance and sound dampening.

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 — Architect: Kollektive Design + Architecture — Windows by: Architectural Aluminium — Photography: Andrew Warn.



Nine Steps — Architect: De Atelier Architects — Windows: DLG Aluminium & Glazing — Photography: Simon Dallinger

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 — Windows: Taylors Window Supplies — Photography: Geoff Comfort

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: 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: AVS Windows — Photography: Simon Whitebread

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.

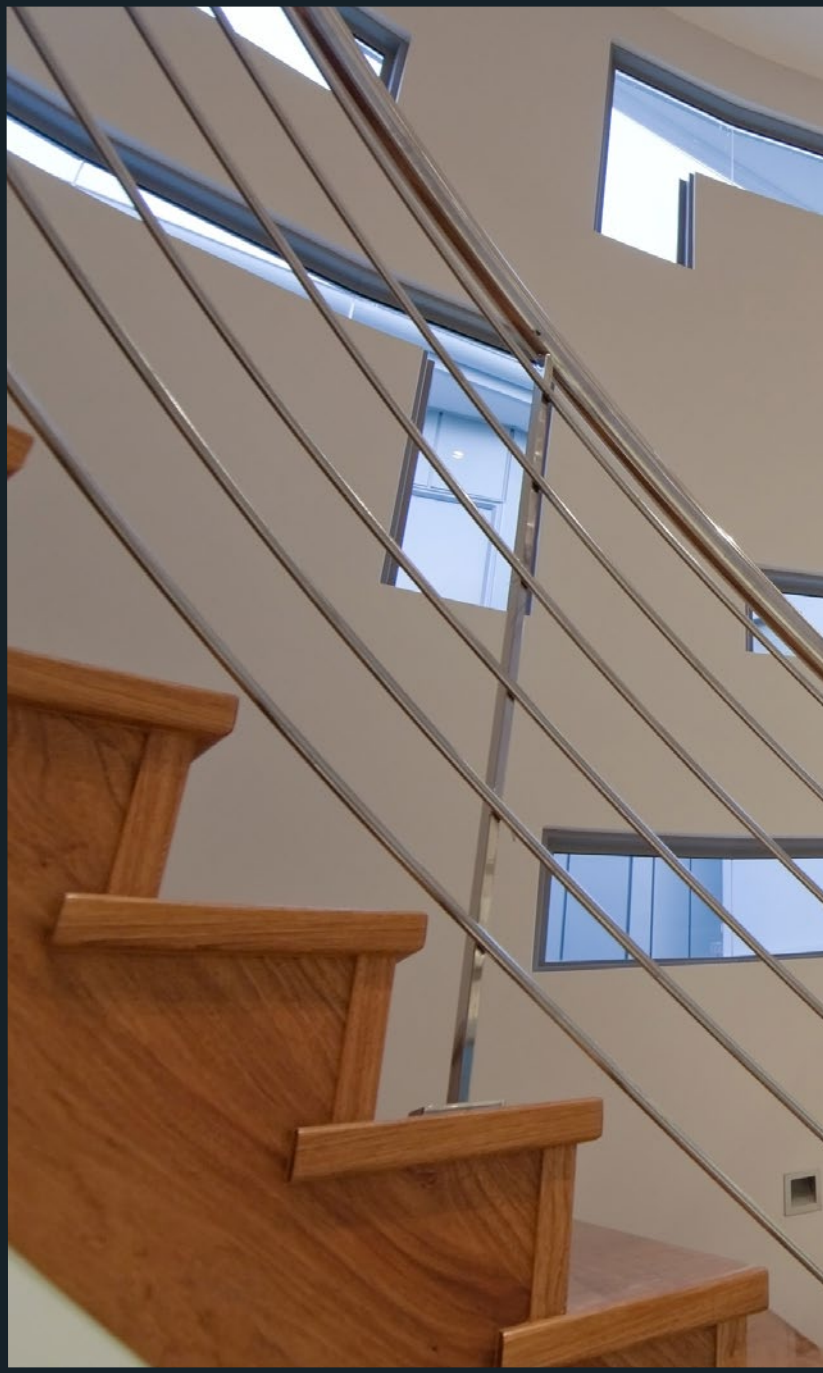
Vantage® louvre windows can also be fitted with flyscreens.

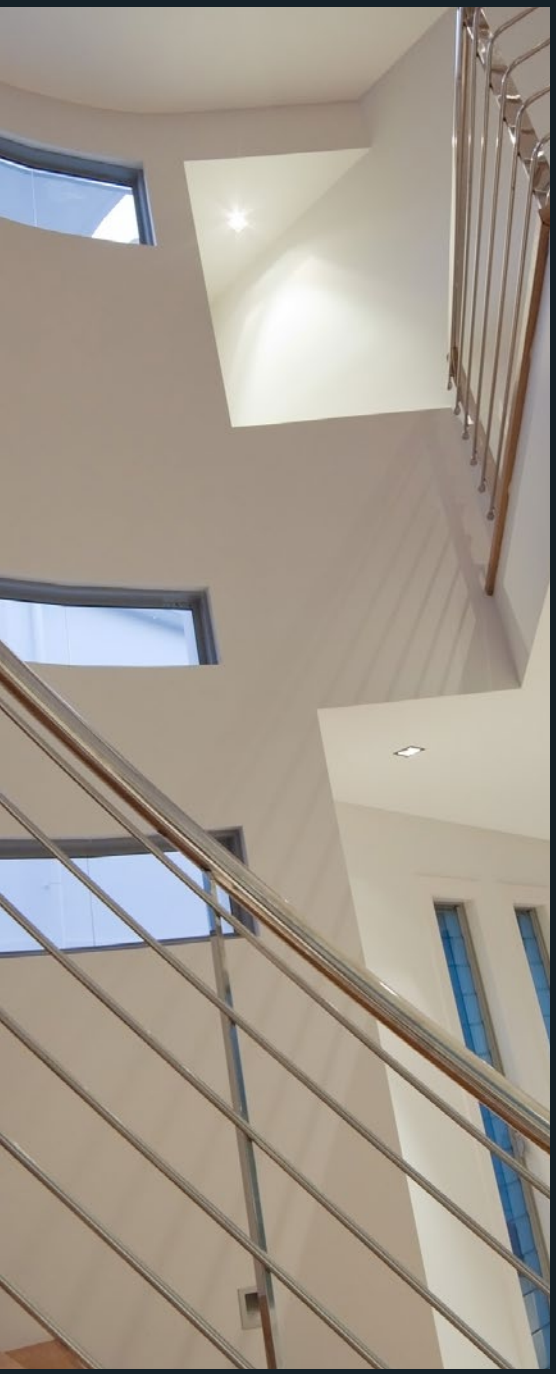
Series 525 Louvre Window

Beach Front Beauty — Architect: BHI Architects — Builder: Alcan Constructions — Windows: 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 AND THE ENVIRONMENT.

Selecting the right Vantage® high performance windows and doors for your home will help to improve energy efficiency and comfort.

Valley House — Architect: Philip M Dingemanse — Windows by: Glass Supplies — Photography: Peter Hyatt.

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.

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.

Kooroork House — Architect: Lucas Hodgens — Windows: ACME! Windows & Doors — Photography: Glen Hester

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.

A window's energy performance is calculated 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).

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 & 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.

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.

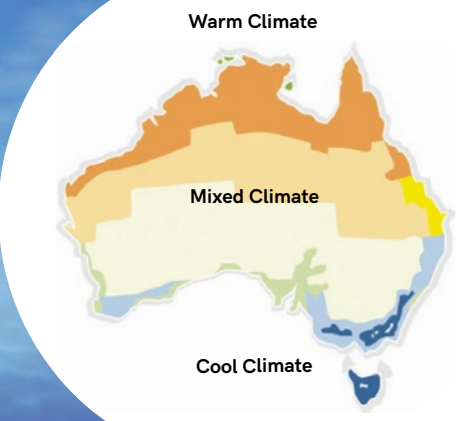
Low performing windows and doors become a weak spot in the building envelope. Like the hole in a leaky bucket, they let energy escape from your home costing you valuable dollars.

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 — Photography: 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 and 3.	Mixed Climate. BCA Climate zones 4 and 5.	Cool Climate. BCA Climate zones 6, 7 and 8.
Overview	Outside air temperature is typically warm and energy is often expended on cooling the home. The aim is keeping the heat out to minimise the need for air-conditioning and reduce your energy usage.	A mixed climate is where outside air temperature varies significantly throughout the year. The goal is to keep heat out in Summer and allow as much in as possible during Winter.	Outside air temperature is typically cool and energy is expended on heating the home. In a cool climate, the goal is to keep heat within the home and maximise solar energy input in cooler months.
Preferred U-Value	**LOW** A low U-Value helps to maximise the efficiency of air conditioning by helping to keep cool air in.	**LOW** A low U-Value helps keep heat in during Winter and maximises cooling efficiency in Summer.	**LOW** Low U-Value windows keep the heat in, reducing the amount of heating required and energy used.
Preferred SHGC	**LOW** Minimises the amount of heat absorbed by windows and doors. This is particularly important on east facing, west facing and unshaded windows.	**MEDIUM** The importance of allowing the heat in for Winter or keeping it out in Summer needs to be weighed. Considerating the window's aspect and elevation is crucial.	**HIGH** Maximises the heat absorbed by the windows which provides extra warmth.
Considerations	- Keep solar radiation out - Retain coolness of air-conditioned air	- Balance the benefits of solar heat gain in Winter and keeping it cool in Summer - Insulate against heat transfer year round.	- Maximise desirable solar heat gain. - Insulate against heat transfer
Other Factors	Windows with large openable areas to facilitate crossflow ventilation are an advantage.	Season specific shading on windows will help to optimise performance and comfort in these climate zones. Windows with large openable areas to facilitate crossflow ventilation are an advantage	Season specific shading on windows will help to optimise performance and comfort in these climate zones
Suitable Glass Types	- Tinted - High Performance Tinted - Tinted Low-E - Tinted IGU Low-E	- Tint - Tint + Clear Low-E - Tint + Clear IGU - Tint + Clear Low-E IGU	- Clear Low-E - Clear IGU - Clear Low-E IGU

DESIGNER SERIES THERMALHEART™

Bundaroo St — Architect: Tina Tziallos - Tziallos Omeara Architecture Studio — Windows: Hanlon Windows — Photos: Tom Ferguson.

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

This range is ideal for 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.

Thermalbreak 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.

How does it work?

HOT CLIMATE.

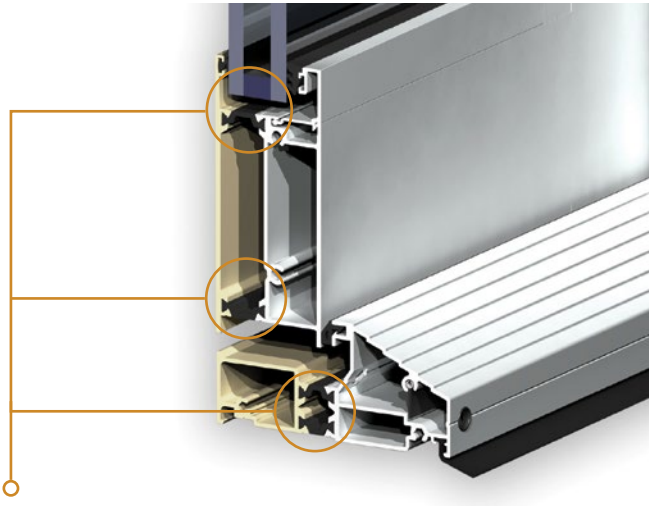
In a hot climate ThermalHEART™ products will act as a buffer against the hot outside air temperatures, minimising the transfer of heat from outside into the home. They will also help to minimise the loss of cool air from artificial cooling units, thus reducing your need for cooling and lowering your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



DUAL COLOUR TECHNOLOGY.

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.

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

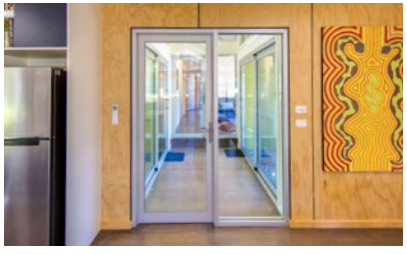
ThermalHEART™ windows and doors are true energy efficient windows, with a thermally broken frame, sash, mullion and transom. They are capable of impressive product sizes, making large heights and spans possible.

AWNING WINDOW.

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

BI-FOLD DOOR.

Incorporate a reliable bottom-mounted roller system for smooth, reliable performance. Heavy duty quad rollers run on a matching double track for optimum performance and support ensuring heavy panels operate easily.



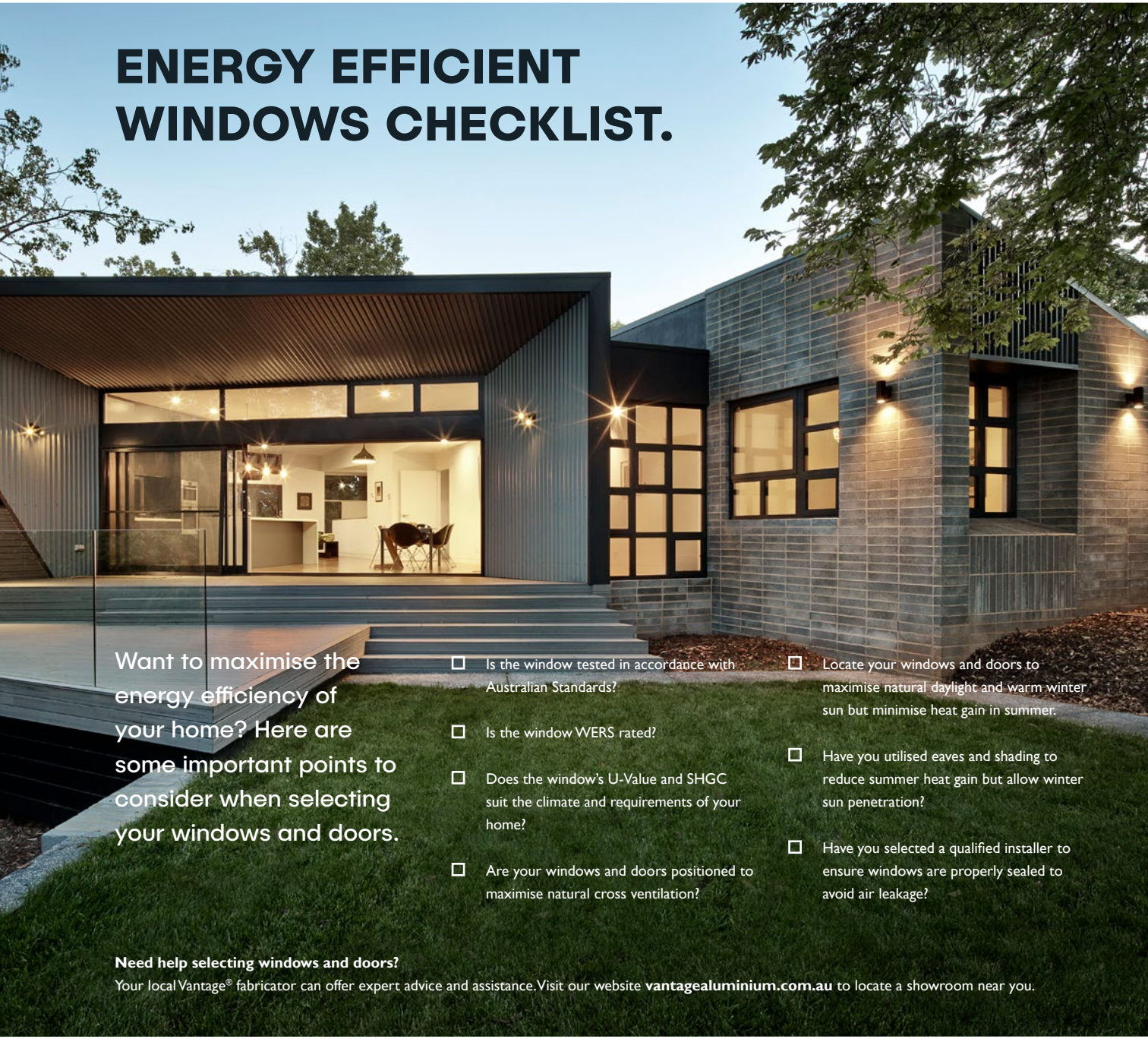
HINGED DOOR.

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.

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.

ENERGY EFFICIENT WINDOWS CHECKLIST.



Want to maximise the energy efficiency of your home? Here are some important points to 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 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.

Narrabundah House — Windows: Monaro Windows — Architect: Adam Dettrick — Photography: Michael Downes, UA Creative.

VANTAGE® DOORS.

Turramurra House — Architect: Justin Noxon - Noxon Giffen — Windows: 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 high performance and thermally broken products. Consider Designer Series and ThermalHEART™ – technologies with great performance and improved energy ratings

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 and contemporary touches are available alongside a range of excellent hardware options. Vantage® door panels are very stable – they don't swell or move in damp conditions as timber entry doors can and are available in a wide range of high quality powder coat colours or anodised finishes.

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 available within the bi-fold system, offering enhanced energy efficiency. Vantage® folding door systems open internal spaces to the great outdoors in dramatic style.

SUPERB SLIDERS.

A slider is available to suit any residential application with a wide range of single and multi-slider configurations made possible within the Vantage® range. Designer Series sliding doors are particularly suitable in large specialised arrangements or exposed locations. Consider Designer Series ThermalHEART™ sliders for maximum thermal performance.

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

Valley House — Architect: Philip M Dingemanse — Windows: Glass Supplies — Photography: Peter Hyatt

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.

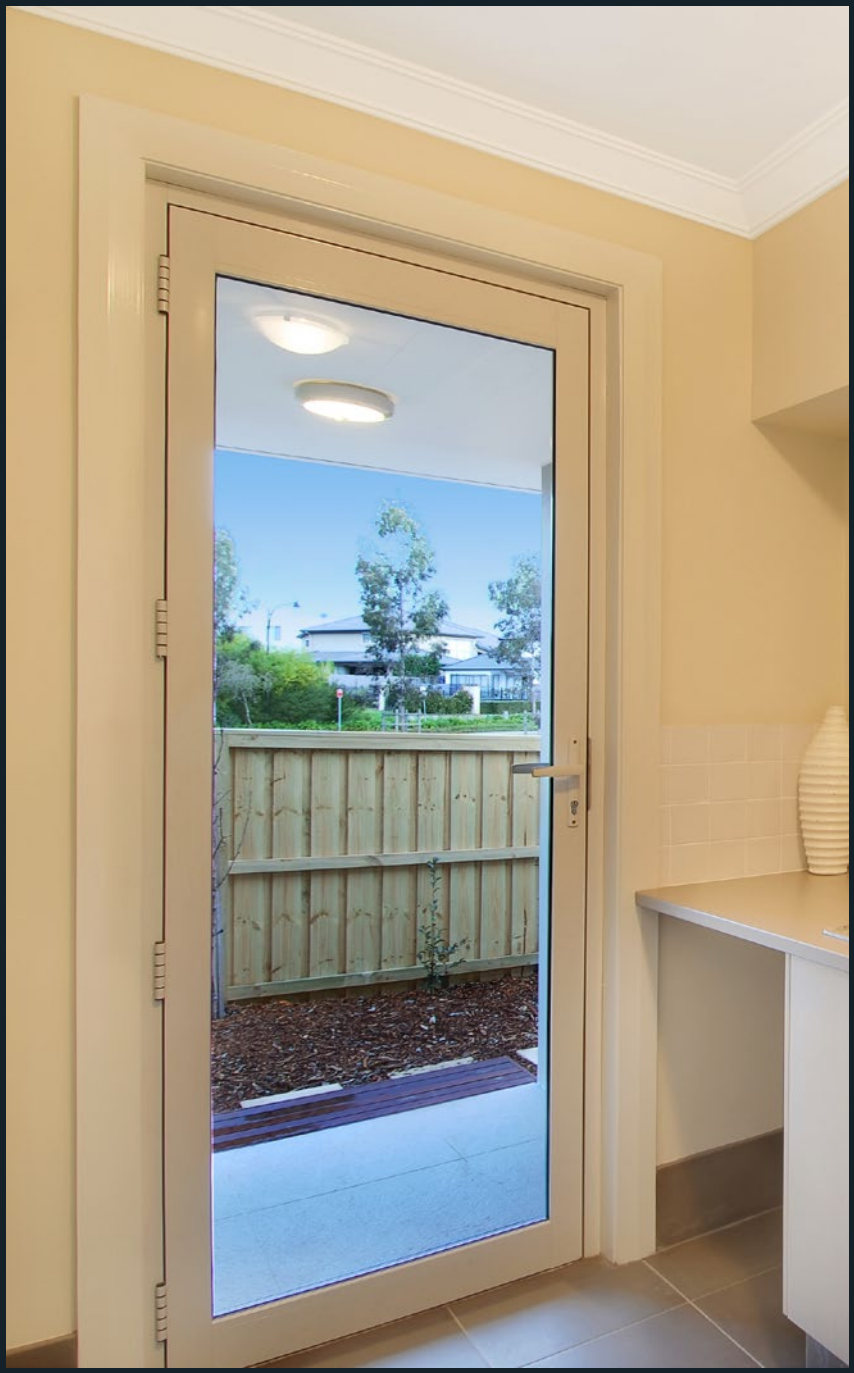
Bottom rails are available in standard size to match the rest of the door, or can be made deeper with the addition of a rail extender that gives a more traditional appearance.

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

Photography courtesy of DLG Aluminium & Glazing.



Windows: Midcity Windows — Builder: Tareena Homes

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

Photography courtesy of Hanlon Windows

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.

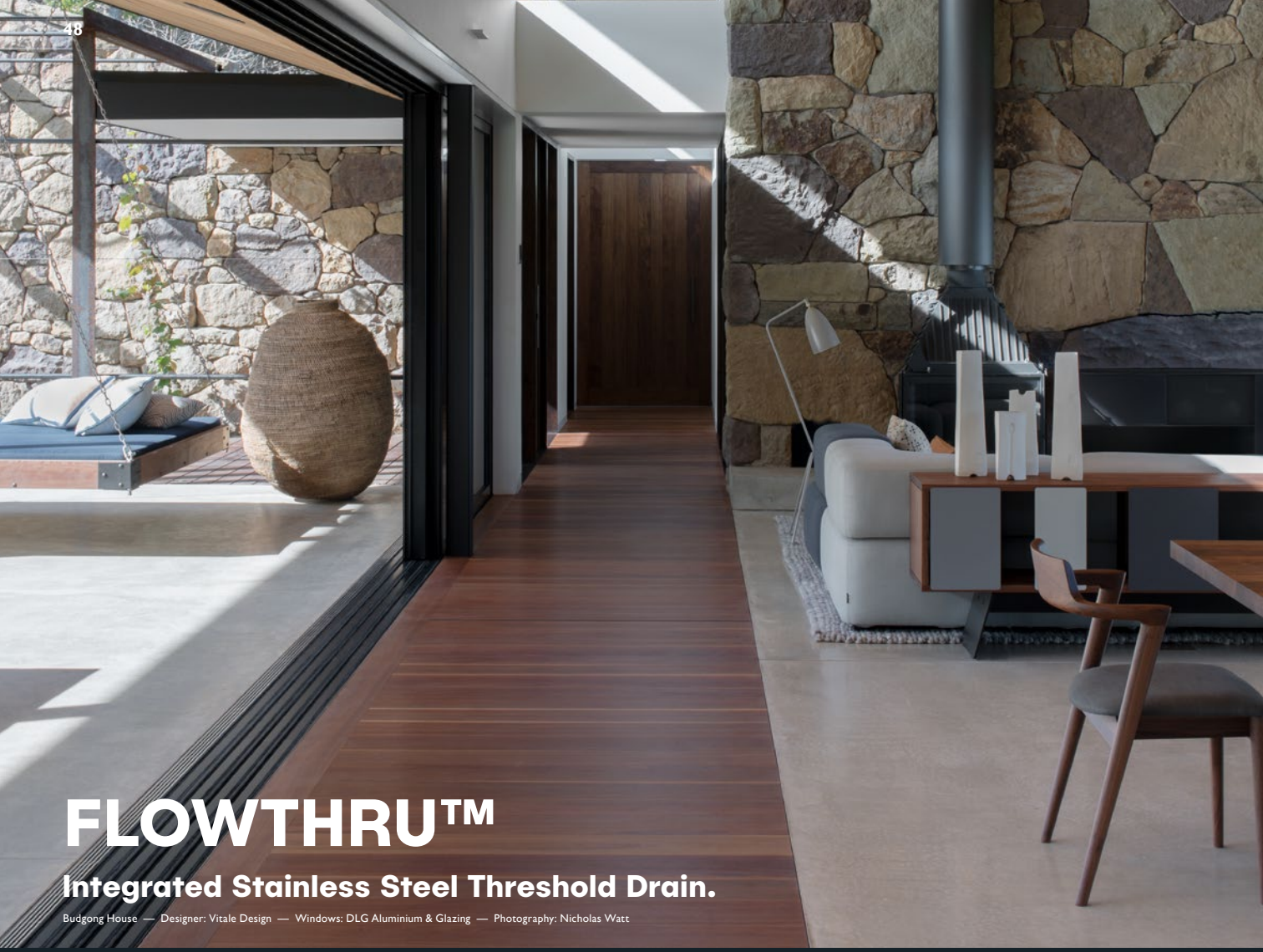
S1E allows homeowners to have complete control of their living environment and can be installed in single or bi-parting configurations. It retracts horizontally and discreetly into its frame when not in use – a revolutionary solution for those who refuse to compromise on style.

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

Architect: Warren & Janette Brokenborough — Windows: Scope Windows & Doors — Photography courtesy of Scope Windows & Doors



FLOWTHRU™

Integrated Stainless Steel Threshold Drain.

Budgong House — Designer: Vitale Design — Windows: DLG Aluminium & Glazing — Photography: Nicholas Watt

A flush threshold between internal and external living environments has become an increasingly popular feature in architecturally designed homes and commercial building applications. In addition to allowing the spaces to flow easily, creating a seamless transition between living spaces, flush thresholds minimise the risk of trips and falls and ensures ease of accessibility.

When specifying a flush threshold, it is essential that drainage is considered particularly if the doorway is likely to be exposed in any way. Failure to specify a secondary drainage or an alternate solution may lead to failure of the door causing leakage and potential damage to internal floor surfaces.

The AWS FlowTHRU™ drain is the only fully tested threshold drainage solution available for Vantage® and Elevate™ door systems.

Why FlowTHRU™?

The only fully tested threshold drainage solution available for Vantage® and ThermalHEART™ door systems – proven performance.
Tested in a NATA accredited laboratory, the AWS FlowTHRU™ drain has been proven to perform alongside Vantage® and ThermalHEART® systems in the harshest of environments.
AWS has confidence in the performance of a correctly specified FlowTHRU™ drain and door combination in applications up to and including C4. This is the only fully tested threshold drain and door system available on the Australian Market.

Simplifies door installation - provides a smooth, flat surface for sill installation.
Including FlowTHRU™ drain in your design addresses the issues of drainage for flush threshold applications with the added bonus of simplifying the installation of Vantage® or ThermalHEART® door systems. When correctly installed the FlowTHRU™ tray provides a flat and level base for door sills to be installed upon, cradling the door sill for simplified installation.

Detailed installation instructions minuses the risk of site problems.
We offer detailed installation instructions including slab set down details to ensure the correct detailing and installation of FlowTHRU™ threshold drain solutions. Correct installation is an essential for reliable product performance.

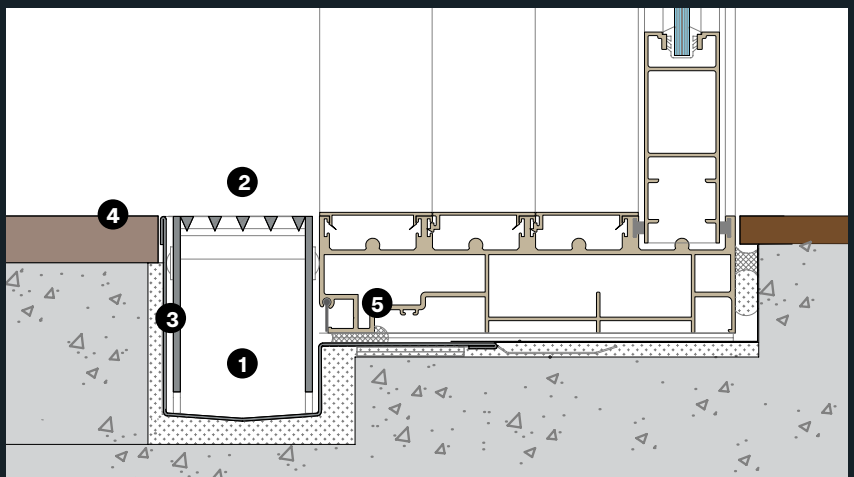
Stainless Steel Design for maximum durability.
Manufactured from 316 Grade Stainless Steel, FlowTHRU™ threshold drainage solutions look great and will stand the test of time, offering excellent durability and corrosion resistance.

Hydraulically engineered design for guaranteed performance.
AWS worked closely with industry leading Hydraulic experts at ACO to develop the FlowTHRU™ threshold drain solution for Vantage® and ThermalHEART® door systems. The high performance FlowTHRU™ design will cater for extreme weather conditions including category 4 cyclone applications*.

ACO Heelsafe® Anti-Slip grate ensures standard compliance and reduces the risk of slips, trips & falls.
Compliant with a number of Australian and International Standards for pedestrian, wheelchair, bicycle and cane use. The FlowTHRU™ threshold drain incorporates a maximum slot width of 6mm to prevent small heels from becoming trapped. Discrete raised multiple mechanical nodes prevent slipping without compromising aesthetics

One Solution, one Supplier - eliminates the risk of incompatibility.
The FlowTHRU™ drain is developed by AWS and industry leading hydraulics experts ACO. Supplied by licenced Vantage® and ThermalHEART® manufacturers. Now you can specify and order the drain and door for your project from one supplier eliminating the risk of incompatibility. Having one supplier for drain and door ensures your products will fit together effortlessly onsite, achieving the high quality architectural finish you desire. When correctly specified and installed, we stand by the performance of this integrated system.

* FlowTHRU™ must be installed as a secondary drainage solution only.

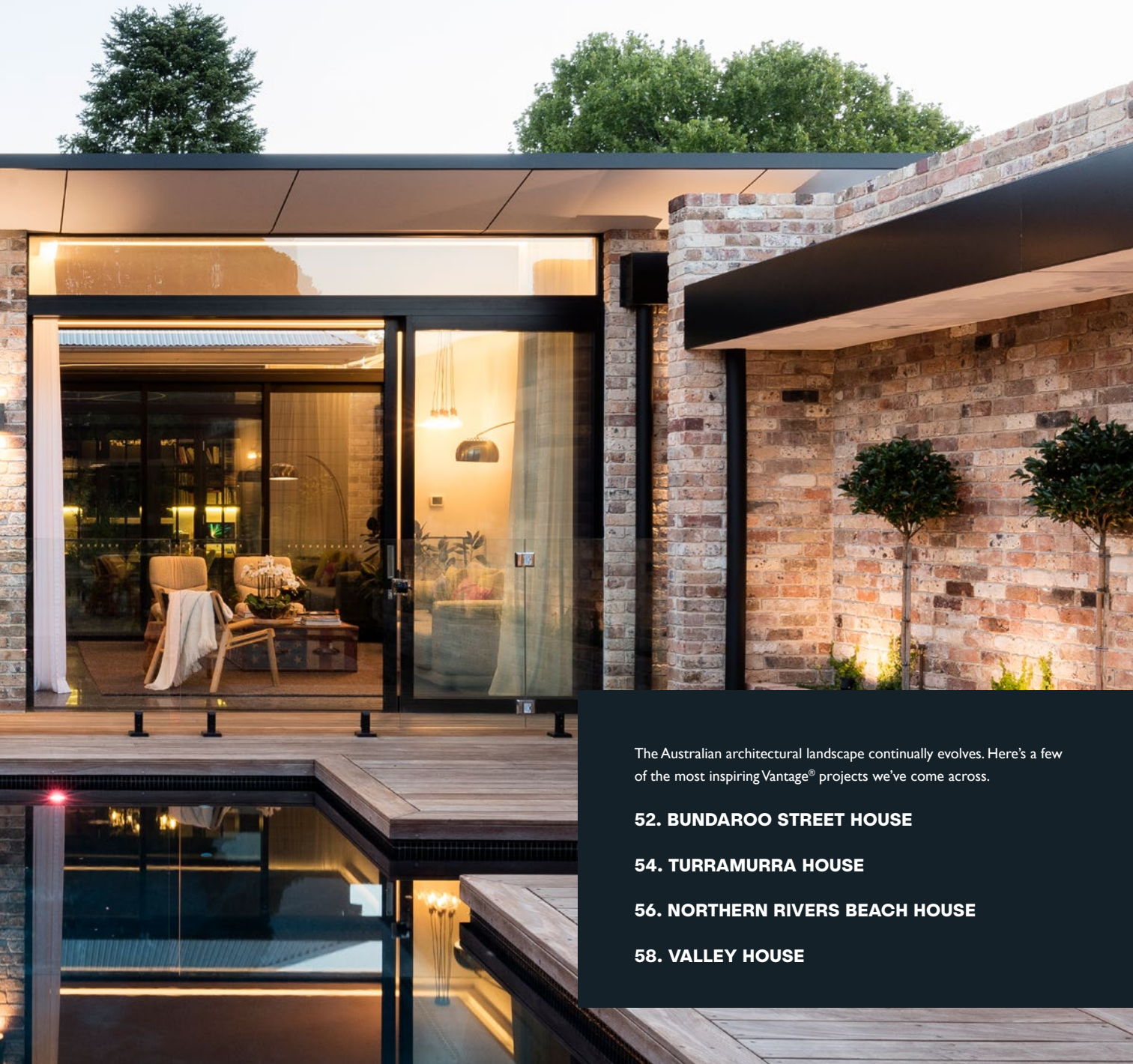


Features.

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.

HOME FEATURES.

Bundaroo St — Architect: Tina Tziallos - Tziallos Omeara Architecture Studio — Windows: Hanlon Windows — Photos: Tom Ferguson.



The Australian architectural landscape continually evolves. Here's a few of the most inspiring Vantage® projects we've come across.

BUNDAROO STREET HOUSE.

Bundaroo St — Architect: Tina Tziallos - Tziallos Omeara Architecture Studio — Windows: Hanlon Windows — Photos: Tom Perguson.

A heritage listed house within the Bowral conservation area that was once a B&B is nestled behind a rhododendron tree. An extension to the back of the cottage, that cannot be seen from the front of the home, has an industrial chic feel which makes for a superb contrast to the original front section of the home.

Architect Tina Tziallas of Tziallas Omeara Architecture Studio said, 'We had to marry contemporary design, thermal performance, heritage and a very complex build on quite a restrained site'. This made Bundaroo a very dynamic project, where Tina worked closely with the client, the builder and AWS window fabricator, Hanlon Windows.

Hanlon Windows were involved from the design stage. The brief was for large windows and doors including an extensive amount of glazing for maximum natural light.

Being located in the Southern Highlands where a cooler climate is certain each year, the AWS ThermalHEART™ product was specified.

An impressive louvre gallery was envisaged as an indoor/outdoor space that visually connects the guest wing to the rest of the

With an array of modern fixtures, a great feature of the home is the heating system in place, a geothermal system. A geothermal heat pump extracts heat from the ground which is then put to use for the heated floor, the swimming pool and the hot water system. This design idea supports the reason why ThermalHEART™ was chosen for this energy efficient home.

With a rich palette of materials, exquisite interior styling and the most energy efficient products on the market, Bundaroo is an apt example of a successful, contemporary, and sustainable home in the Southern Highlands.

house and cross ventilation was key. At certain times of the day, the louvres create amazing shadows along the polished concrete floor; an artwork that is constantly changing as the day unfolds.

At either end of the louvre gallery are external thermally broken doors, ensuring that when it is cold, the louvered space does not impact on the thermal performance of the rest of the home.

TURRAMURRA HOUSE.

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

The client's brief was to replace the existing 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 due to this bushfire rated zone.

Instead of bunkering this home down due to the bushfire regulations, this goal was to open it up to its leafy surrounds and provide protection through careful design and material choices.

The architect wanted a home with a generously scaled living area that, through large windows and doors, connected to the

Turramurra House — Architect: Justin Noxon - Noxon Giffen — Windows by: Great Lakes Glass & Glazing — Photos: Katherine Lu

outdoors and embraced the bushland to the rear. This called for a durable glazing system that could be made in large sizes while being bushfire rated. Vantage® Series 618 sliding doors were used at the rear of the house to accomplish this goal.

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.

NORTHERN RIVERS BEACH HOUSE.

Architect: Refresh* Design — Windows: Window Makers — Photography by Damien Bremberg, courtesy of Refresh Design

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® was chosen for its elegant, sleek joinery and the renowned quality of the products. The hardware available to complement this range included 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.

AUSTRALIAN INSTITUTE OF ARCHITECTS HOUSE OF THE YEAR 2015.
Gold Coast/Northern Rivers Regional Awards

VALLEY HOUSE.

Valley House — Architect: Philip M Dingemanse — Windows: Glass Supplies — Photographer: Peter Hyatt

Reclining on a rolling carpet of green hills is The Valley House. High above Launceston in beautiful Tasmania, it is a perfect balance of charcoal-grey steel, finely-grained timber, and large expanses of glass. Set against a backdrop of vast blue sky, this home manages to walk the line between striking landmark and seamless complement to its rural setting.

Architect, Philip Dingemanse, came to the project with a great love of functional and beautiful design, and a pragmatic approach to budget and utility. His wealth of hands-on building experience also closely informs his design method.

The brief was to create a family home that connected with the environment and the community in which it was situated. Energy efficiency, sustainability, and awareness of the twin threats of bushfire and storm were also considerations.

The design is open plan, with a stunning kitchen at the epicentre of the home creating a wonderful sense of connection between the home's occupants.

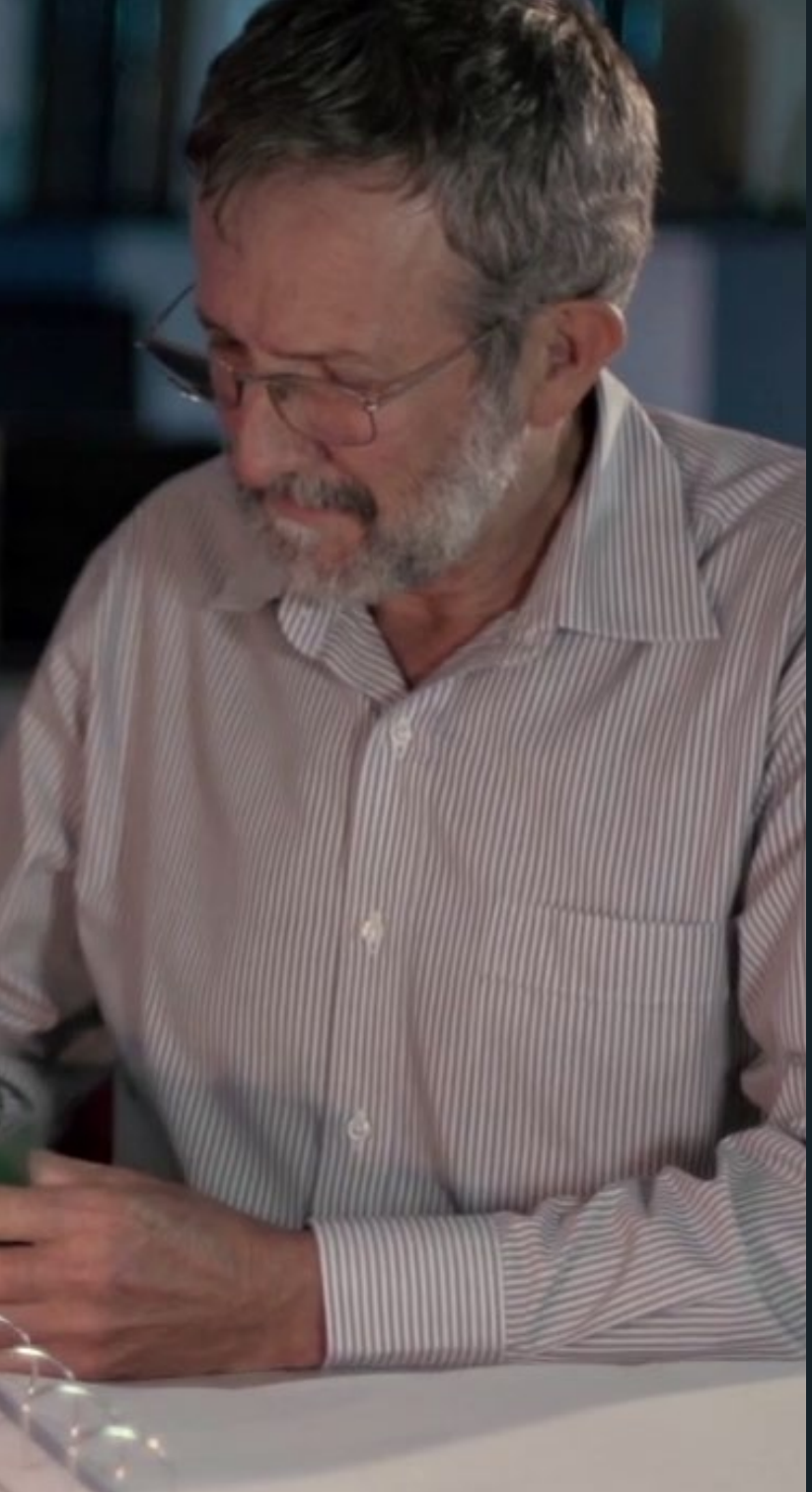
The property's location is known for its extremes of climate. Double-glazed Viridian glass, and generous window and door

expanses have been used, to allow the sun's warmth to be captured during the depths of winter. And in summer, the occupants take advantage of the cooling effects of clever ventilation.

AWS sliding doors were chosen for their design, performance and local availability. These also allow breezes to circulate through the house during the summer months. The result is increased energy efficiency, and less need for heating and air-conditioning. Combined with the use of AWS windows, the design perfectly frames the picturesque views from almost every room and angle of the property.

The Valley House reflects the expansiveness of its surrounds, the horizon, and the pristine bushland in which it resides. It is proof that a modest budget doesn't mean you have to sacrifice beauty. In fact, with the right vision and products to match, anything is possible.

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 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 that comply with the BCA and all relevant Australian Standards.

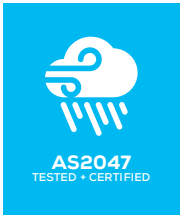
Throughout our literature and website, products which meet the specific requirements of the BCA for bushfire zones, extreme weather conditions, elevated openings and noise abatement are identified with the tags illustrated below to assist you in selecting the ideal window or door system for your project.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

CYCLONE.

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.

BAL-40.

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.



AS2047.

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

ACOUSTIC.

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

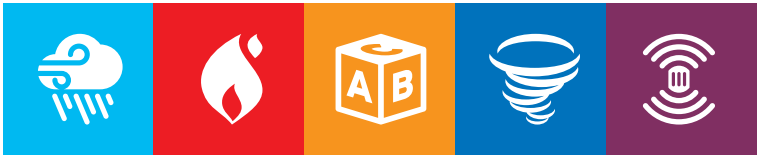
SAFE4KIDS.

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

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

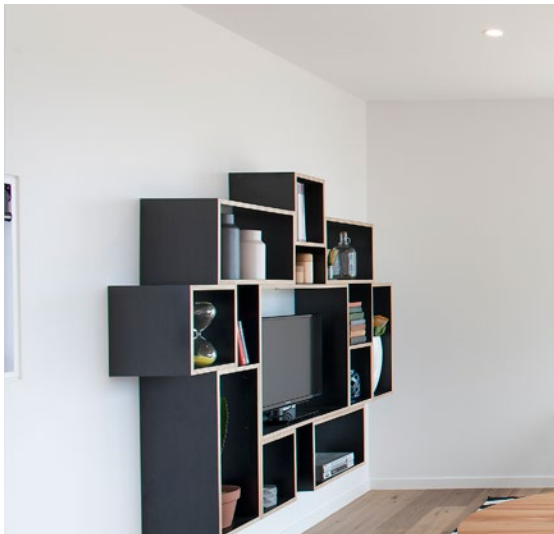
TESTED TO AS2047.

Wonthaggi House — Building Designer: Ashley Beaumont — Builder: Ecoliv Sustainable Buildings — Windows: Talum Windows

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

BAL-40 RATED SYSTEMS.

Blue Mountains House — Building Designer: Distinct Innovations — Photography: Mind the Gap. — Windows: Architectural Aluminium

Tested and certified bushfire solutions from AWS.

Many Australian homes are 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, doors, and other building materials for new build or renovation projects in bushfire-prone areas. These changes are intended to minimise the risk of property loss and the potential for loss of life.

If you currently live, or plan to build, in a bushfire-prone area, there are many precautions you can (and some you must) take to help protect you and your home. The correct selection and installation of bushfire rated window and door systems is an important one.

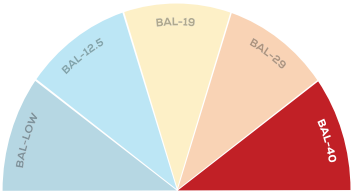
AWS offers Australia's largest range of BAL-40 bushfire rated windows and doors.

Bushfire Attack Level.

In Australian Standard AS3959, the different bushfire intensity levels that a home may experience during a bushfire are classified. These are called Bushfire Attack Levels (BALs for short).

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.

BAL RATING.	BCA REQUIREMENT.
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.

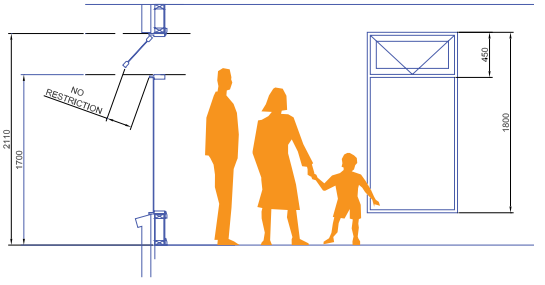
Restricted openings to protect children.

The injury and death of children from falls out of windows are tragic and largely preventable occurrences. The Building Code of Australia (BCA) was updated in 2013 to establish regulations for the installation of windows with restricted openings where there is a risk of injury or death from accidental falls.

AWS supports this initiative and has undertaken extensive research and development in the supply and installation of compliant window and door systems that reduce risk.

Where guards or restricted openings are deemed necessary by the BCA, Vantage® windows and doors can be fitted with restricted opening chain winders, buffer stops, and restricted opening latches to satisfy the requirements.

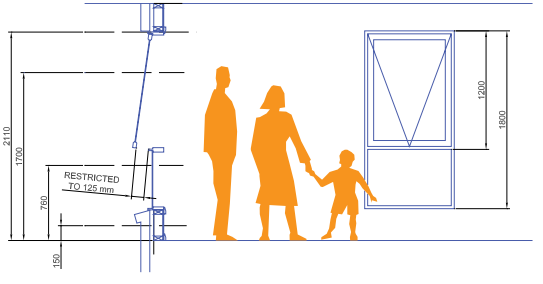
All Vantage® windows identified as SAFE4KIDS™ meet BCA requirements without the need of supplementary security grills or robust screens.



Case 1.

No openings within 1700mm of the floor.

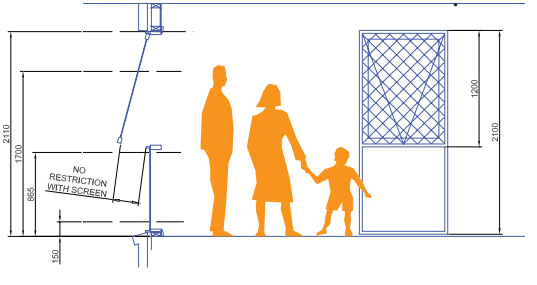
No restrictions apply.



Case 2.

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

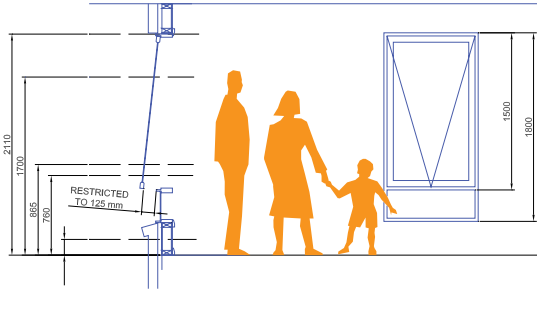
Openings must be restricted to 125mm or fitted with a non-removable robust screen.



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
PERFORMANC E TESTED

ACOUSTICS TESTED.

High performance noise solutions.

Modern day lifestyle and the proximity of our homes and offices to roads, airports and industry has made acoustics an important factor in the design of living spaces.

Noise polution can have negative impacts on our health, both physical and mental. Stress build-up and a lack of sleep are the key contributors.

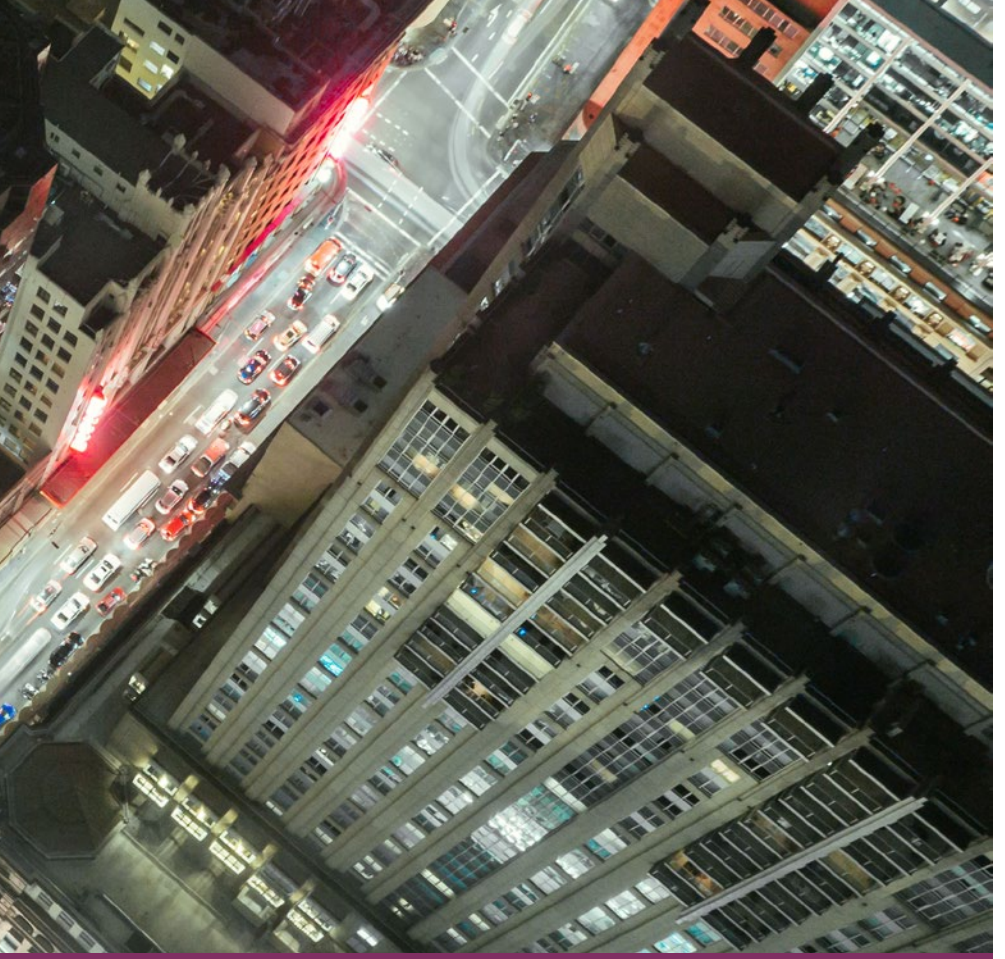
Windows and doors can significantly impact the way your home or building envelope is insulated from external sounds.

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.

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.

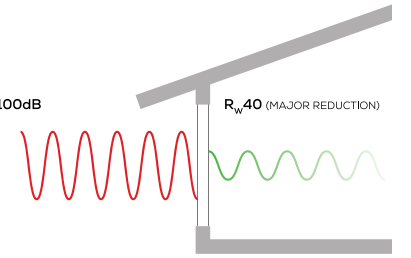


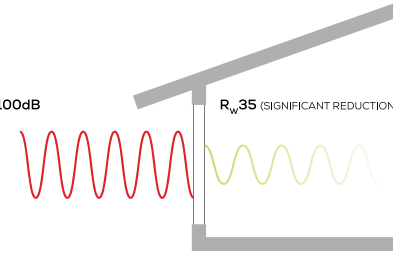
100dB equates to...

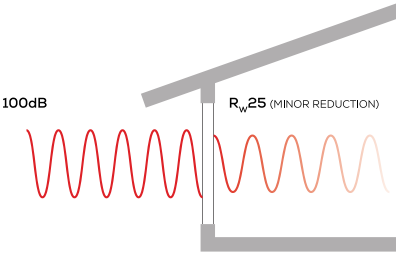
NEARBY AIRCRAFT TAKING OFF.

NEARBY HEAVY TRAFFIC AND HORNS.

JACKHAMMER 2M AWAY.







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. For example, a window with a 22 Rw rating will help block approximately 22 dB.

For a building to reach it's acoustic potential, products need to be amongst similarly performing elements of the building envelope. Just one product with poor acoustics can allow noise into a room and drop overall performance.

CYCLONE
TESTED + CERTIFIED

CYCLONE TESTED.

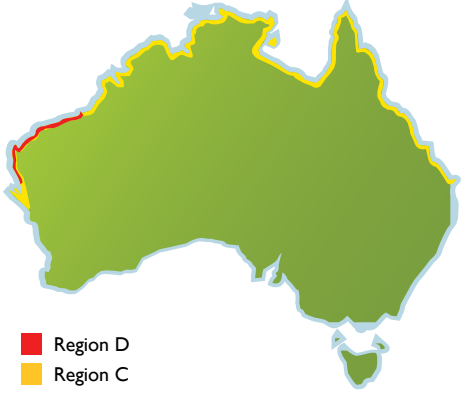
Solutions for extreme weather.

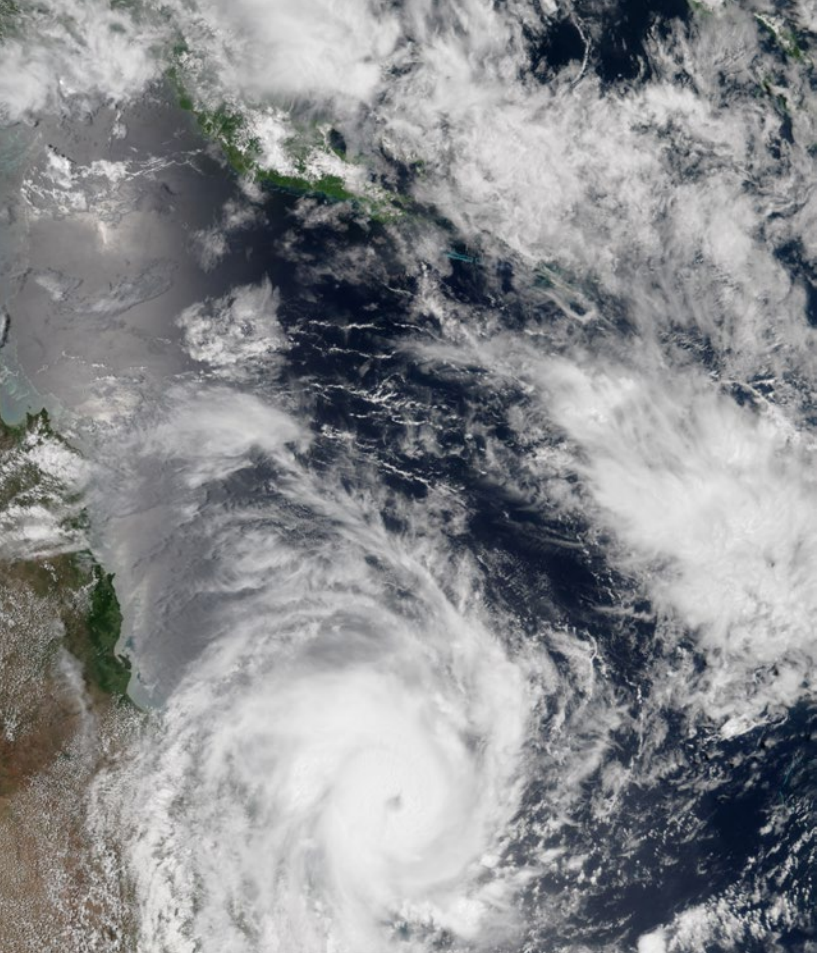
Cyclones are a major natural hazard, mainly affecting the eastern, northern and western coastlines of Australia.

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 has a wind classification based on its region and site conditions. In cyclone region C and D, it is split into four further wind classifications: C1, C2, C3, C4.

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

	Design wind speed Vh	
Classification	m/sec	km/hr
C1	50	180
C2	61	220
C3	74	266
C4	86	310

Considerations for Windows.

A common problem during cyclones is windows and doors being broken by flying debris. Not only is broken glass an issue but it also opens up an avenue for strong winds to enter the home.

These winds can effect the internal pressures of the house and may reduce the overall structural integrity of the housing envelope. If the window or door was installed incorrectly or has inadequate strength, it could be pushed in or blown out.

To address these issues, a range of Vantage® windows and doors have been tested to meet and exceed the requirements for regions C & D.

This is accomplished by incorporating:
- 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 undergo impact testing to 39m/s for region D and 29m/s for region C.

GENERAL INFORMATION.

Choosing a Vantage® supplier for your windows and doors is only part of the aluminium joinery decision.

Rosebud House — Architect: James Goodlet — Altereco Design — Windows: Windows By Design

It's important to consider the additional questions of window and door selection: colour, hardware, style, glass and product configuration. This section provides information to help you make an informed decision.

CHOOSE THE COLOUR.

Some handy hints for choosing the right colour for your joinery! Whether you want to complement your house colour or contrast it, Vantage® offers a wide range of powder coat and anodising tones to choose from.

THE RIGHT GLASS.

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

WINDOW & DOOR HARDWARE.

With three proprietary brands of hardware solutions, we have the range to suit the needs of your home. Colour matched and stainless steel options are available to ensure you get the performance you need with the style you want.

SYSTEM PORTFOLIO.

Vantage® offers a range of windows and doors to suit the requirements of your project and budget. Whether it's performance that doesn't break the bank, architecturally-influenced style or an energy efficient solution, we've got the solution you are after.

TYPICAL CONFIGURATIONS.

To help simplify the process, we've drawn up some of the many common window and door configurations available to you. These are helpful as a starting point, whether as inspiration or a helpful starting point when consulting your local Vantage® supplier.

YOU CHOOSE THE COLOUR.

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 options...

Powder Coating.

Powder coating is a tough, durable baked-on coating available in a wide range of colours.

The Vantage® colour card contains swatches for our standard range of colours, highlighting some of the most popular Vantage® powder coat colours. It is available from your local Vantage® fabricator.

When you select a powder coat colour from the standard colour range, colour matched hardware for your windows and doors 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 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.

- The colour of joinery you choose now may limit options in the future if you want a change of house colour.

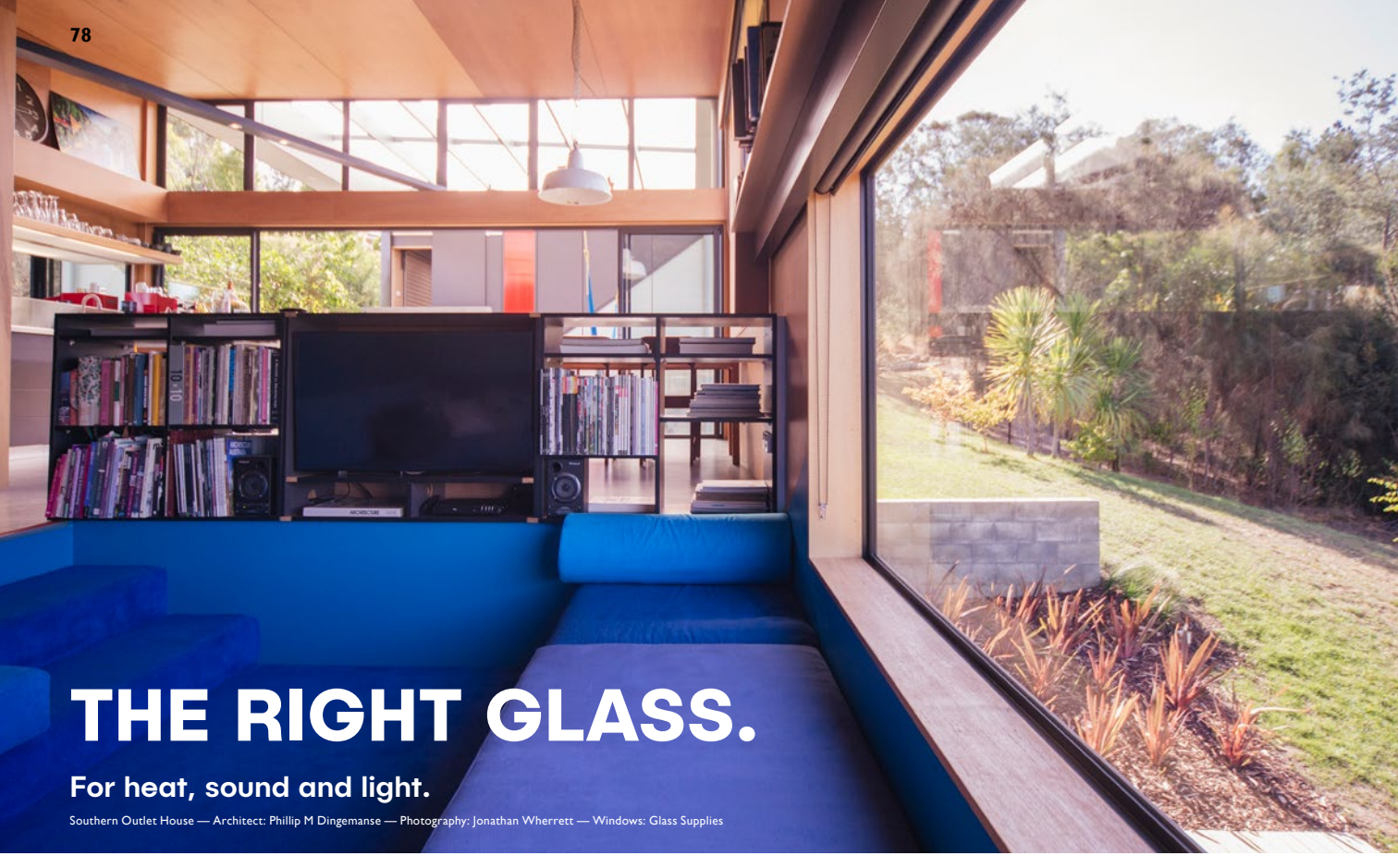
- Contrasting joinery colours are popular and natural tones such as darker greens, blues, greys or black are often chosen.

- 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 is important to consider that the colour of your windows and doors has an impact on the inside view and can influence interior colour schemes. Selecting a neutral joinery colour, like white, cream, taupe, or black, helps to preserve flexibility for interior selections.

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



THE RIGHT GLASS.

For heat, sound and light.

Southern Outlet House — Architect: Phillip M Dingemanse — Photography: Jonathan Wherrett — Windows: Glass Supplies

Glass not only insulates us from temperature extremes, it also controls the passage of light and heat in and out of the home.

Australians looking to transform their homes should seriously consider changes that can 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, controls the passage of light and regulates heat both in and out of our homes.

There are three key considerations when thinking about glazing for your home: natural light, solar heat gain and thermal conductivity. An understanding of your local climate is key in determining your optimal high performance glass selection.

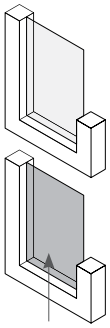
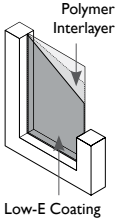
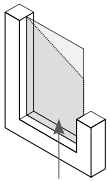
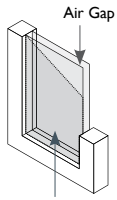
High performance glass can be used to overcome site limitations and demanding window orientations so you can enjoy your views without compromising window size and your home's energy efficiency.

Selecting the right high performance glass can provide a great view with a lot of natural light but also control UV and glare too. You can 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 high performance glass with other options like specialty glass that reduces noise or provide increased protection from

Comparing the Perfomance of Different 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 TYPE. Examples used are Viridian unless specified.		ATTRIBUTES.	GLARE REDUCTION.	SOLAR HEAT REDUCTION.	INSULATION.	
 Toned Glass	Ordinary Glass	**Glass thickness 4mm – 6mm**				
	VFloat™ Toned	**Glass thickness 4mm – 6mm** Improved solar heat reduction over ordinary glass: - Toned up to 32% more effective - Supertoned up to 59% more effective				The first step in solar heat reduction for sunny climates. A tone reduces glare and solar heat absorption for hot climates and demanding orientations.
	VFloat™ Supertoned					
 Polymer Interlayer Low-E Coating	SmartGlass™ S1 Clear	**6.38mm Grade A safety glass.** Improved solar heat reduction over ordinary glass: - Clear up to 39% more effective - Green/Grey up to 41% more effective - Neutral up to 40% more effective				Increased insulation with lower solar heat reduction for passive solar heating in cooler climates on northern orientations. Adding a tint reduces solar heat absorption and glare.
	SmartGlass™ S1 Grey / Neutral					
 Low-E Coating	SmartGlass™ SP10	**Glass thickness 4mm – 6mm** - Up to 39% better insulation than ordinary glass. - Low E insulation with a choice of solar protection performance for residential applications.				
	SmartGlass™ SP30 SmartGlass™ SP35					
 Air Gap Low-E Coating	LightBridge™ Clear	**Unit thickness 12mm – 32mm** - LightBridge is a range of high performance insulating glass units (IGUs), with low-e glass and inert gas fill as standard, developed specifically for residential applications.				IGUs provide the best all-round performance. Great insulator and perfect for both hot and cold climates.
	LightBridge™ Toned					

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 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™ and ICON™ 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.

ando

Complementing 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.

Twin Point Sliding Door Lock

Slimline Sliding Door Lock

Single Point Sliding Door Lock

Sliding Window Lock

Bi-fold operator

Hinged Door Lock

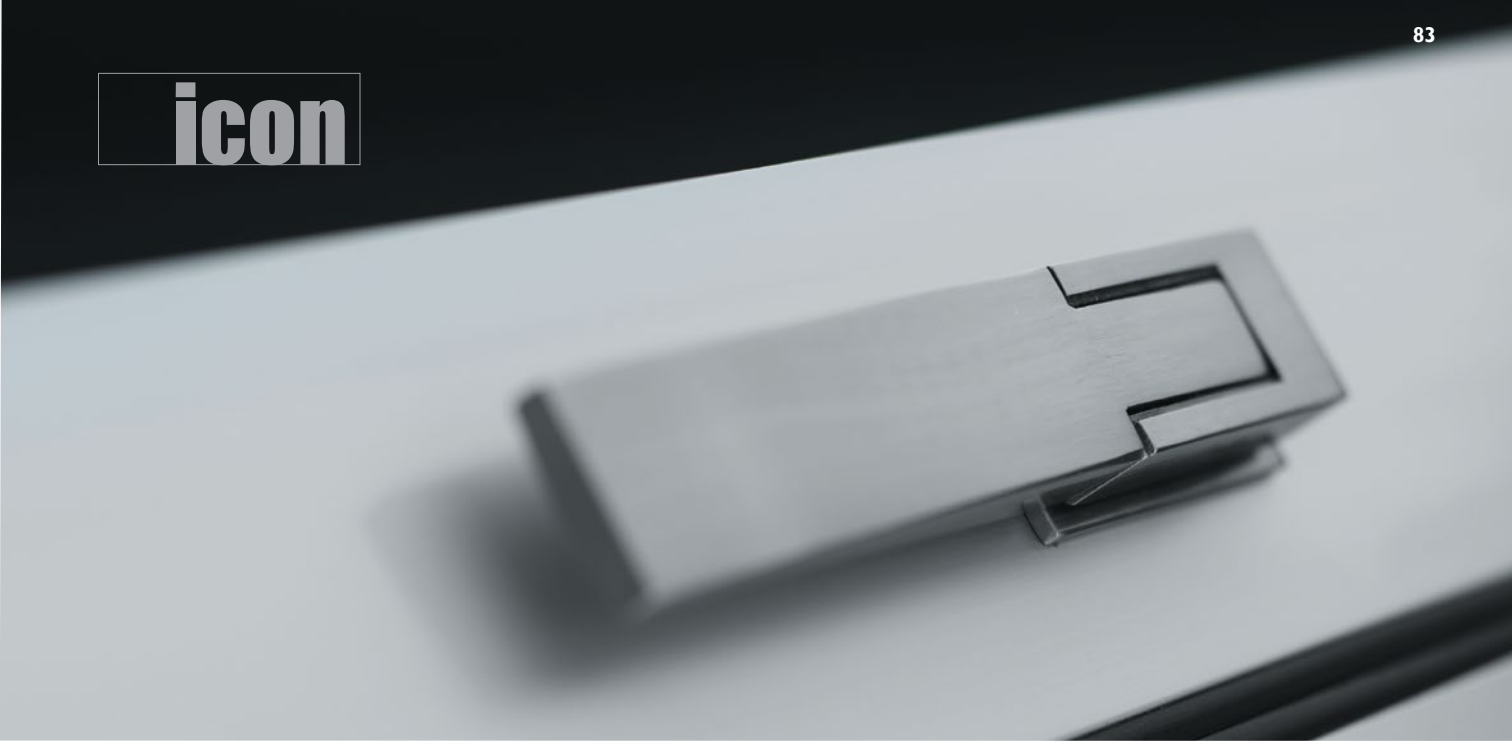
Manual Chainwinder

Double Hung Lock

Twin Point Sliding Door Lock

Note: Images are not to scale.

icon



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

ICON™ offers superior weathering performance and outstanding durability making it suitable for all environments.

The range incorporates a square-edge, rectilinear look to complement the lines of our Designer Series windows and doors.

Hinged Door Lock

Bi-fold Operator

Surface Mounted Lock

Sliding Door Handle

Flush Pull

Sliding Window Lock

Casement Latch

Note: Images are not to scale.

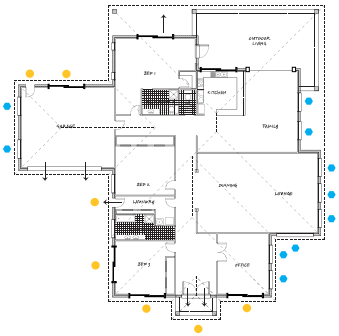
ONE KEY SOLUTION.

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

Our proprietary hardware ranges are designed with an eye 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 the Vantage® windows and doors used across the project.

In most instances, window locks can be keyed alike, as can door locks. This allows for one key to operate all of the Vantage® windows within your project and one key to operate all Vantage® doors. This simplified approach brings both security and peace of mind.



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

HARDWARE COMPATIBILITY.

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

ANDO™

	Residential Series					Designer Series							ThermalHEART™			
	514 Dhung	516 Awning	517 Awning	541 Sliding	542 Sliding	546 Bi-fold	548 Bi-fold	549 Hinged	601/2 Sliding	613 Dhung	616 Awning	618 Sliding	726 Awning	729 Hinged	730 Bi-fold	731 Sliding
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	●									●						

ICON™

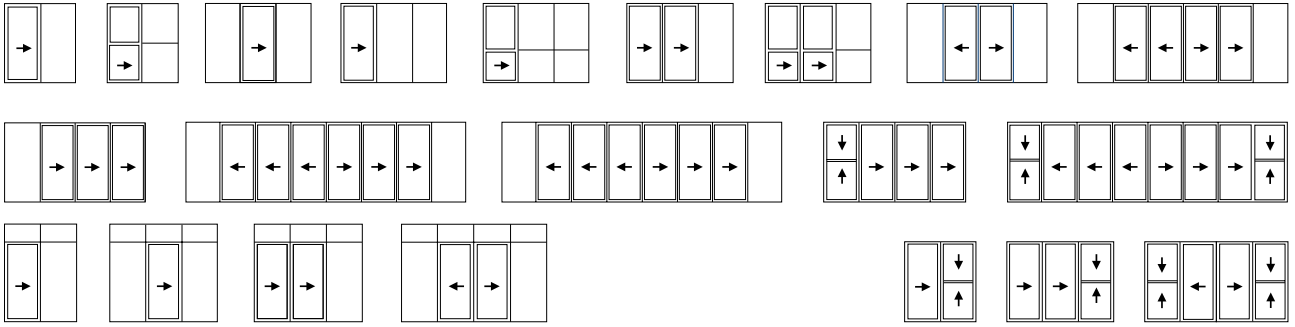
	514 Dhung	516 Awning	517 Awning	541 Sliding	542 Sliding	546 Bi-fold	548 Bi-fold	549 Hinged	601/2 Sliding	613 Dhung	616 Awning	618 Sliding	726 Awning	729 Hinged	730 Bi-fold	731 Sliding
Twin Point Sliding Door Lock				●	●							●				
D-pull with ISEO Lock												●				●
Flush Pull (with mortice lock)												●				●
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™ and ANDO™ hardware is not compatible with the following: Series 501/503, Series 502/504 Series 514 or Series 613. ICON™ hardware is not compatible with Series 601/ 602.

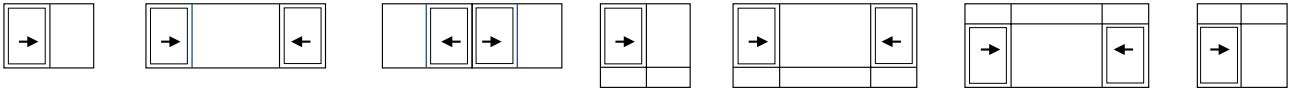
TYPICAL CONFIGURATIONS.

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.

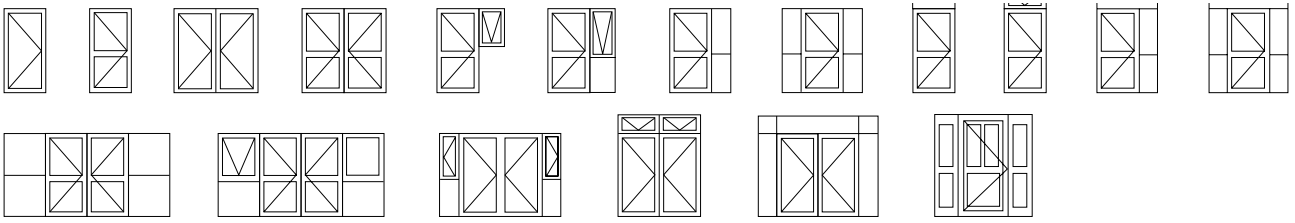
Sliding Doors.



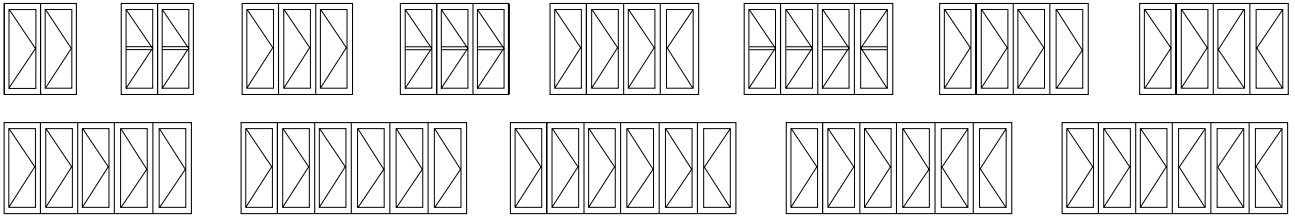
Sliding Windows.



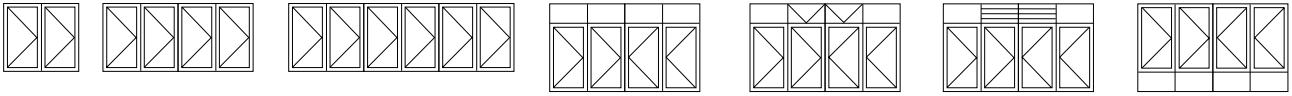
Hinged, French & Entrance Doors.



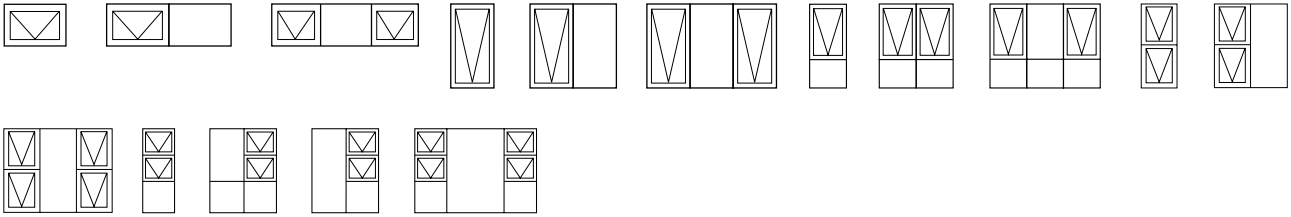
Bi-fold Doors.



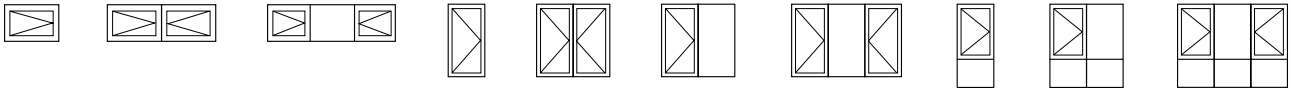
Bi-fold Windows.



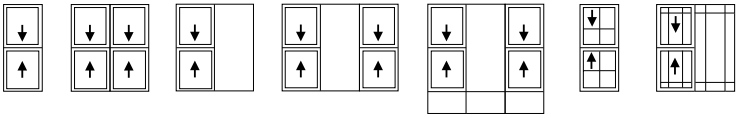
Awning Windows.



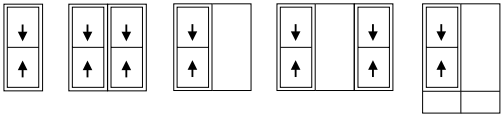
Casement Windows.



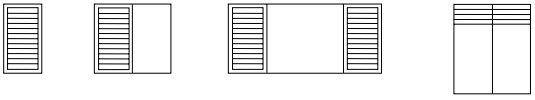
Double Hung Window.



ClearVENT™ Windows.



Louvre Windows.

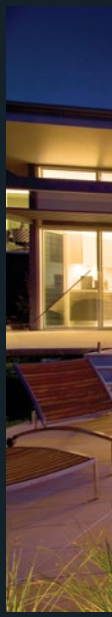


Key.

SYSTEM PORTFOLIO.

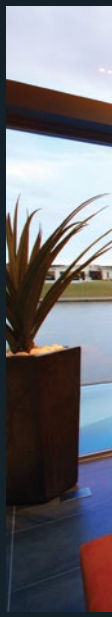
Designer Series

525	LouvreMASTER™ Adjustable Window
546	Bi-fold Window
548	High Performance Bi-fold Door
548	High Performance Hinged Door
601	MAGNUM™ Sliding Window – Beaded Fixed Light
602	MAGNUM™ Sliding Window – Double Sash Design
613	MAGNUM™ Double Hung Window
614	ClearVENT™ Sashless Double Hung Window
616	MAGNUM™ Awning & Casement Window
618	MAGNUM™ Sliding Door



Designer Series ThermalHEART™

726	ThermalHEART™ Awning Window
729	ThermalHEART™ Hinged Door
730	ThermalHEART™ Bi-fold Door
731	ThermalHEART™ Sliding Door



Need help selecting your windows and doors? Your local Vantage® fabricator can offer expert advice and assistance. To locate a showroom near you, find your local supplier on vantagealuminium.com.au

Residential Series

504 Residential Sliding Window - Double Sash Design

514 Residential Double Hung Window

516 Residential Awning Window (50mm frame)

517 Residential Awning Window (102mm frame)

541 Residential Sliding Door

542 DStacker™ Sliding Door

549 Entry Door

Specialty

531 SoundOUT™ Secondary Sliding Window

532 SoundOUT™ Secondary Casement Window

533 SoundOUT™ Secondary Sliding Door

THE VANTAGE® FABRICATOR NETWORK.

Across the country there are over 200 dedicated and highly trained, licensed manufacturers of the Vantage® range of aluminium windows and doors.

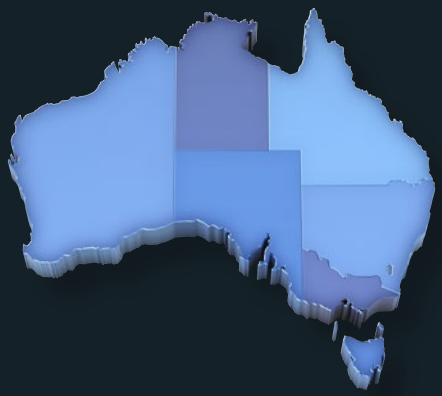
These privately owned and independent businesses compete within the residential and commercial construction markets.

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 Elevate range of products.

Our 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 your choice in surface finishes and hardware.

VANTAGE®
WINDOWS &
DOORS



Vantage® fabricators are located throughout Australia in city and regional areas. Locate a Vantage® fabricator who can assist with your project on our website:

vantagealuminium.com.au

SENSATIONAL SHOWROOMS.

Taberner Glass Showroom — Photography: Andrew Warn

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 perfect window and door systems for you.

Vantage® showrooms are located across Australia – though each one is different and unique, they all share one thing in common. They all 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 informed decisions.

Showrooms feature products from all across our residential and commercial ranges as well as hardware, colour and glass options. This gives you access to the products, tools and advice you need to make informed decisions that will effect your lifestyle for years to come.

To locate your nearest showroom, find your local supplier via the fabricator search bar on:

vantagealuminium.com.au

AWS
ARCHITECTURAL WINDOW SYSTEMS PTY LTD

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

FOR TECHNICAL SUPPORT & FABRICATOR LOCATIONS CALL **1300 026 189**
or email marketing@awsaustralia.com.au

Head Office: 76-78 Jedda Road, Prestons NSW 2170
PO BOX 311 Liverpool NSW 1871, Australia