

ELEVATE DESIGN

ARCHITECTURALLY INSPIRED SYSTEMS FOR SUPERIOR STYLE & PERFORMANCE



COMMERCIAL ALUMINIUM GLAZING BY **SAWS**



Wayfarer Apartments. Builder: GEOCON. Architect: Cox Architecture. Windows: Taylors Windows

Take your ideas to new heights with creative glazing solutions by Elevate™ Aluminium Systems.

Our philosophy is simple: to create commercial window and door systems that offer streamlined and efficient solutions to the commercial construction and high-end residential market.

Architects and their clients are constantly exploring new ways to express themselves and interact with their surroundings. In answer to this need, we offer the Elevate™ Aluminium Systems range of products. An innovative selection of cutting-edge commercial systems that raise the bar and inspire great outcomes.

Our ThermalHEART™ commercial framing is testament to this drive. This unique range of thermally broken commercial framing systems delivers exceptional thermal performance for commercial building applications. Designed and tested for Australian conditions, ThermalHEART™ systems also offer enormous design flexibility, making them ideal for any climate or environment.



Specifier Support.

At AWS, we are committed to providing support to architects and specifiers.

The road to creating a specification can be varied, and resources and approaches differ. That's why we offer you a variety of technical tools to make specifying Elevate™ Aluminium Systems easy, including CAD and 3D files, extensive technical literature and an experienced team of window experts.

Access a full range of specification tools via our dedicated specifier website - specifyaws.com.au - a streamlined no nonsense site to put technical resources at your fingertips.

We take pride in the relationships we have formed with both the Australian Institute of Architects, and the Building Designers Association of Australia.

Our technical team is always happy to help. Just email techsupport@awsaustralia.com.au for all the support you need.



SPECIFYAWS.COM.AU
Specifier Resource Centre

2 Understanding our Systems.



Commercial Series

Dedicated, high-performance commercial window and door systems.

The Commercial Series offers a selection of locally designed and tested dedicated commercial systems. These systems were developed for use in commercial, institutional and light industrial applications and offer economical, high-performance glazing solutions. Designed to integrate seamlessly with Elevate™ Commercial framing suites, the range includes sliding, awning, and double-hung windows along with sliding and hinged doors.

Commercial Series window and door systems can be used in conjunction with Commercial Framing and Architectural Series systems to achieve your ideal glazing solution.

Select the ideal window or door system for your project from our range of standard commercial framing, thermally broken framing and dedicated window and door systems. Use the colour coded bars throughout this book to help select the system you desire.



Commercial ThermalHEART™

State-of-the-art, high-performance thermally broken commercial systems.

Australia's first range of high-performance, thermally broken commercial framing systems.

Designed to offer superior thermal performance and address the growing need for energy efficient systems in commercial applications. Elevate™ Commercial with ThermalHEART™ technology delivers drastically improved thermal performance to help architects and designers meet the increasingly stringent energy requirements for commercial buildings. ThermalHEART™ framing systems perform up to 51% better than standard single glazed commercial aluminium framing.



Commercial Framing

Innovative framing solutions for commercial and residential applications.

The Elevate™ Commercial Framing range includes CentreGLAZE™, FrontGLAZE™ and FaceLINE™ framing systems designed to meet the ever-growing needs of the commercial building sector. Elevate™ Commercial framing systems can be fully integrated with a variety of Architectural and Vantage Designer Series products, offering versatile solutions for your building project.

Available in 80mm, 102mm, 150mm and 225mm platforms and designed to accept single and double glazing, Elevate™ Commercial framing incorporates strong, bold profiles, enabling large expanses of glazing to be achieved.



Architectural Series

Strong, bold, stylish profiles for commercial architectural projects.

The Architectural Series of high-performance windows and doors is both modern and meticulous in design. Its shapes reflect the designer preference for clean, flush surfaces, continuous sightlines and square-edge 'cubist' forms.

The system has been developed with aesthetic unity in mind; similar looks and lines for windows and doors with common frame edges to simplify architectural detailing.

The Architectural Series has been designed with the strength and versatility to allow the choice of large formats and sizes increasingly favoured by architects.



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It's time to start breaking your windows, thermally breaking. Learn about the substantial benefits of thermally broken commercial framing.

52 Feature Projects

See Elevate™ Aluminium systems used in some of Australia's leading commercial property designs.

60 Behind the Scenes

Get to know how Elevate™ Aluminium systems are designed and tested to offer you the best quality and performance.

Need help selecting your windows and doors?

The AWS specifier team can help you develop your window and door specifications. Contact us via email at techsupport@awsaustralia.com.au





COMMERCIAL FRAMING.

The Elevate™ Aluminium Systems range of commercial framing includes CentreGLAZE™, FrontGLAZE™ and FaceLINE™ glazing systems designed to meet the ever-growing needs of the commercial building sector. An innovative selection of Commercial ThermalHEART™ systems which offer substantial improvements in thermal performance are also available.

Commercial ThermalHEART™

This innovative range of thermally broken commercial framing systems delivers substantially improved thermal performance when compared to non-thermally broken systems. Designed to accept 24mm IGUs as standard, the Commercial ThermalHEART™ range enables architects and designers to achieve building code compliance and meet energy provisions without compromising on the use of large expanses of glazing.

Glazing Options

Elevate™ framing systems can accommodate single, thick and double glazing requirements. Where thick glass is used, additional screw ports are incorporated to help support the weight of thick heavy glass. Insulated glass units up to 24mm thick can be accommodated by double glazed framing systems.

50mm Door Platform

Elevate™ framing systems are designed to use 50mm doors. The 50mm door stile is approximately 40% stronger than the industry standard 44mm door stile. This enables the use of tall, wide panels in oversize applications. The thicker stiles enable true inline French meeting stiles and facilitate the use of thick glass panels.

Architectural Styling

Elevate™ framing incorporates clean architectural styling. Profiles are shaped to reflect the designer preference for clean, flush surfaces, continuous sightlines and square-edge 'cubist' forms.

8 CentreGLAZE™ Framing.

Elevate™ CentreGLAZE™ framing offers a balanced aesthetic, with glass positioned in the centre of the frame. Designed for use in both residential and commercial applications, CentreGLAZE™ framing is compatible with a wide range of accessories and adaptors.

We offer two thermally broken CentreGLAZE™ framing systems within the range. Available in 100mm and 150mm platforms, ThermalHEART™ framing systems deliver exceptional thermal performance for improved efficiency and comfort.

Our standard CentreGLAZE™ framing systems are available in 102mm for typical low-rise residential and commercial applications, and 150mm where added strength is required to achieve large spans. Single and double glaze options are available.

Series 400 CentreGLAZE™ Single Glazed (102mm)

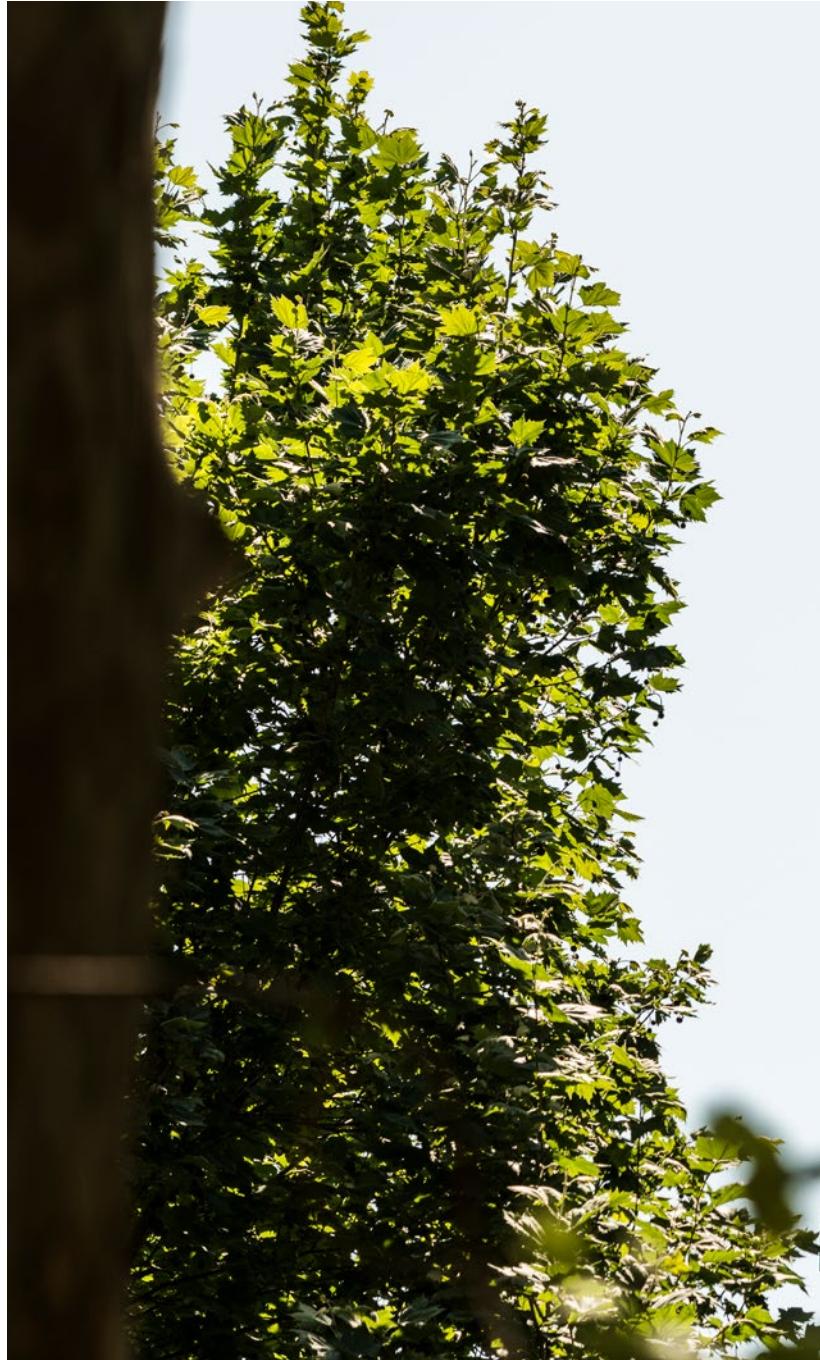
Series 620 CentreGLAZE™ Wide (150mm)

Series 424 CentreGLAZE™ Double Glazed (102mm)

Series 624 CentreGLAZE™ Double Glazed (150mm)

Series 804 Thermally Broken CentreGLAZE™ (100mm)

Series 806 Thermally Broken CentreGLAZE™ (150mm)





Offset Framing & Internal Partitioning.

Elevate™ Offset framing has been designed to complement the Elevate™ CentreGLAZE™ range. Two frame widths are offered: 80mm and 150mm.

The 80mm narrow offset frame system is ideal for use in internal partitioning applications. The narrow frame gives a clean, minimalist aesthetic.

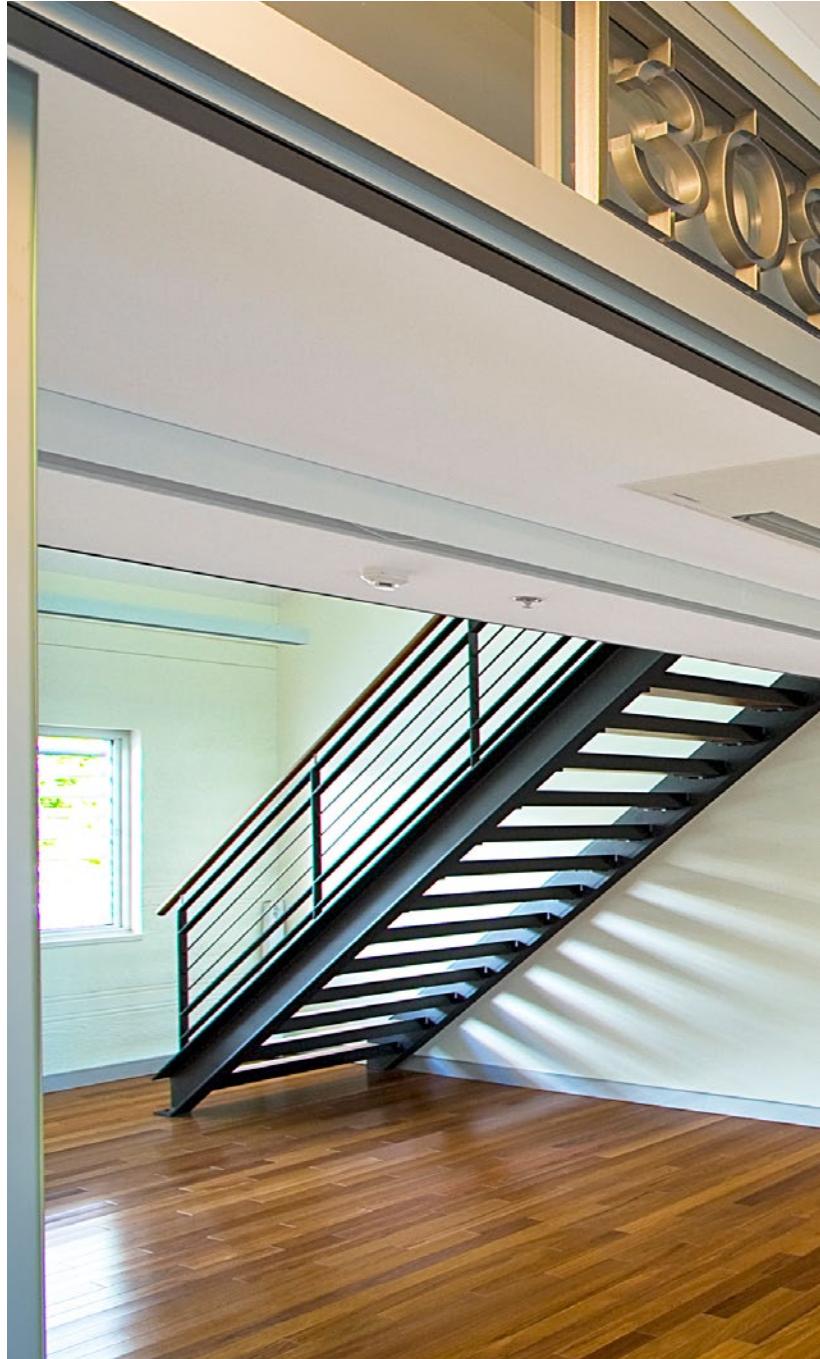
The 150mm wide offset frame makes an excellent companion to our standard CentreGLAZE™ framing range. The wide offset frame provides additional strength to achieve tall, wide spans and maintains the same glass position as Series 400 CentreGLAZE™ framing when viewed from the outside, enabling the two systems to be used together without compromising the external aesthetic, thus allowing architects and designers increased flexibility in design.

Our newly developed Series 105 office partition system is designed for internal use only and can be single or double glazed. The double glazed version provides superior acoustic performance.

Series 80 Narrow Offset Framing (80mm)

Series 600 Wide Offset Framing (150mm)

Series 105 Office Partition System





Valhalla Cinema. Architect: Tanner and Associates. Windows by Manly Aluminium.

FrontGLAZE™ Framing

Elevate™ FrontGLAZE™ framing systems offer a clean external finish. Glass is positioned very close to the external face with minimal external frame projection.

Splayed external ledges and glazing beads shed dust and water from the framing whilst offering excellent water and weather resistance. Transom drainage holes are concealed under the front drip groove. Full width interlocking mullions ensure maximum strength and weather performance.

Within the Elevate™ range we offer thermally broken FrontGLAZE™ framing systems. Available in 100mm and 150mm, ThermalHEART™ framing systems deliver improved thermal performance, efficiency and comfort.

FrontGLAZE™ framing can be coupled to SlideMASTER™ doors and windows along with conventional hinged and pivot doors. Adaptors are available for the integration of awning and casement windows into framing.

FrontGLAZE™ systems are available single or double glaze in 102mm, 150mm and 225mm widths. Structurally glazed mullions are also available.

Series 406 FrontGLAZE™ SG (102mm x 50mm)

Series 426 FrontGLAZE™ DG (102mm x 60mm)

Series 606 FrontGLAZE™ SG (150mm x 50mm)

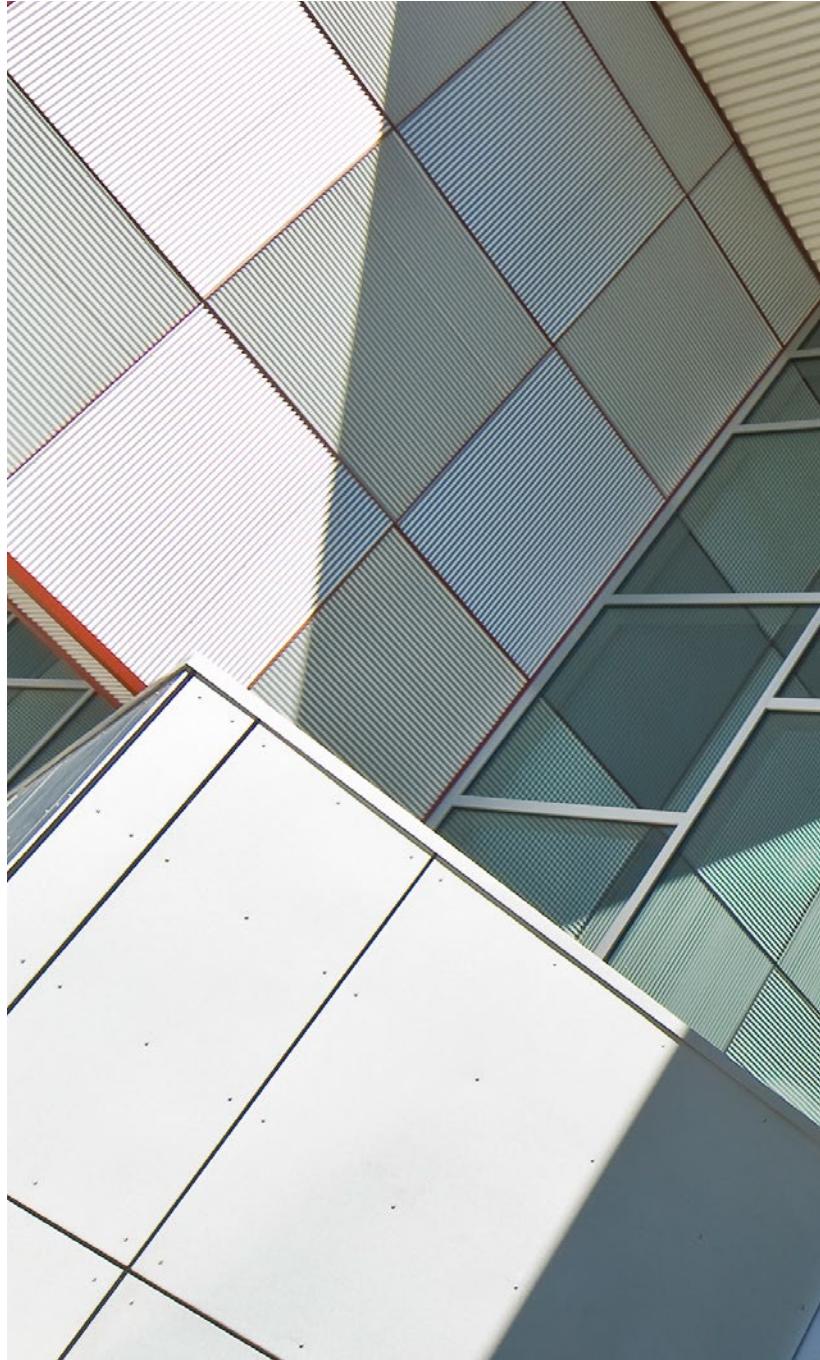
Series 626 FrontGLAZE™ DG (150mm x 60mm)

Series 646 SoundOUT™ FrontGLAZE™

Series 936 FrontGLAZE™ DG (225mm)

Series 824 Thermally Broken FrontGLAZE™ (100mm)

Series 826 Thermally Broken FrontGLAZE™ (150mm)





FaceLINE™ Framing.

The Elevate™ FaceLINE™ framing system has been designed to highlight and complement the clean lined facades that are a favourite within the commercial design community.

FaceLINE™ framing enables glass to be positioned very close to the external face of the frame creating an almost seamless glass facade. With a variety of snap-on caps available, along with the ability to incorporate structural silicon glazed panels, FaceLINE™ framing systems are unequalled in the industry for performance and aesthetically innovative design.

FaceLINE™ framing systems are available in two frame sizes: 102mm for typical low-rise residential and commercial applications and 150mm where added strength is required to achieve large spans.

102mm and 150mm FaceLINE™ framing adapts to other systems within the Elevate™ commercial framing family so that flexibility can be attained with ease.

Elevate™ FaceLINE™ has solved the inherent problem with other similar systems. We can fit sub-head, sub-jamb and sub-sills. The Elevate™ FaceLINE™ system incorporates full perimeter frames with snap-on cover mullions and/or transoms.

Series 407 FaceLINE™ Framing (102mm)

Series 607 FaceLINE™ Framing (150mm)







THERMALLY BROKEN SYSTEMS.



ThermalHEART™ is the technology that lies at the core of a new thermally efficient range of commercial aluminium framing systems. In fact, the ThermalHEART™ Commercial range is up to 51% more thermally efficient than standard, single glazed commercial aluminium framing.

Thermal Break System

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

Architects' Convenience

When it comes to large areas of glazing, the extra insulation provided by ThermalHEART™ technology gives you additional flexibility with regard to Building Code compliance.

A Versatile Range

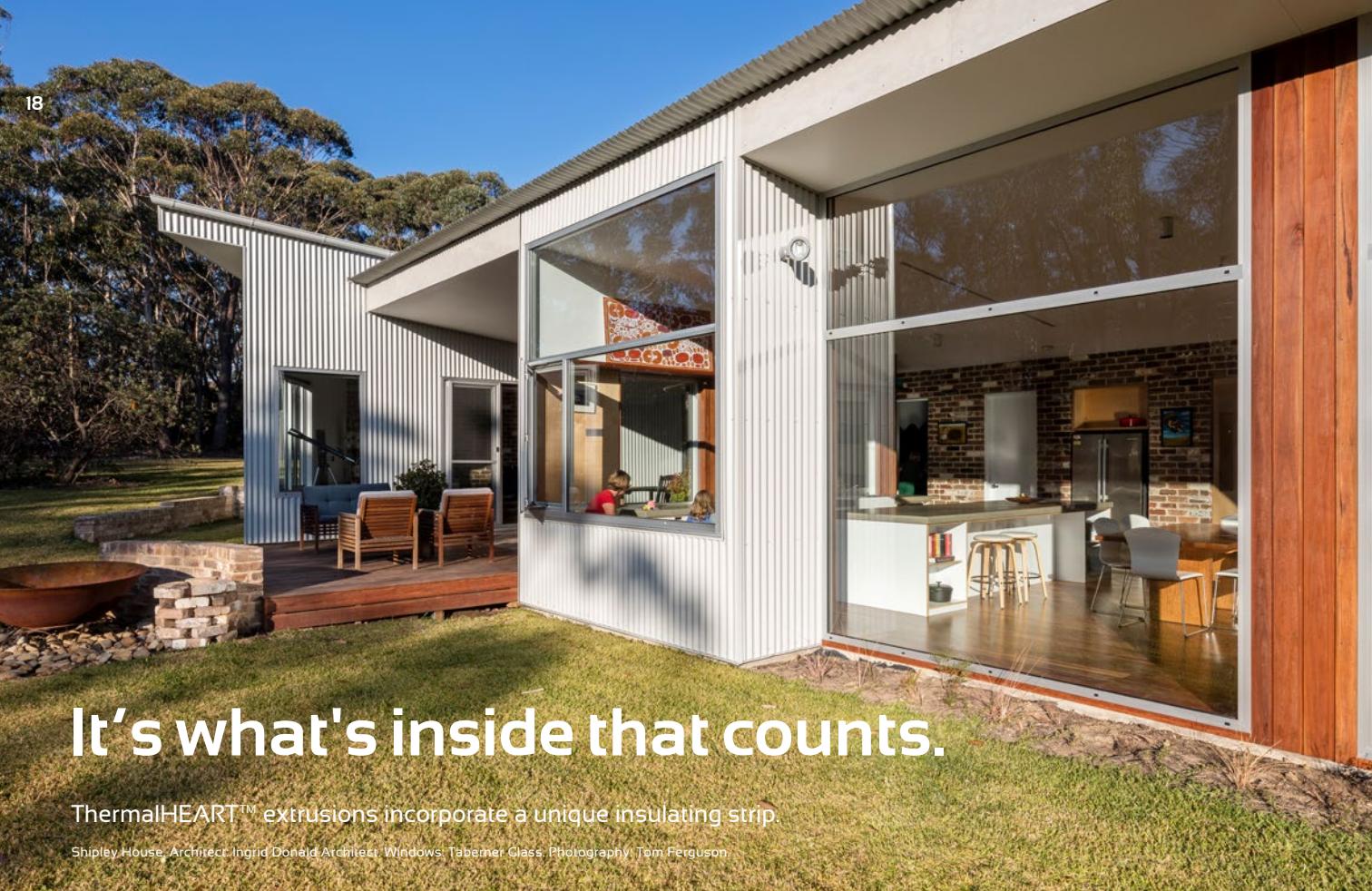
The comprehensive Elevate™ Commercial ThermalHEART™ range includes CentreGLAZE™ and FrontGLAZE™ framing in 100mm and 150mm platforms, along with a compatible door system for hinged, pivot or sliding installations. We can also fit awning sashes into most of these systems. Awning sashes will also accept IGUs up to 24mm.

Efficiency and Comfort

When combined with double glazing, Elevate™ Commercial ThermalHEART™ framing systems meet contemporary aspirations for energy conservation and comfortable interior temperatures.

Dual Colour Option

The unique ThermalHEART™ joining method allows for one finish on the outside and one on the inside, to complement both internal and external palettes.



It's what's inside that counts.

ThermalHEART™ extrusions incorporate a unique insulating strip.

Shipley House. Architect: Ingrid Donald Architect. Windows: Taberner Glass. Photography: Tom Ferguson.

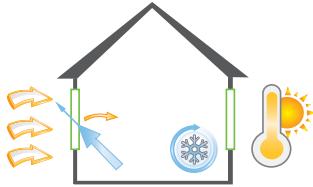
Polyamide is an excellent thermal insulator. It has very similar expansion rates to aluminium, ensuring ThermalHEART™ extrusions maintain excellent structural integrity.

The inclusion of a polyamide strip substantially improves the thermal performance of the window system. Used in conjunction with double glazing, ThermalHEART™ window systems can significantly reduce the requirements for artificial heating or cooling in commercial buildings, thus lowering a building's long-term energy requirements.

ThermalHEART™ systems help to maintain optimum internal temperatures in commercial buildings, and reduce the need for artificial heating or cooling.

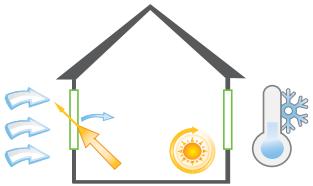
The ability to incorporate large expanses of glazing with minimal negative impact on efficiency ensures architects have the flexibility to maximise the use of natural light, enhance the connection to the outdoors, and allow building occupants to be aware of the passage of time, all important elements in contemporary commercial architecture.

How ThermalHEART™ works.



Cold Climate.

- 1 Drastically reduce the cold from entering the building, making buildings warmer.
- 2 Help keep the warm air in, reducing heating costs.
- 3 Eliminate condensation, which often occurs due to the difference in temperature between the interior and exterior environments.



Warm Climates

- 1 Act as a buffer against the hot air outside, minimising the transfer of heat into a building.
- 2 Help to minimise the loss of cool air from artificial cooling units, reducing the need for cooling and lowering energy consumption.

Unique Features.

External Aluminium Extrusion

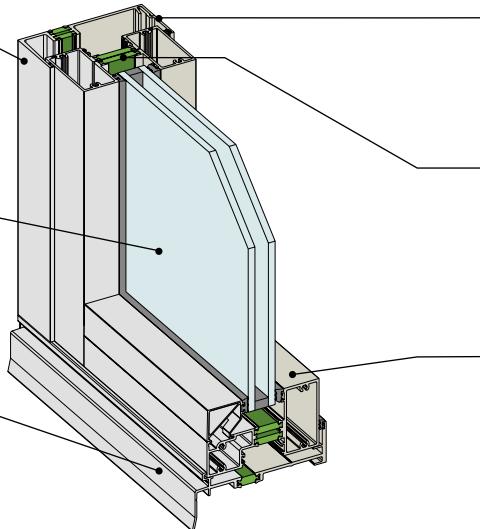
Separated from internal extrusion by thermal break to deliver excellent thermal performance.

IGU Thickness up to 24mm

Use IGUs for maximum performance, also suitable for single glazing.

Thermally Broken Sub-sill

Suitable for residential installations, thermal break is maintained



Dual Finish Technology

innovative dual finish technology - one colour inside, one colour outside

Polyamide Strips create the Thermal Break

shares the same expansion properties as aluminium to maintain structural integrity

Internal Aluminium Extrusion

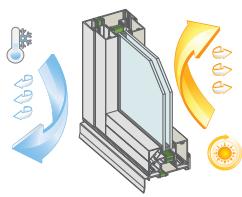
Separated from external extrusion by thermal break to deliver excellent thermal performance.



Exceptional Thermal Efficiency.

Shipleigh House. Architect: Ingrid Donald Architect. Windows: Taberner Glass. Photography: Tom Ferguson.

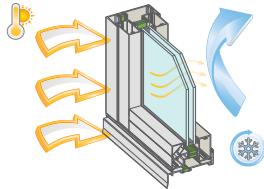
ThermalHEART™ systems use advanced thermal modelling techniques during the design phase to ensure the best possible outcome and achieve very favourable WERS ratings.



U-value.

The U-value is the measure of how much heat energy is transferred through a window. The lower the U-value, the better it is at keeping the heat or cold out.

ThermalHEART™ systems provide excellent insulation minimising the transfer of heat or cold between the internal and external environment.



Solar Heat Gain Co-efficient.

SHGC is a measure of how much solar radiation passes through a window. ThermalHEART™ systems drastically reduce solar heat gain through the window frame. Varying levels of solar radiation will still pass through the glass, offering passive solar heating.



How ThermalHEART™ Compares.

By looking at WERS ratings for our standard and thermally broken commercial framing systems, it is possible to identify the performance improvements which can be achieved using ThermalHEART™ framing.

Compared to non-thermally broken single glazed CentreGLAZE™ framing, ThermalHEART™ systems deliver a performance improvement in the range of 51%.

With non-thermally broken double glazed CentreGLAZE™ framing, ThermalHEART™ systems increase performance by around 24%.

Series 400

CentreGLAZE™ Framing Non-thermally Broken SG

| Window ID | Glass Type | Uw | SHGCw | Tvw |
|------------|------------|-----|-------|------|
| AWS-027-02 | 6SnClr | 4.6 | 0.55 | 0.62 |
| AWS-027-12 | 6.38CPClr | 4.2 | 0.63 | 0.75 |

Series 424

CentreGLAZE™ Framing Non-thermally broken DG

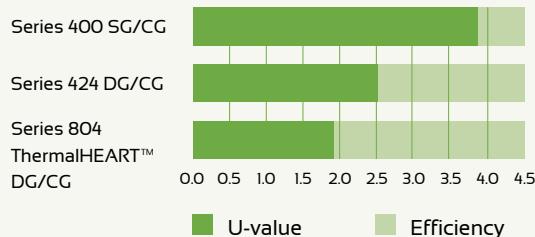
| Window ID | Glass Type | Uw | SHGCw | Tvw |
|------------|------------------|-----|-------|------|
| AWS-028-10 | 6.38CPClr/12Ar/6 | 2.6 | 0.55 | 0.66 |
| AWS-028-14 | 6.38CPGy/12Ar/6 | 2.6 | 0.38 | 0.31 |
| AWS-028-26 | 6EVanGy/12Ar/6 | 2.7 | 0.30 | 0.26 |
| AWS-028-18 | 6.385nGy/12Ar/6 | 2.8 | 0.32 | 0.26 |
| AWS-028-09 | 6.38CPClr/12/6 | 2.8 | 0.55 | 0.66 |
| AWS-028-13 | 6.38CPGy/12/6 | 2.8 | 0.38 | 0.31 |

Series 804

ThermalHEART™ CentreGLAZE™ Framing DG

| Window ID | Glass Type | Uw | SHGCw | Tvw |
|------------|------------------|-----|-------|------|
| AWS-054-06 | 6.38CPClr/12Ar/6 | 1.9 | 0.53 | 0.64 |
| AWS-054-04 | 6.38CPGy/12Ar/6 | 1.9 | 0.36 | 0.30 |
| AWS-054-17 | 6EVGy/12Ar/6 | 1.9 | 0.29 | 0.25 |
| AWS-054-15 | 6.385nGy/12Ar/6 | 2.0 | 0.30 | 0.25 |
| AWS-054-05 | 6.38CPClr/12/6 | 2.1 | 0.53 | 0.64 |
| AWS-054-03 | 6.38CPGy/12/6 | 2.1 | 0.37 | 0.30 |

Comparison of U-values by frame type.



22 **A Solution for
Section J**

Got a Section J migraine?
ThermalHEART™ is your pain relief.



Government requirements on energy efficiency in commercial buildings have become more and more stringent. For a long time, commercial window systems have been found lacking in this area. ThermalHEART™ changes this, delivering to the Australian market an immediate solution to Section J headaches.

The Building Code of Australia, Section J Part 2, sets out requirements for minimum energy efficiency provisions in multi-residential and commercial buildings. As government focus shifts to energy efficiency, these provisions are becoming more and more demanding.

ThermalHEART™: a solution to Section J

Using the elemental Deemed-to-Satisfy method, the Section J Glazing Calculator sets out the minimum requirements for U-values and Solar Heat Gain Coefficients (SHGC), based on climate zone, building size, glass to facade ratio and orientation. The inclusion of a thermal break ensures ThermalHEART™ systems typically meet or exceed the U-values and SHGCs set out in Section J. In general, this means you can use large expanses of glazing even in extreme climate zones and still achieve a pass.

The Kinghorn Motors Section J Story

When Kinghorn Motors VW decided to upgrade their Nowra showroom, the project almost didn't make it past planning. A less-than-perfect aspect, facing the highway and eastern sun meant Section J required extremely low U and SHGC values - Values unable to be achieved with standard single glazed commercial aluminium systems.

If not for ThermalHEART™ framing, compliance issues would have forced designers to alter the design and significantly reduce glazing throughout the building.



24 Dual Colour Options

A close-up photograph of a window frame joint. The frame is white on the outside and a different color on the inside. A silver ball bearing is visible in the joint, which is the ThermalHEART™ joining method. The background is blurred, showing the window's interior and exterior panes.

The innovative ThermalHEART™ joining method allows for a different choice of finish, to complement both internal and external finish palettes. The result? One finish on the outside, another on the inside, and unprecedented colour flexibility.

Interesting Colour Fact.

Did you know that the colour you select for your window and door systems can affect the transfer of heat through the window frame?

It's true. Most of us are aware that dark colours absorb heat. Actually, rather than thinking of them as absorbers of heat, it is important to understand that darker colors are better absorbers of light. When light is absorbed by a dark object, the energy carried by the light doesn't just disappear. Rather, it raises the energy of the object doing the absorbing. The object, in turn, releases the absorbed energy as heat. A dark coloured frame will absorb most of the light that hits it, making the internal surface of the window frame warmer and transferring more heat into the building.

That's why the unique dual colour offering of ThermalHEART™ is so important. Now you can select the strong bold colours which look so impressive on commercial buildings and be confident the dark frames won't transfer heat to the building interior.



Double Finish

A different finish appears on the internal and external extrusion surfaces.



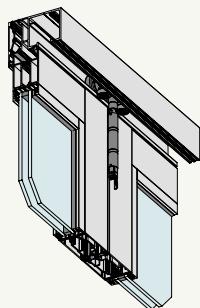
Single Finish

The same finish appears on the internal and external extrusion surfaces.

ThermalHEART™

A comprehensive range

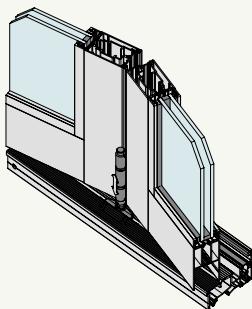
To achieve excellent thermal performance, ThermalHEART™ systems incorporate an innovative polyamide insulator strip which separates the internal and external elements of the extrusion. We offer a comprehensive range of ThermalHEART™ systems to help you maximise efficiency and comfort.



Series 831 Thermally Broken bi-fold Door (Top Rolling)

The Series 831 thermally broken, top hung bi-fold door has been designed to integrate with thermally broken CentreGLAZE™ and FrontGLAZE™ framing. The 50mm thick door panels accept IGUs up to 28mm and can achieve very large panel sizes.

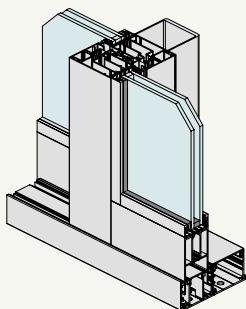
AWS Centor™ twin stainless steel roller bearings running in heavy duty dual overhead tracks support the door panels. The E3 rollers will support panels up to 80kg delivering consistently smooth operation.



Series 832 Thermally Broken bi-fold Door (Bottom Rolling)

The Series 832 thermally broken, bottom rolling bi-fold door has been designed to integrate with thermally broken CentreGLAZE™ and FrontGLAZE™ framing. The 50mm thick door panels accept IGUs up to 28mm and can achieve very large panel sizes.

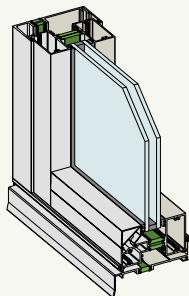
AWS Centor™ quad stainless steel roller bearings running in a heavy duty concealed sill track support heavy door panels up to 80kg. Rollers and pivots can be height adjusted as required.



Series 852 Thermally Broken Commercial Door

Series 852 thermally broken doors are compatible with the full range of ThermalHEART™ commercial systems. Available as hinged, pivot and sliding panels.

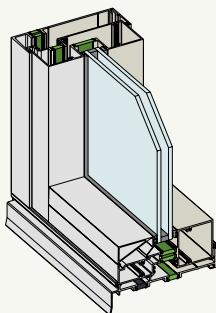
Dedicated hardware and a variety of sils have been developed for this system to maintain efficiency and minimise air infiltration. Screen doors can be fitted to Series 852 doors when fitted into Series 806 or 826 (150mm) frames.



Series 804 Thermally Broken CentreGLAZE™ Framing (100mm)

Series 804 CentreGLAZE™ shopfront frames with ThermalHEART™ technology measure 100mm x 60mm and are specifically designed to accept 24mm Insulating Glass Units (IGUs).

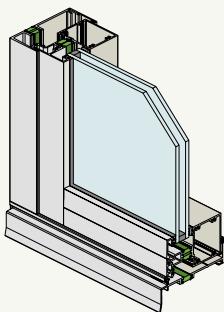
Series 804 has a wide range of thermally broken sub-frames to cover most installations. This includes sub-sills with integrated nailing fin ideal for residential installations.



Series 806 Thermally Broken CentreGLAZE™ Framing (150mm)

Series 806 CentreGLAZE™ shopfront frames with ThermalHEART™ technology measure 150mm x 60mm and are specifically designed to accept 24mm Insulating Glass Units (IGUs).

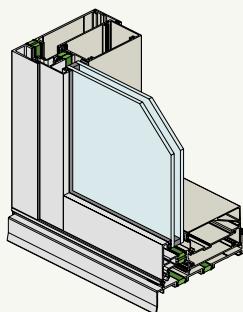
Series 806 has a wide range of thermally broken sub-frames to cover most installations.



Series 824 Thermally Broken FrontGLAZE™ Framing (100mm)

Series 824 FrontGLAZE™ shopfront frames with ThermalHEART™ technology measure 100mm x 60mm and are specifically designed to accept 24mm Insulating Glass Units (IGUs) with glass positioned close to the front of the frame.

Series 824 can be supplied with external or internal glazing, and has a wide range of thermally broken sub-frames. This includes sub-sills with integrated nailing fin ideal for residential installations.



Series 826 Thermally Broken FrontGLAZE™ Framing (150mm)

Series 826 FrontGLAZE™ shopfront frames with ThermalHEART™ technology measure 150mm x 60mm and are specifically designed to accept 24mm Insulating Glass Units (IGUs) with glass positioned close to the front of the frame.

Series 826 can be supplied with external or internal glazing, and has a wide range of thermally broken sub-frames to cover most installations.

28 Series 852 Thermally Broken Door

Top Hung Sliding Door with Centor E3 Rollers

Sill water resistance

| | |
|-------------------------|-------|
| External slide as drawn | 200Pa |
| Internal slide | 300Pa |
| Slide - slide | 200Pa |

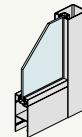
Key Features

Top hung sliding doors using Centor E3 rollers with AWS custom head track will support panels up to 250kg

| | |
|--------------------------------|--------|
| Maximum Panel Height | 2800mm |
| Maximum Panel Width | 2500mm |
| Maximum Panel Weight | 250kg |
| Maximum Glass Thickness | 28mm |

Other Systems

Centor E3 Rollers are also available on Series 50 & 52 commercial doors.



Series 50



Series 52



Centor E3 top roller assembly

Custom roller assembly bracket

Roller support bracket fixings

Heavy duty door spigot system

Head Detail

Centor E3 Top Hung roller carriages support the weight of the sliding door panels at the head.

This style of sliding door system is ideal for supporting large or heavy door panels, such as double glazed panels. Supporting the weight of the panel at the head offers smooth operation and reduces the force required to operate the door

The door tracks can be ganged up to create more door panels, increase the recess in floor to suit.

E3 Rollers in this Elevate™ head track will support panels up to 250Kg.

Head track fitted with removable cover trims to make this detail water resistant.

Door panels can be lifted/lowered using the roller adjustment bolts.

Weatherpile mohair seal both sides of door

13mm Gap between sill channel and sill infill

Weatherpile mohair seal both sides of sill channel.

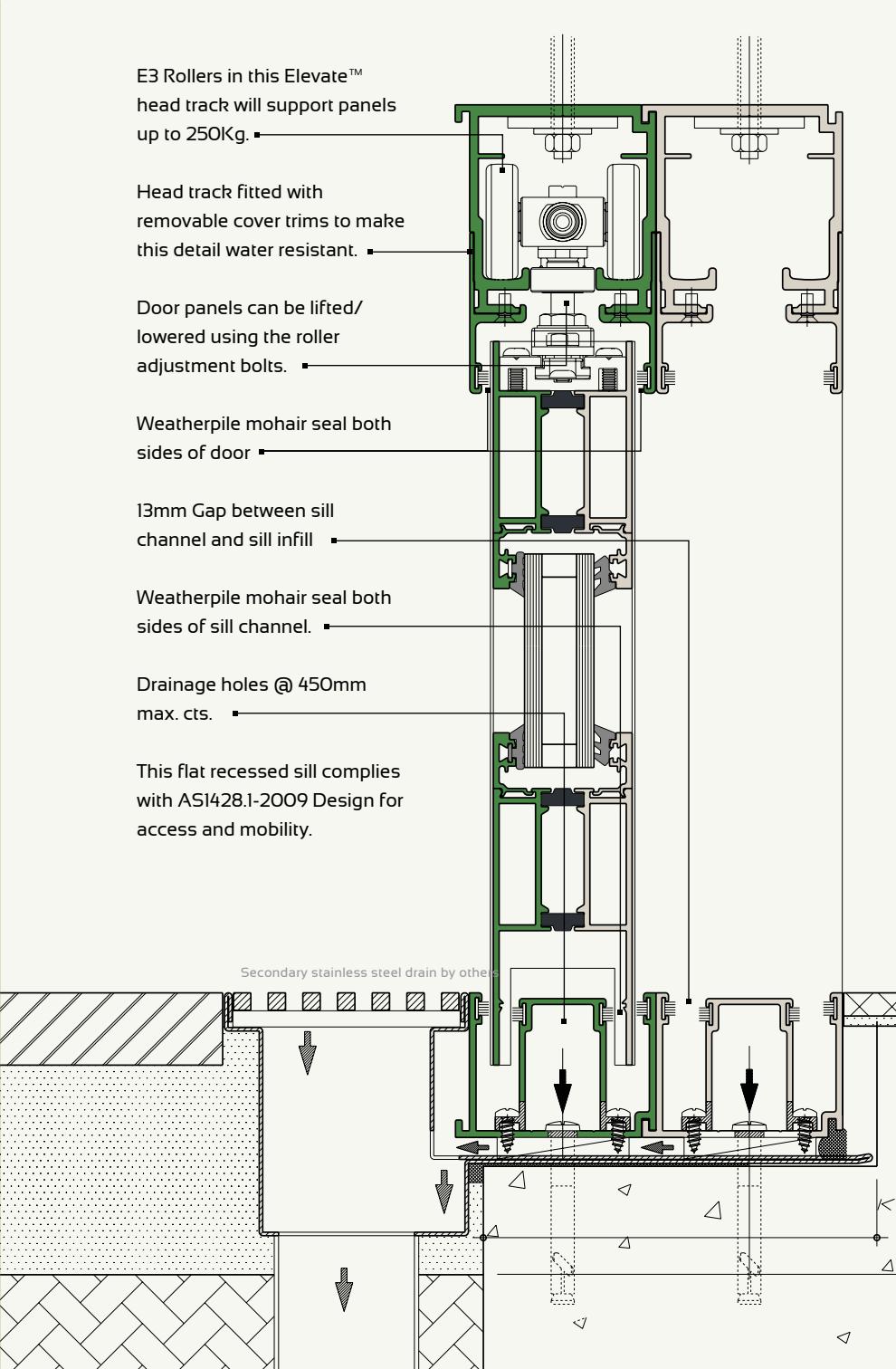
Drainage holes @ 450mm max. cts.

This flat recessed sill complies with AS1428.1-2009 Design for access and mobility.

Secondary stainless steel drain by other

Sill Detail

The Series 852 door sill has been designed to achieve full disabled access compliance. The sill has a maximum gap of 13mm and maximum gradient of 1:8 to cater for wheelchair compliance. In most instances zero threshold or recessed door sills these products offer no independent water performance and should be coupled with an external lineal drain, as shown, in exposed locations.





WINDOW & DOOR SYSTEMS

Designed to suit a range of commercial and high-end residential applications. The Elevate™ range of Windows and Doors enable wide, bold panels to be created. Impressive panel heights of up to 3m can be achieved. The commercial grade profiles and hardware ensure reliable, smooth operation and suitability for a range of applications.

High Performance Systems.

Architectural Series systems are designed to achieve exceptional weather and strength performance. All Elevate™ Architectural Series systems are WERS rated, enabling you to make informed decisions about the thermal efficiency of the window and door systems you select for your home or building project.

Attractive Entrances.

Unlike most industry standard commercial hinged door systems, Elevate™ hinged doors are based on a 50mm frame platform. This delivers significantly higher strength and performance characteristics, enabling large bold panels to be achieved. Our hinged doors can be installed as traditional hinged doors, french doors or stylish pivot doors.

Sensational Sliders.

Elevate™ sliding doors deliver smooth, reliable operation and large wide openings. An impressive array of configuration options are available including 90-degree corner sliders, multi-stacking panels and cavity slider installations. Panels of up to 2.5m wide and 3m high can be used to create a dramatic architectural aesthetic in residential or commercial building projects.

Bi-fold Benefits.

Elevate™ bi-folds give you increased flexibility in design. We offer two systems: top hung, where all of the load is supported at the head of the door; and bottom rolling, where door panels run on heavy duty floor mounted rolling systems. These options ensure our Bi-fold systems are ideal for new installation or retrofit and will deliver long-term smooth operation.

Awning Windows

Awning windows are an ideal choice for both residential and commercial applications. They push out effortlessly from the base and give ventilation with a measure of protection from passing showers.

The Elevate™ range of high performance awning windows incorporate extra strong frame and sashes providing outstanding strength, weather resistance and making them suitable for use in high wind load areas.

A range of latch and locking mechanisms are available, from simple cam handles to manual winders and concealed electric awning winders. Winder options suit applications where a fixed flyscreen is required. Electric winders are an ideal choice for high or difficult to access windows and can be fitted with a rain sensor that automatically closes the windows.

For very large Awning windows, Truth™ Hardware is the ideal choice. The scissor winding mechanism provides excellent strength and closes the sash tightly against the frame.

AWS can also offer a twin winder option for wide sashes up to 2400mm.

* Site restrictions and conditions may apply

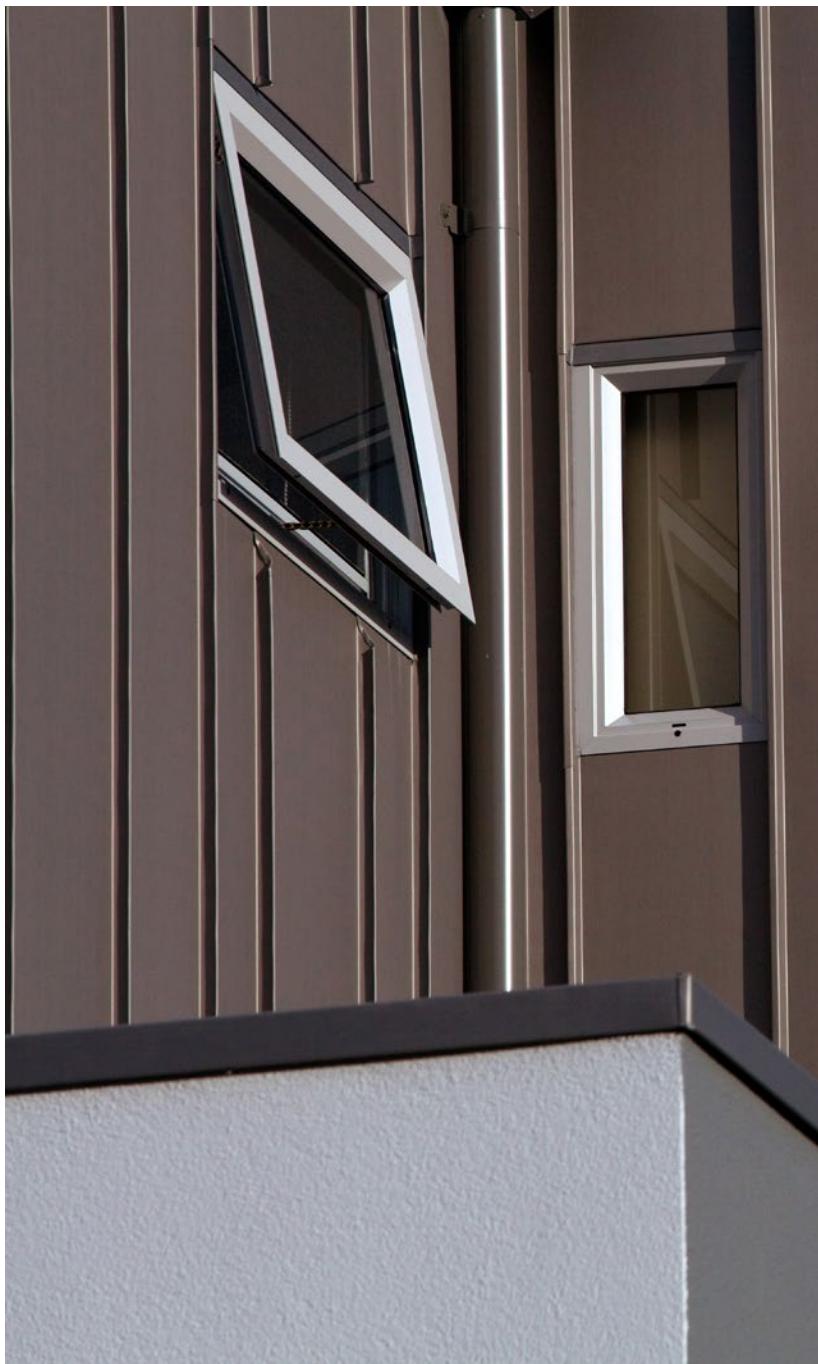
Series 456 Residential Awning into Commercial

Series 466 Architectural Awning Window

Series 467 Architectural Awning Window (Truth™)

Series 468 Architectural Awning Window (Truth™)

Series 668 Commercial Awning (Truth™)





Casement Windows

The Elevate™ range of high performance Casement windows incorporate extra strong frames and sashes to provide outstanding strength and weather resistance. These systems are suitable for use in high wind load areas and have been successfully tested to 450Pa water resistance.

A range of latch and locking mechanisms are available. For very large Casement windows, Truth™ Hardware is the ideal choice. The winder mechanism combined with multi-point jamb latching provides excellent strength and closes the sash tightly against the frame.

Splayed or square beading options are available, giving you the flexibility to select the perfect look for your project. Square beads offer a flat, modern aesthetic whilst splayed beads provide a more traditional look.

Integrated flyscreens are available. Screens tuck neatly into the head and sill eliminating the need for unsightly screws or rivets.

When opened to the 90-degree position, external cleaning of the windows can be easily achieved.

Series 466 Architectural Casement Window

Series 467 Architectural Casement Window (Truth™)

Series 468 Architectural Casement Window (Truth™)





Sliding Windows

The Elevate™ range of sliding windows includes a variety of options, from basic residential sliding windows incorporated into commercial framing, to dedicated high-performance, heavy-duty commercial systems for the ultimate in performance and strength.

Series 452 Sliding windows incorporate standard residential sliding sashes in dedicated CentreGLAZE™ framing. The windows have a commercial appearance whilst providing an economical solution for applications where CentreGLAZE™ framing is used throughout.

Series 461 Apartment sliding windows deliver excellent wind and water performance results and are specifically designed for high-rise applications.

Series 462 Sliding windows incorporate dedicated commercial frame and sash and are ideal for applications where stronger, larger panels are desired. This system offers a bold, clean square aesthetic and is ideal for high-end residential or commercial applications.

Series 662 sliding windows are based on a 225mm frame platform. Series 701 sliding windows are the ideal choice to complement SlideMASTER™ doors.

Series 452 Commercial Sliding Window

Series 461 Apartment Sliding Window

Series 462 Commercial Sliding Window

Series 662 Commercial Sliding Window

Series 701 SlideMASTER™ Sliding Window





Double Hung Windows

Elevate™ double hung windows are a popular choice in both residential and commercial building applications. Some of the practical features of these windows are that they do not protrude over decks or walkways and are superb for ventilation.

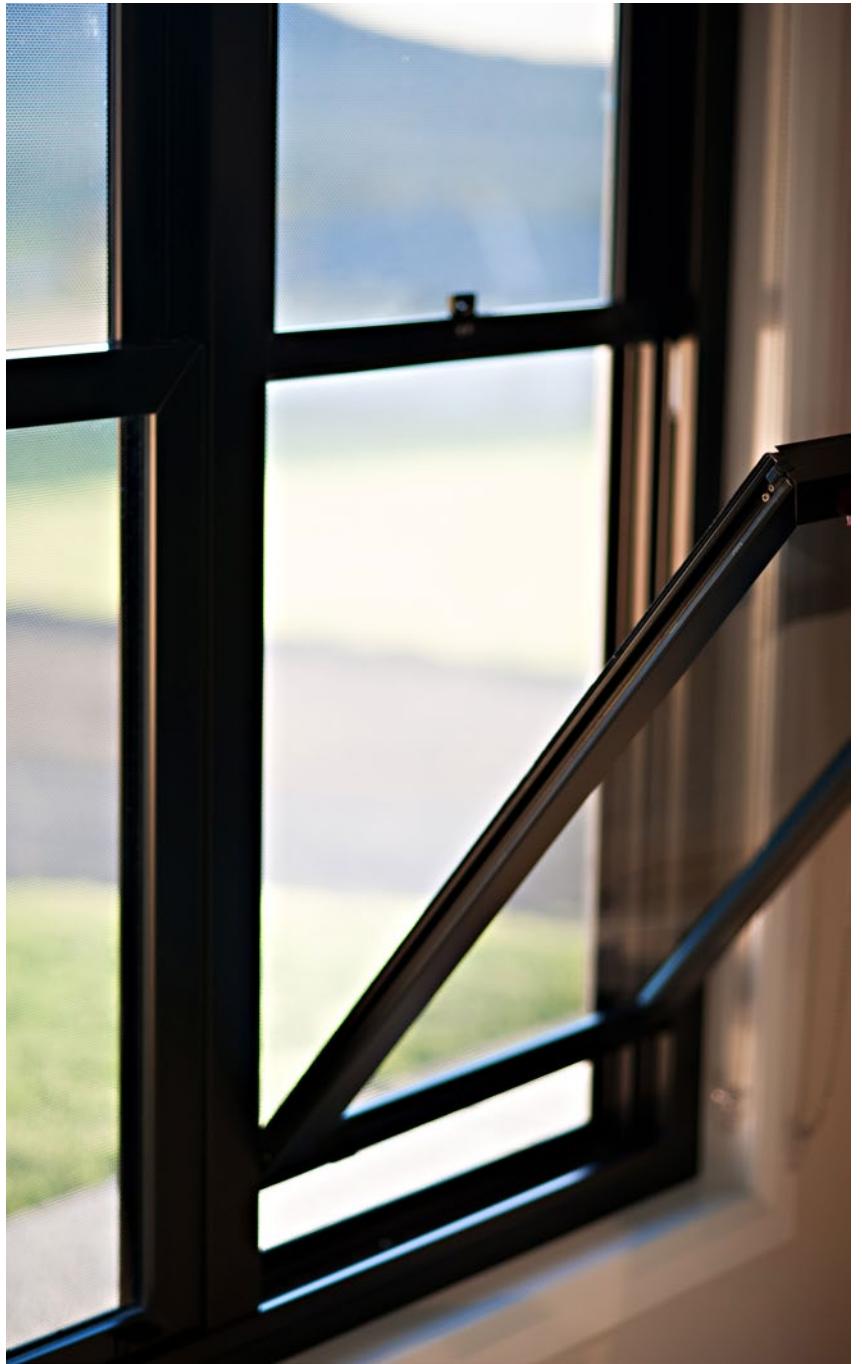
Series 453 incorporates the basic double hung residential sashes into bold square commercial framing with dedicated head, sill and jamb adaptors.

The Series 463 commercial architectural double hung window incorporates 30mm thick, heavy duty sashes to allow large panels to be achieved and will accommodate 20mm double glazing. This system allows both sashes to pivot inwards for convenient cleaning from the inside of the building and offers excellent weather performance, strength, sound reduction and security.

ClearVENT™ sashless Double-Hung windows can be incorporated into sliding and bi-fold door panels. These popular systems offer unobstructed views and excellent ventilation options.

-  Series 453 Commercial Double-Hung Window
-  Series 463 Architectural Double-Hung Window
-  Series 464 ClearVENT™ Sashless Double-Hung





Sun Control Shutters

Designed to create privacy and provide a sun screening system, sun control shutters can be fitted into a wide range of products including bi-fold windows and doors, sliding doors, awning windows, casement windows and commercial framing.

Unlike most shutters available, Elevate™ LouvreMASTER™ Shutters are operated with a sliding side bar to give a clean stylish appearance.

The shutter blades have a smooth, clean face and can be positioned to provide ventilation, privacy and sun control.





42 Sliding Doors

SlideMASTER™ Doors are designed to offer large, wide openings. The strong frame and sash enable wide panels to be created for unobstructed views.

Our sliding doors can be configured as multi-panel sliders. Corner sliding options are available, where doors meet at a 90-degree junction with no central mullion.

The Elevate™ Series 471 Apartment door is designed to provide a high-performance and economical solution for high-rise applications.

AWS has recently released a range of thermally broken commercial systems, and the Series 852 thermally broken door is designed to be used with thermally broken commercial framing and can be configured as a sliding door.

All Elevate™ doors can be screened using a traditional screening system or Centor™ Retractable Screen.

Centor™ E3 heavy duty overhead roller carriages can be fitted to a range of Elevate™ sliding door systems facilitating effortless operation of very large sliding door panels with minimal threshold impact.

Series 442 Commercial Stacking Sliding Door

Series 471 Apartment Sliding Door

Series 50 Commercial Door (Wraparound Sash)

Series 52 Commercial Door (Double Beaded)

Series 642 Commercial Stacking Sliding Door

Series 702 SlideMASTER™ Sliding Door (External Sliding)

Series 704 SlideMASTER™ Sliding Door (Internal Sliding)

Series 852 Thermally Broken Door





Courtyard House. Architect: Figr. Builder: Grundella Constructions. Photography: Tom Blachford.

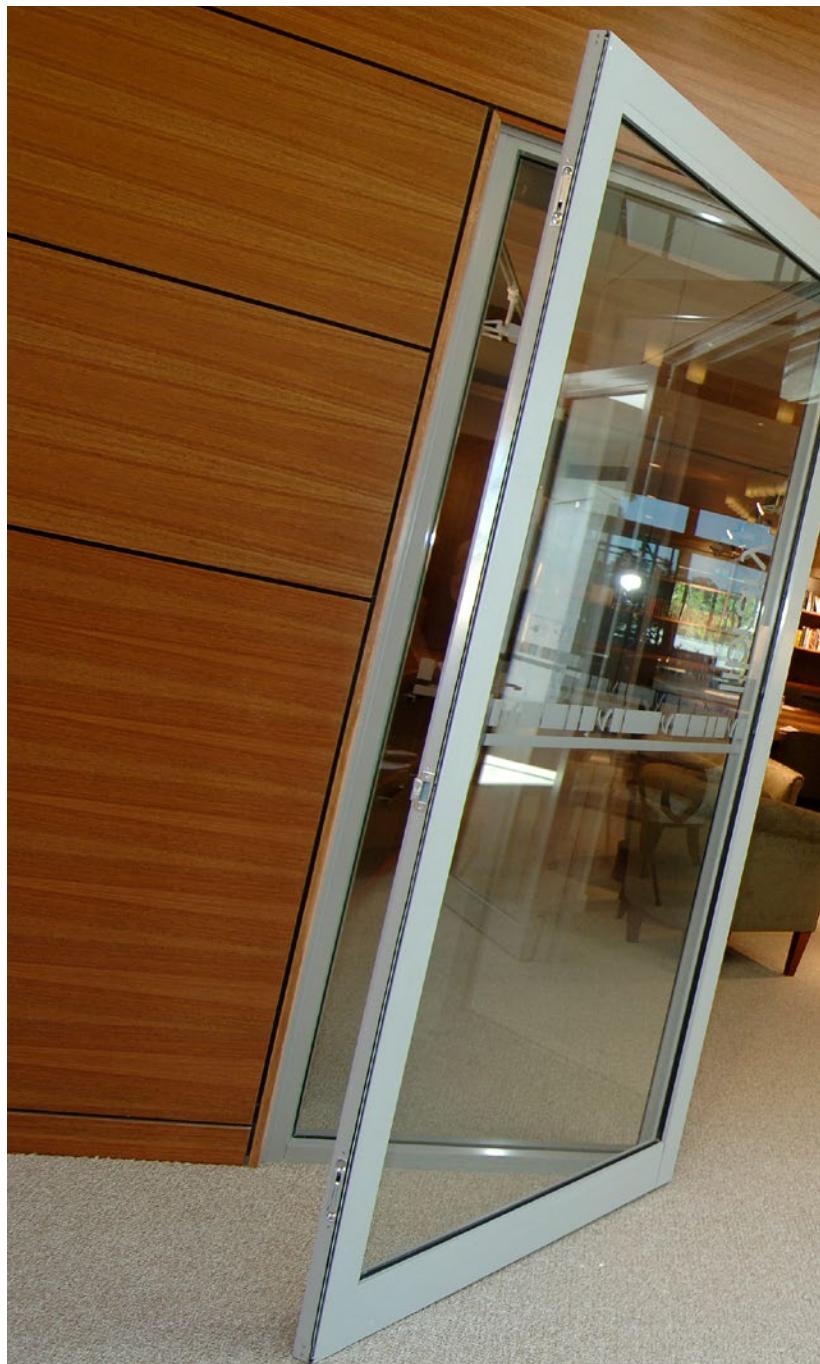
44 Hinged Doors

Unlike most commercial hinged doors on the market which are 44mm thick, Elevate™ hinged doors are based on a 50mm platform. The 50mm platform delivers up to 40% better strength than industry standard 44mm doors. The thicker door stiles easily support the weight of heavy glass and enable you to achieve true inline French door meeting stiles.

Elevate™ hinged doors are compatible with all Elevate™ framing systems and offer a range of beading options to suit your application.

Pivot doors are a popular choice in architecturally designed homes, incorporating a very wide door which pivots on a floor spring to achieve a dramatic wide opening. All Elevate™ hinged doors can be incorporated into a pivot door application.

Elevate™ Aluminium Systems has recently released a range of thermally broken commercial systems, and the Series 852 thermally broken door is designed to be used with thermally broken commercial framing and can be configured as a hinged or pivot door.



Series 50 Commercial Door (Wraparound Sash)

Series 51 Light Commercial Door

Series 52 Commercial Door (Double Beaded)

Series 650 Architectural Hinged Door (150mm)

Series 852 Thermally Broken Door



46 Bi-fold Doors

Elevate™ Bi-fold doors incorporate extra strong stiles to enable large bold panels to be created.

Panels with heights of up to 3m and widths of 1m can be achieved subject to site conditions. Bi-folds can be configured to stack in one direction or as bi-parting units.

Elevate™ offers two styles of bi-fold systems. The bottom hung system supports door panels at the sill, with heavy duty roller carriages supporting the panel weight and offering smooth, reliable operation. As weight is supported at the sill, highlights can be fitted above the bi-fold panels. The bottom hung rollers are ideal for timber wall construction, as there is no reliance on the lintel overhead to carry the panel weight.

The top hung system supports panel weight at the head, reducing the need for a large sill, allowing low line and recessed sill options. Stainless steel hinges and hanging gear supports door panels of 80kg. This system is ideal for applications where large heavy door panels will be used, and a steel or concrete lintel overhead can support panel weight.

Centor™ retractable screens can be fitted behind all bi-fold door systems.

Series 410 FoldMASTER™ (Bottom Rolling)

Series 411 ViewMASTER™ (Top Hung)

Series 412 FoldMASTER™ (Bottom Rolling Centor™)

Series 831 Thermally Broken Bi-Fold Door (Top Hung)

Series 832 Thermally Broken Bi-Fold Door (Bottom Rolling)



Manly Skiff Club. Architect: Sutech. Windows: MidCity Windows. Photography: Andrew Warn.



Retractable Flyscreens.

The SIE 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 Elevate™ Bi-fold and Sliding doors.

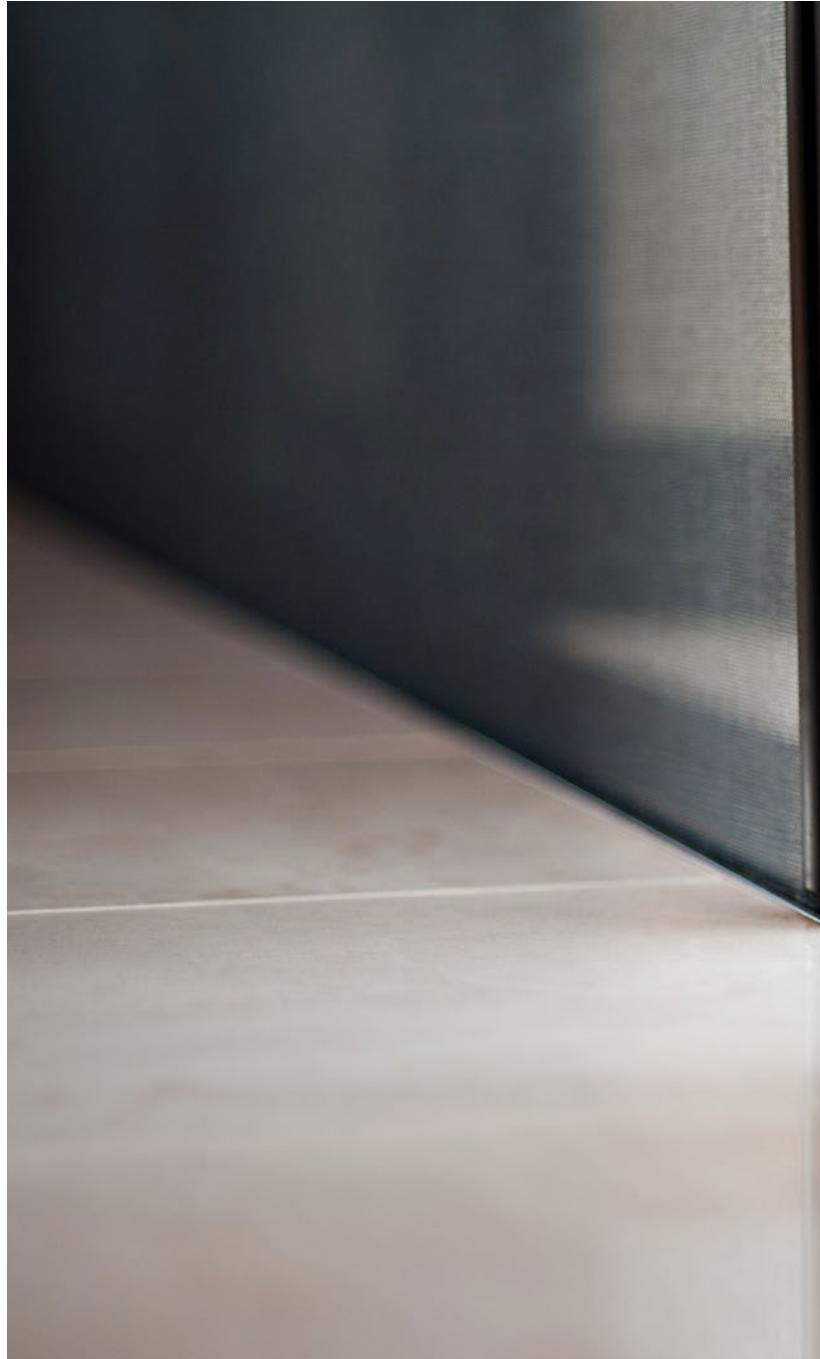
SIE allows homeowners to have complete control of their living environment and can be installed in single or bi-parting configurations. SIE retracts horizontally and discreetly into its frame when not in use a revolutionary solution for those who refuse to compromise on style.

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 3.9m and up to 7.6m wide, a bi-parting system is used.

NB Maximum span of 3.9m refers to the Centor™ screen. For installation with Elevate™ systems, screen may be larger than specified door size. Consult an AWS fabricator for advice on this system.

Centor™ Retractable flyscreens can be fitted behind Series 410 and 411 Bi-fold doors as well as Series 702 and 704 SlideMASTER™ doors. Speak to your Elevate™ Aluminium Systems fabricator about adding these innovative systems to your project.







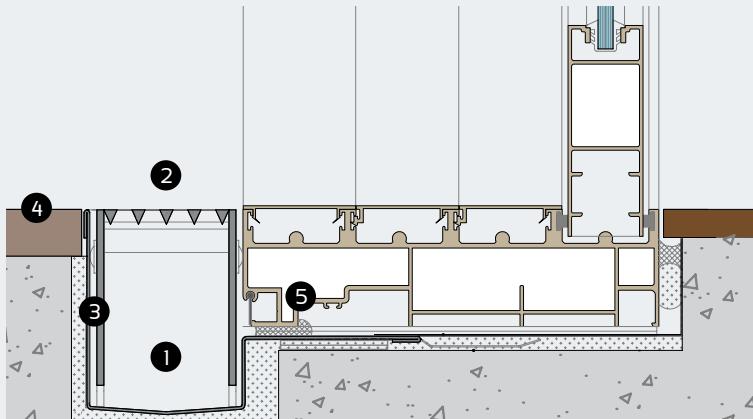
Budgong House. Architect: Ben Vitale, Vitale Design. Windows: DLG Aluminium & Glazing. Photography: Nicholas Watt

Integrated Stainless Steel Threshold Drain.

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.



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.

Why choose FlowTHRU™?

The only fully tested threshold drainage solution available for Elevate™ and ThermalHEART™ door systems proven performance.

Tested in a NATA accredited laboratory, the AWS FlowTHRU™ drain has been proven to perform alongside Elevate™ 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 Elevate™ 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 Elevate™ 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 Elevate™ 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.



PROJECT FEATURES.

The innovative design and exceptional features of the Elevate™ range of systems make them suitable for a wide variety of commercial and high-end residential applications. From beautiful architecturally inspired homes to high-rise commercial structures, Elevate™ Aluminium Systems can deliver the performance and design outcomes you desire. The following pages showcase some fantastic projects utilising Elevate™ Aluminium Systems.

54



56



58



Courtyard House.



There's nothing like a cleared block of land to give you an idea of exactly how the elements will impact your building plans.

Armed with absolute knowledge of what they were fighting, the owners of a once-barren demolition site in the heart of Melbourne's Templestowe Lower approached architects, Fig, to design a building that met the challenges of the site's location while creating the illusion of grand proportion.

The result is a picturesque idyll of soothing lines, open spaces and checkerboard-green, flanked by gardens, and wrapped around a breathtaking, centrally-located courtyard.

From almost every room of Courtyard House, the use of AWS Magnum black powdercoated sliding doors allows the owners to enjoy the courtyard at any time of day or night.



Huge expanses of Viridian ComfortPlus double-glazing from K&B Windows also ensure the home is protected from the intense heat of summer as well as the fierce chill of the Melbourne winter. In addition, the massive sliding doors create welcome cross-ventilation throughout the beautiful living areas, reducing the need for expensive cooling and heating, and playing a large part in meeting strict sustainability standards.

Inside, Silvertop ash ceilings flow into a bulkhead over the exterior deck, for a seamless linear connection between spaces and a stunning visual integration of blue sky, green grass and dark foliage.

Meanwhile, the hallway follows the curved line of the building's western wall which is punctuated with tall windows that flood the home with pristine morning light.

The outcome of this close collaboration between owner, builder, architect and fabricator is a perfect balance of modern indoor living and the great outdoors a sheltered oasis of beautiful design and big ideas, nestled in quiet suburbia.

Bendigo Library.



The Bendigo Library was originally built in 1983. The complex had serviced the local community in its two-storey structure for over 30 years and was a well-known complex within Bendigo.

As of late, the building has become dated and was poorly integrated with the adjoining car park and streets. The building required a renovation and upgrade to its facilities, whilst maintaining its reference to the adjacent Town Hall as well as some key historical features.

MGS Architects won the tender for the site's redevelopment, and started the project by working with the spatial elements they already had in the existing building. The architects took visual cues from nearby buildings as well as the current site for design inspiration. MGS Architects were required to ensure the heritage of the building was somewhat maintained.

The redevelopment included ensuring the new site was enticing to the local community and enhanced the interplay of light throughout the building. The building



was to be light-filled and inspirational, with the aim of encouraging creativity and productivity in the community.

The building is transparent with large glass panes and windows and doors throughout, enabling visual connections to the park and Bendigo community. The project required a high quality window and door system that allowed for large span glazing whilst remaining durable.

Local aluminium window and door manufacturers ACMEI Windows and Doors were chosen to complete the extensive glazing for this project. ACMEI assisted MGS Architects and the builders to decide upon the perfect window and door system for this refurbishment.



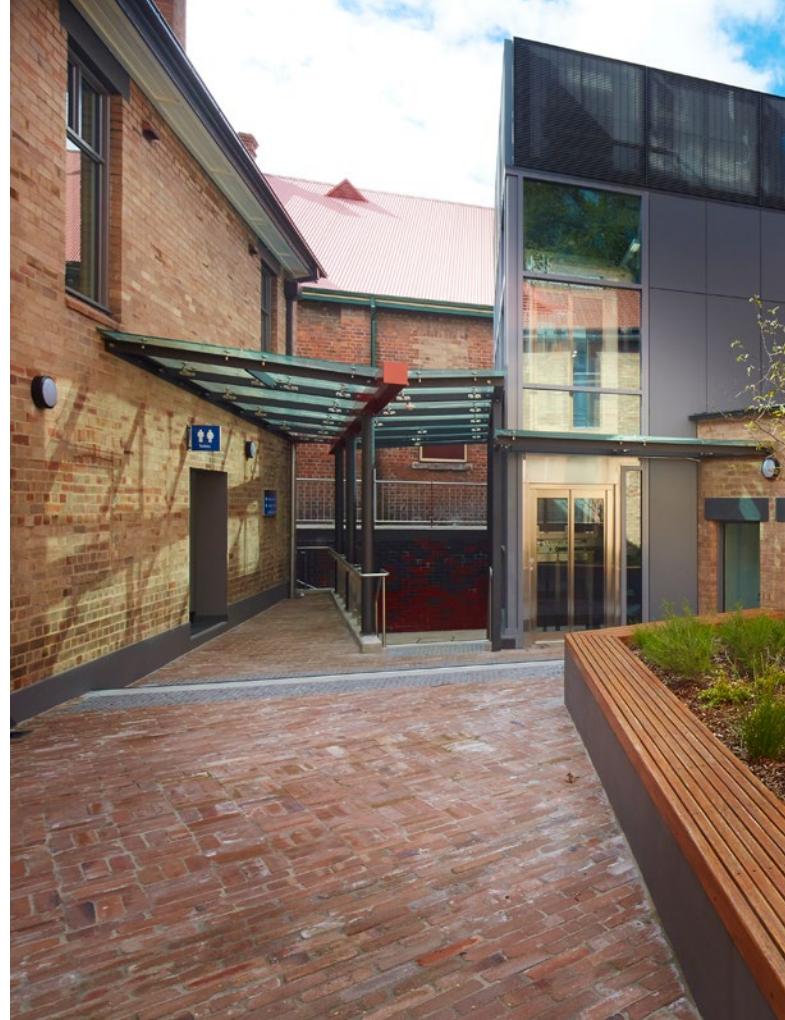
The Elevate™ Aluminium Joinery range of aluminium windows and doors was used for this project due to its durability and flexibility. The Elevate™ range is custom made, ensuring the architects received the perfect glazing solution for their unique design.

Series 626 Double Glazed, Front Glazed framing is used to frame the external glazing that surrounds the building. This commercial framing alongside double glazing has ensured minimal artificial heating and cooling in this extreme weather climate. Series 400 Single Glazed, Centre Glazed framing is used for internal glazed floor to ceiling windows and doors.



Since the upgrade, over 55,000 people have passed through the library each month, which is an increase of over 25 per cent. With renewed links to Town Hall and the retail precinct of Bendigo, the library has become a new place for the exchange of ideas and interaction within the community.

58 **UWS Lithgow**



Nestled in the foothills of the magnificent Blue Mountains, on the western side of the Great Dividing Range, Lithgow is an historic NSW town with a strong industrial heritage dating back to the 1800s.

When plans were formed to establish a University of Western Sydney (UWS) Outreach Campus in an old, rundown building in Lithgow's civic precinct, it's no surprise the project team were so committed to maintaining its old-world charm while ensuring sensitivity to the local environment.

The brief was to transform the former Charles H Hoskins Memorial Institute, built in 1927, into a contemporary learning facility, while retaining the building's original character and ensuring energy efficiency. TKD Architects was engaged to take on the project.

While the exterior of the building retains its original facade, the neglected brickwork has been restored to its former glory. An ancillary wing was also demolished and replaced with a glass lobby flooding the interiors with an abundance of natural light.



Due to the extreme weather and extensive glazing, it took 15 months of careful consulting on U-values and SHGC before the team found the perfect products and materials. Window and door manufacturers, Evolution Window Systems worked closely with TKD Architects to ensure the building maintained a comfortable temperature in both winter and summer while delivering the requisite energy savings and cost efficiencies. Because the site is located on a busy main road, noise reduction was also a major consideration.



To contend with such large expanses of glass in a dramatic curtain-wall application, a thermal break with double glazing was also a must.

Evolution suggested the ThermalHEART™ Series 804 and 826, and the Series 852 Hinged Door as they deliver excellent thermal performance and are ideal for commercial and high-end residential applications where minimising heat or cold transfer is a priority.



BEHIND THE SCENES.

Elevate™ Aluminium Systems is committed to offering Australian designed, fully tested commercial window and door systems to the Australian market. Through a process of almost constant evolution, Elevate™ Aluminium Systems has maintained an unsurpassed reputation for design and performance excellence. Elevate™ represents dedication to precision, flexibility in design and unrivalled technical support.

Design and Innovation.

All Elevate™ window and door systems are designed locally for Australian conditions by Architectural Window Systems (AWS). AWS maintains a constant drive to refine, improve and modernise its aluminium profiles to enhance good looks, performance and manufacturability. This dedication to making the best aluminium windows and doors has won Elevate™ a loyal and growing following among architects, builders, homeowners and specifiers.

Research and Development.

The AWS 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 Elevate™ window and door systems can be tested and researched to ensure compliance with building codes and relevant industry standards.

Unrivalled Service.

The Elevate™ brand is proudly designed and extruded in Australia by Architectural Window Systems. AWS technical staff have in excess of 120 years experience in the aluminium window and door industry. In addition to developing some of the most innovative aluminium joinery products in Australia, AWS technical services staff maintain a level of support to fabricators unrivalled in the window industry.



GENERAL INFORMATION

Choosing an Elevate™ Aluminium Systems 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 building colour or contrast with it, AWS Commercial offer over 80 powder coat and 10 anodising tones to choose from.

Window and Door Hardware.

Options include the bold ICON™ range of stainless steel hardware for a truly architectural look. Don't forget that custom colouring your hardware to the joinery always gives an attractive result.

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.

System Portfolio.

Elevate™ Aluminium Systems offer a range of windows and doors to suit the requirements of your project and budget. Choose from Commercial Framing or Architectural Series systems to achieve the perfect look and maximum functionality for your project.

64 Choose your Colours.

Choosing a colour for your window and door systems requires careful thought. All Elevate™ Aluminium Systems are made to order, so you have complete freedom to choose the perfect colour and finish for your project.

Elevate™ Aluminium Systems 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 Elevate™ fabricator.

It offers a wide colour selection and highlights some of the most popular architectural joinery powder coat colours.

When you select a powder coat colour from the AWS Commercial standard colour range, matching window and door hardware is easy and affordable.

Anodising.

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



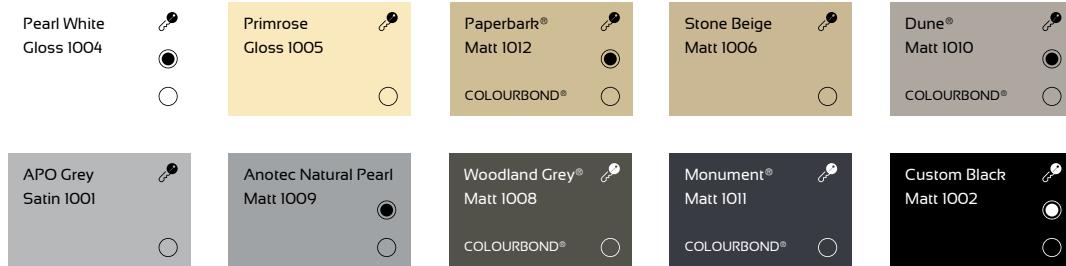
Dual Colour.

In addition to its exceptional thermal properties, an added advantage of ThermalHEART™ joinery is the ability to achieve a dual colour finish. If you want to make a dramatic colour statement in your project, ThermalHEART™ systems might just be the way to go.

The innovative ThermalHEART™ joining method allows for a different choice of finish, to complement both internal and external finish palettes. The result? One finish on the outside, another on the inside, and unprecedented colour flexibility.

Read more about **Dual Colour** on page 27.

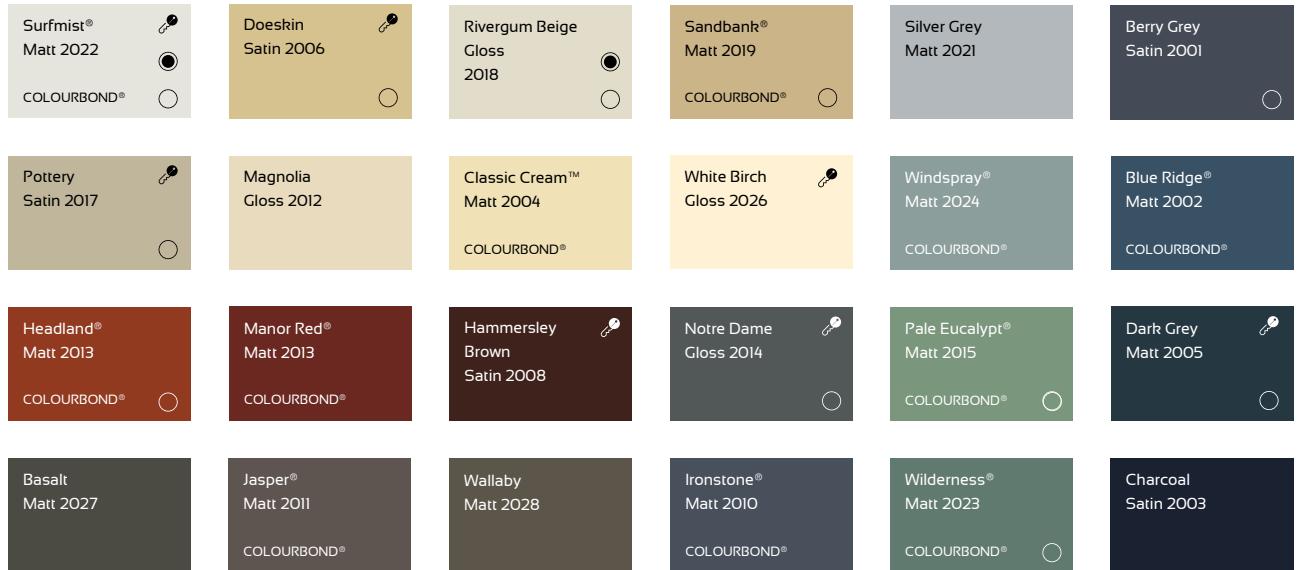
Standard Colours.



Selected Pearls.



Popular Colours.

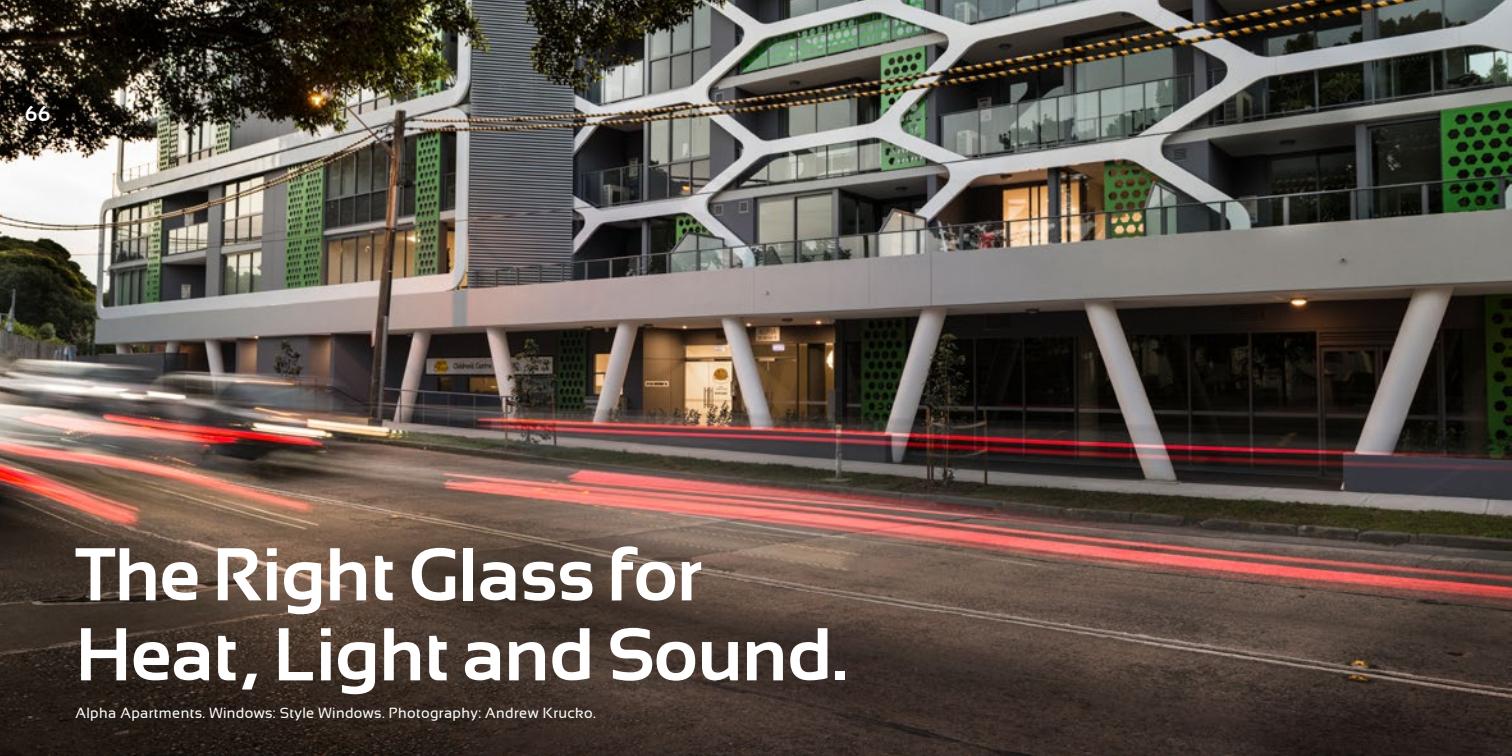


 Colour Matched Hardware Available

ThermalHEART® Single Finish/External Colour

ThermalHEART® Internal Colour

IMPORTANT NOTE Finishes shown on these pages are a guide only and are not accurate representations of actual powder coat finishes. Please request powder coat swatches from your local fabricator for accurate colour matching.



The Right Glass for Heat, Light and Sound.

Alpha Apartments. Windows: Style Windows. Photography: Andrew Krucko.

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.

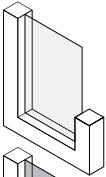
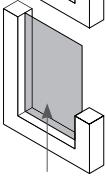
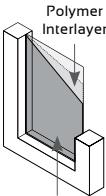
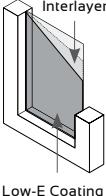
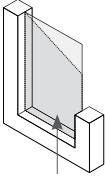
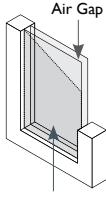
High performance glass can be used to overcome site limitations and demanding window orientations so you can enjoy your views without compromising window size and your home's energy efficiency.

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 extreme weather and intruders.

Comparing the Performance 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. |
|---|--|---|--|---|
|  Ordinary Glass | Glass thickness 4mm 6mm | | | |
| | VFloat™ Toned Improved solar heat reduction over ordinary glass: Toned up to 32% more effective |  |  | |
| | VFloat™ Supertoned Supertoned up to 59% more effective |  |  | |
|  Toned Glass | | | | |
|  SmartGlass™ SI Clear | 6.38mm Grade A safety glass. Improved solar heat reduction over ordinary glass: Clear up to 39% more effective | |  |  |
| | SmartGlass™ SI Grey / Neutral Green/Grey up to 41% more effective Neutral up to 40% more effective |  |  |  |
|  Low-E Coating | | | | |
|  Low-E Coating | SmartGlass™ SP10 Glass thickness 4mm 6mm Up to 39% better insulation than ordinary glass. | |  |  |
| | SmartGlass™ SP30 SmartGlass™ SP35 Low E insulation with a choice of solar protection performance for residential applications. |  |  |  |
|  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. |  |  |  |
| | LightBridge™ Toned |  |  |  |

← The first step in solar heat reduction for sunny climates.
 A tone reduces glare and solar heat absorption for hot climates and demanding orientations.

← 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.

← IGUs provide the best all-round performance. Great insulator and perfect for both hot and cold climates.

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.

68 **Hardware.**

The stunning ANDO™ and ICON™ ranges.





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 Elevate™ Aluminium 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™.



Developed to complement the modern design and clean lines of the Architectural Series, the ANDO™ range brings a fresh, 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™ Sliding window mortice lock
- ANDO™ Sliding door 'D' handle
- ANDO™ Hinged door lock
- ANDO™ Bi-fold activator
- ANDO™ Chainwinder

Note: Images are not to scale.





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

Note: Images are not to scale.



74 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 printed 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 tags, illustrated to the right, to assist you in selecting the ideal window or door system for your project.



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



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.



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



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



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

| | | AS2047 | BAL40 | SAFE4KIDS | CYCLONE | ACOUSTICS |
|-------------------|---|--------|-------|-----------|---------|-----------|
| COMMERCIAL SERIES | Series 50 Commercial Door | ■ | ■ | N/A | | |
| | Series 51 Commercial Door | ■ | | N/A | | |
| | Series 52 Commercial Door | ■ | ■ | N/A | ■ | |
| | Series 442 Commercial Stacking Sliding Door | ■ | | N/A | | |
| | Series 452 Commercial Sliding Window | ■ | ■ | ■ | | |
| | Series 453 Commercial Double-Hung Window | ■ | | ■ | | |
| | Series 456 Commercial Awning Window | ■ | ■ | ■ | | |
| | Series 461 Apartment Sliding Window | ■ | ■ | ■ | | |
| | Series 471 Apartment Sliding Door | ■ | ■ | N/A | | |
| | Series 642 Commercial Stacking Sliding Door | ■ | | N/A | | |
| | Series 662 Sliding Window | ■ | | ■ | | |
| | Series 668 Awning/Casement Window | ■ | | ■ | | |
| SPECIALTY | Series 531 SoundOUT™ Sliding Window | N/A | N/A | N/A | | ■ |
| | Series 532 SoundOUT™ Casement | N/A | N/A | N/A | | ■ |
| | Series 533 SoundOUT™ Sliding Door | N/A | N/A | N/A | | ■ |

| | | | | | | | |
|---|---|---|---|-----|-----|---|--|
| THERMAL | Series 804 Thermally Broken CentreGLAZE™ (100mm) | ■ | ■ | N/A | | ■ | |
| | Series 806 Thermally Broken CentreGLAZE™ (150mm) | ■ | ■ | N/A | | | |
| | Series 824 Thermally Broken FrontGLAZE™ (100mm) | ■ | ■ | N/A | | | |
| | Series 826 Thermally Broken FrontGLAZE™ (150mm) | ■ | ■ | N/A | | | |
| | Series 831 Thermally Broken Bi-fold Door (Top Hung) | ■ | ■ | | | | |
| | Series 832 Thermally Broken Bi-fold Door (Bottom Rolling) | ■ | ■ | | | | |
| | Series 852 Thermally Broken Commercial Door | ■ | ■ | N/A | | | |
| COMMERCIAL FRAMING | Series 400 CentreGLAZE™ SG (102mm) | ■ | ■ | N/A | ■ | ■ | |
| | Series 620 CentreGLAZE™ (150mm) | ■ | | N/A | | | |
| | Series 424 CentreGLAZE™ DG (102mm) | ■ | ■ | N/A | ■ | ■ | |
| | Series 624 CentreGLAZE™ DG (150mm) | ■ | ■ | N/A | ■ | | |
| | Series 406 FrontGLAZE™ SG (102mm) | ■ | ■ | N/A | | | |
| | Series 606 FrontGLAZE™ SG (150mm) | ■ | ■ | N/A | | | |
| | Series 426 FrontGLAZE™ DG (102mm) | ■ | ■ | N/A | ■ | | |
| | Series 626 FrontGLAZE™ DG (150mm) | ■ | ■ | N/A | ■ | | |
| | Series 646 SoundOUT™ FrontGLAZE™ | ■ | | | | ■ | |
| | Series 80 Narrow Offset (80mm) | ■ | | N/A | | | |
| | Series 105 Office Partition System | | | | | ■ | |
| | Series 600 Wide Offset (150mm) | ■ | ■ | N/A | | | |
| | Series 407 Faceline™ (102mm) | ■ | | N/A | | | |
| | Series 607 Faceline™ (150mm) | ■ | | N/A | | | |
| | Series 936 CentreGLAZE™ (225mm) | ■ | | | ■ | ■ | |
| | ARCHITECTURAL SERIES | Series 417 LouvreMASTER™ | | | | | |
| | | Series 410 FoldMASTER™ Bi-fold (Bottom rolling) | ■ | ■ | N/A | | |
| Series 411 ViewMASTER™ Bi-fold (Top Hung) | | ■ | | N/A | | | |
| Series 412 FoldMASTER™ Bi-fold (Bottom rolling) | | ■ | | | | ■ | |
| Series 462 Architectural Sliding Window | | ■ | ■ | ■ | | | |
| Series 463 Architectural Double-Hung Window | | ■ | | ■ | | | |
| Series 464 ClearVENT™ Sashless Double-Hung | | ■ | | ■ | | | |
| Series 466 Awning Window | | ■ | ■ | ■ | | ■ | |
| Series 466 Casement Window | | ■ | | ■ | | ■ | |
| Series 467 Awning/Casement Window (Truth™) | | ■ | | ■ | | | |
| Series 468 Awning/Casement Window (Truth™) | | ■ | | ■ | | | |
| Series 662 Sliding Window | | ■ | | ■ | | | |
| Series 668 Awning/Casement Window (Truth™) | | ■ | | ■ | | | |
| Series 650 Architectural Hinged Door | | ■ | ■ | N/A | | | |
| Series 701 SlideMASTER™ Sliding Window | | ■ | | ■ | | | |
| Series 702 SlideMASTER™ Sliding Door | | ■ | | N/A | | | |
| Series 704 SlideMASTER™ Sliding Door | | ■ | | N/A | | ■ | |

■ Denotes system has been tested to comply with relevant standards. N/A = Standard not applicable to this system.

76 System Portfolio.



Commercial Series

- Series 50 Commercial Door
- Series 51 Commercial Door
- Series 52 Commercial Door
- Series 442 Commercial Stacking Sliding Door
- Series 452 Commercial Sliding Window
- Series 453 Commercial Double-Hung Window
- Series 456 Commercial Awning Window
- Series 461 Apartment Sliding Window
- Series 471 Apartment Sliding Door
- Series 642 Commercial Stacking Sliding Door
- Series 662 Sliding Window
- Series 668 Awning/Casement Window



Commercial ThermalHEART™

- Series 804 Thermally broken CentreGLAZE™(100mm)
- Series 806 Thermally broken CentreGLAZE™(150mm)
- Series 824 Thermally broken FrontGLAZE™(100mm)
- Series 826 Thermally broken FrontGLAZE™(150mm)
- Series 831 Thermally Broken Bi-Fold Door (Top Hung)
- Series 832 Thermally Broken Bi-Fold Door (Bottom Rolling)
- Series 852 Thermally broken Commercial Door

NEED HELP SELECTING YOUR WINDOWS AND DOORS?

The AWS specifier team can help you develop your window and door specifications.

Contact us via email at techsupport@awsaustralia.com.au



Commercial Framing

- Series 400 CentreGLAZE™ Single Glazed (102mm) Framing
- Series 620 CentreGLAZE™ Wide (150mm) Framing
- Series 424 CentreGLAZE™ Double Glazed (102mm) Framing
- Series 624 CentreGLAZE™ Double Glazed (150mm) Framing
- Series 406 FrontGLAZE™ Single Glazed (102mm x 50mm) Framing
- Series 606 FrontGLAZE™ Single Glazed (150mm x 50mm) Framing
- Series 426 FrontGLAZE™ Double Glazed (102mm x 60mm) Framing
- Series 626 FrontGLAZE™ Double Gazed (150mm x 60mm) Framing
- Series 646 FrontGLAZE™ SoundOUT
- Series 80 Narrow Offset Framing (80mm)
- Series 600 Wide Offset Framing (150mm)
- Series 407 FaceLINE™ Framing (102mm)
- Series 607 FaceLINE™ Framing (150mm)
- Series 936 CentreGLAZE™ (225mm)
- Series 105 Office Partition System



Architectural Series

- Series 417 LouvreMASTER™
- Series 410 FoldMASTER™ Bi-fold Door
- Series 411 ViewMASTER™ Bi-fold Door
- Series 412 FoldMASTER™ Bi-fold Door
- Series 462 Architectural Sliding Window
- Series 463 Architectural Double-Hung Window
- Series 464 ClearVENT™ Sashless Double-Hung
- Series 466 Architectural Awning/Casement Window
- Series 467 Architectural Awning/Casement Window
- Series 468 Architectural Awning/Casement Window
- Series 662 Sliding Window
- Series 665 Awning Window
- Series 668 Awning/Casement Window
- Series 650 Architectural Hinged Door (150mm)
- Series 701 High Performance SlideMASTER™ Sliding Window
- Series 702 High Performance SlideMASTER™ Sliding Door
- Series 704 High Performance SlideMASTER™ Sliding Door



The AWS Fabricator Network.

Across the country there are over 150 dedicated and highly trained licensed manufacturers of the Elevate™ Aluminium Systems 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 systems from the Elevate™ range of products.

The AWS 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 whom you can consult regarding all aspects of windows and doors, from energy ratings and glass selection, to choice of surface finishes and hardware.



Your Local Fabricator.



AWS fabricators are located throughout Australia in city and regional areas. To locate an Elevate Aluminium Systems fabricator who can assist you with your project, simply visit our website and click on "Where To Buy":

elevatealuminium.com.au

Photo courtesy of AVS Windows and Doors.



Sensational Showrooms.

Everclear Windows & Doors Showroom. Photography: Tom Ferguson.

AWS 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.

Elevate™ Aluminium Systems 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 Elevate™ Aluminium 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. Elevate™ 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.





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