# ELEVATE DESIGN

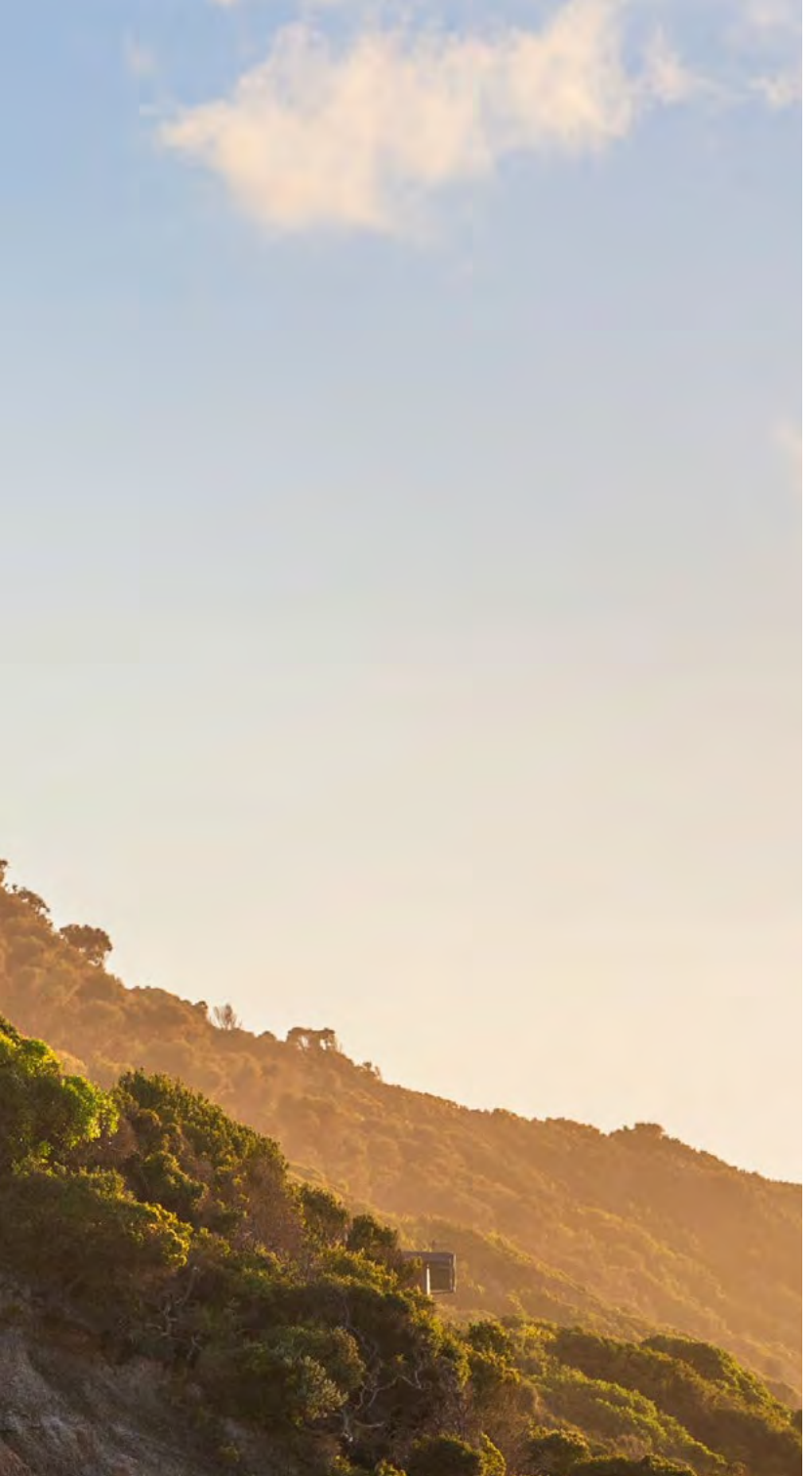
ARCHITECTURALLY INSPIRED SYSTEMS FOR SUPERIOR STYLE & PERFORMANCE

ELEVATE
ALUMINIUM SYSTEMS

COMMERCIAL ALUMINIUM GLAZING BY AWS



Pole House. Architect: F2 Architecture. Windows: Bradfords Glass & Aluminium. Photography: Matt Lord



# TAKE YOUR IDEAS TO NEW HEIGHTS WITH CREATIVE GLAZING SOLUTIONS BY ELEVATE ALUMINIUM SYSTEMS

At 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 glazing 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.

Take your ideas to new heights with Elevate™ Aluminium Systems.


AWS
AWS
AWS

# SPECIFIER SUPPORT

## WE ARE COMMITTED TO PROVIDING SUPPORT TO ARCHITECTS AND SPECIFIERS. AT AWS, WE'RE HERE TO HELP.

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 systems 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

# UNDERSTANDING OUR SYSTEMS

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 you select the system you desire.

## 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.

## 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.

## 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.

## 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.




# CONTENTS

**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**

Merewether Residence.
Architect: Bourne Blue Architecture.
Windows by AVS Windows and Doors.

# SPECIAL FEATURES





# FRAMING SYSTEMS

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. A recent addition to this range is the innovative selection of Commercial ThermalHEART™ systems which offer substantial improvements in thermal performance.

## 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.

Scots School. Architect: NBRS+P Architects. Windows: DLG Aluminium & Glazing. Photos courtesy of DLG Aluminium & Glazing.

# 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)

Photo courtesy of MidCity Windows.

Photo courtesy of All Weather Windows.

# 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.

Our standard FrontGLAZE™ systems are available in 102mm, 150mm and 225mm.

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 to allow the integration of Awning and Casement windows into framing.

Single and double glaze framing options are available as well as structurally glazed mullions.

- Series 406 FrontGLAZE™ SG (102mm x 50mm)
- Series 606 FrontGLAZE™ SG (150mm x 50mm)
- Series 646 SoundOUT™ FrontGLAZE™
- Series 426 FrontGLAZE™ DG (102mm x 60mm)
- Series 626 FrontGLAZE™ DG (150mm x 60mm)
- Series 936 FrontGLAZE™ DG (225mm)
- Series 824 Thermally Broken FrontGLAZE™ (100mm)
- Series 826 Thermally Broken FrontGLAZE™ (150mm)

Charles Sturt University. Architect: Jovaras Westland. Windows by DLG Aluminium & Glazing.

# FACELINE™ FRAMING

The Elevate™ FaceLINE™ framing system has been designed to highlight and complement the clean lined façades 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 façade. 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-jambs 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)

Windows by DLG Aluminium & Glazing.

# THERMALLY BROKEN COMMERCIAL 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 TECHNOLOGY

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.

The Flannery Centre. Architect: Crawford Architects. Windows by Bathurst Glass.



# IT'S WHAT'S INSIDE THAT COUNTS

## ThermalHEART™ extrusions incorporate a unique insulating strip.

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.



Cimitiere House. Architects: GSA Architecture.
Windows: Glass Supplies. Photography courtesy of Glass Supplies.

# HOW THERMALHEART™ WORKS

## COLD CLIMATE

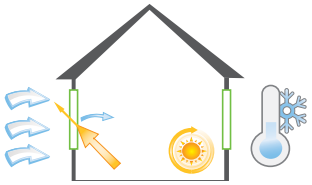
In cold climates, ThermalHEART™ window systems can:

1. Drastically reduce the outside 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.

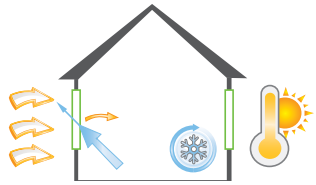
## WARM CLIMATE

In a warm climate, ThermalHEART™ systems:

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.



COLD CLIMATE



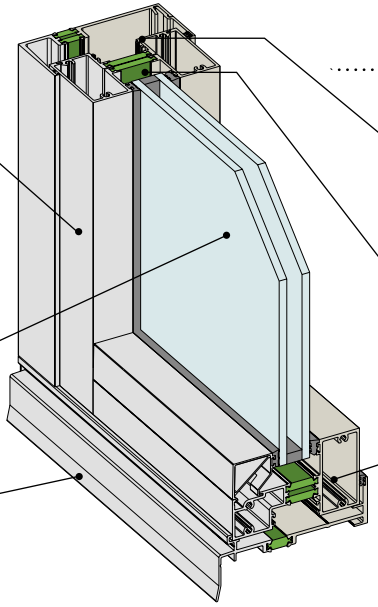
WARM CLIMATE

# UNIQUE FEATURES

**EXTERNAL ALUMINIUM EXTRUSION**
separated from internal extrusion by thermal break to deliver excellent thermal performance

**IGU THICKNESS UP TO 24MM**
use IGU 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

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 the window 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 COEFFICIENT

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.

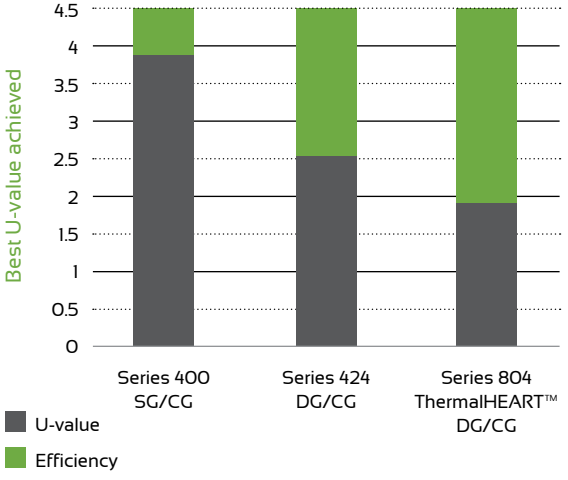
## HOW THERMALHEART™ COMPARES

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.

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

When compared with non-thermally broken double glazed CentreGLAZE™ framing, ThermalHEART™ systems deliver a performance improvement in the range of 24%.

## COMPARISON OF U-VALUES BY FRAME TYPE




## SERIES 400

CentreGLAZE™ FRAMING NON-THERMALLY BROKEN SGz

| 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 | 6.38SnGy/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 | 6.38SnGy/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 |

# A SOLUTION FOR SECTION J

## GOT A SECTION J MIGRAINE? THERMALHEART™ IS YOUR PAIN RELIEF




Kinghorn Motors Nowra. Architect: Art House Building Design. Windows by Hanlon Windows Australia.

Over the past five years, government requirements on energy efficiency in commercial buildings have become ever 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.

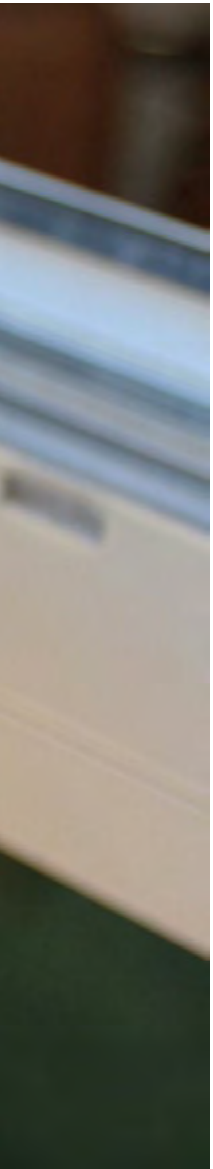
## THE KINGHORN MOTORS SECTION J STORY

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.

# DUAL COLOUR OPTIONS

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?

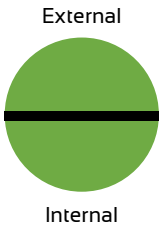
It's true. Most of us are aware that dark colours absorb heat. Actually, rather than thinking of them as absorbers of heat, it is important to understand that darker colors are better absorbers of light. When light is absorbed by a dark object, the energy carried by the light doesn't just disappear. 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.

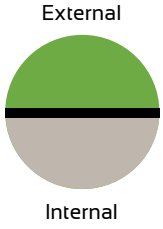
### SINGLE FINISH

The same finish appears on the internal and external extrusion surfaces. Select any finish from the primary ThermalHEART™ finish card.




### DUAL FINISH

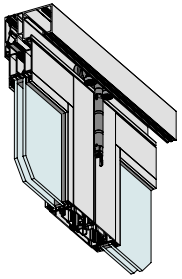
A different finish appears on the internal and external extrusion surfaces. External: select any finish from the primary ThermalHEART™ finish card. Internal: select from the Internal Finish Palette .



# THERMALHEART™ : A COMPREHENSIVE RANGE

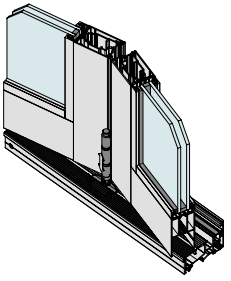
To achieve excellent thermal performance, ThermalHEART™ systems incorporate an innovative polyamide insulator strip which separates the internal and external elements of the extrusion.

We offer a comprehensive range of ThermalHEART™ systems to help you maximise efficiency and comfort.



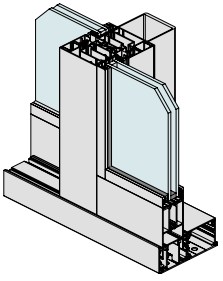
## SERIES 831 THERMALLY BROKEN BI-FOLD DOOR (TOP ROLLING)

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 accepts 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.



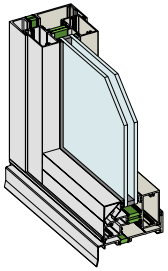
## SERIES 832 THERMALLY BROKEN BI-FOLD DOOR (BOTTOM ROLLING)

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 accepts 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.



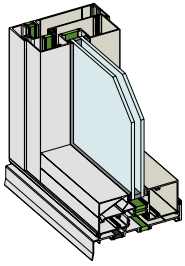
## SERIES 852 THERMALLY BROKEN COMMERCIAL DOOR

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 sills 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.



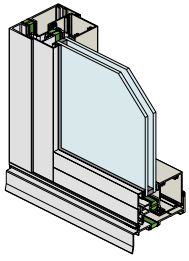
## SERIES 804 THERMALLY BROKEN CENTREGLAZE™ FRAMING (100MM)

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.



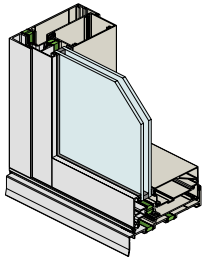
## SERIES 806 THERMALLY BROKEN CENTREGLAZE™ FRAMING (150MM)

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)

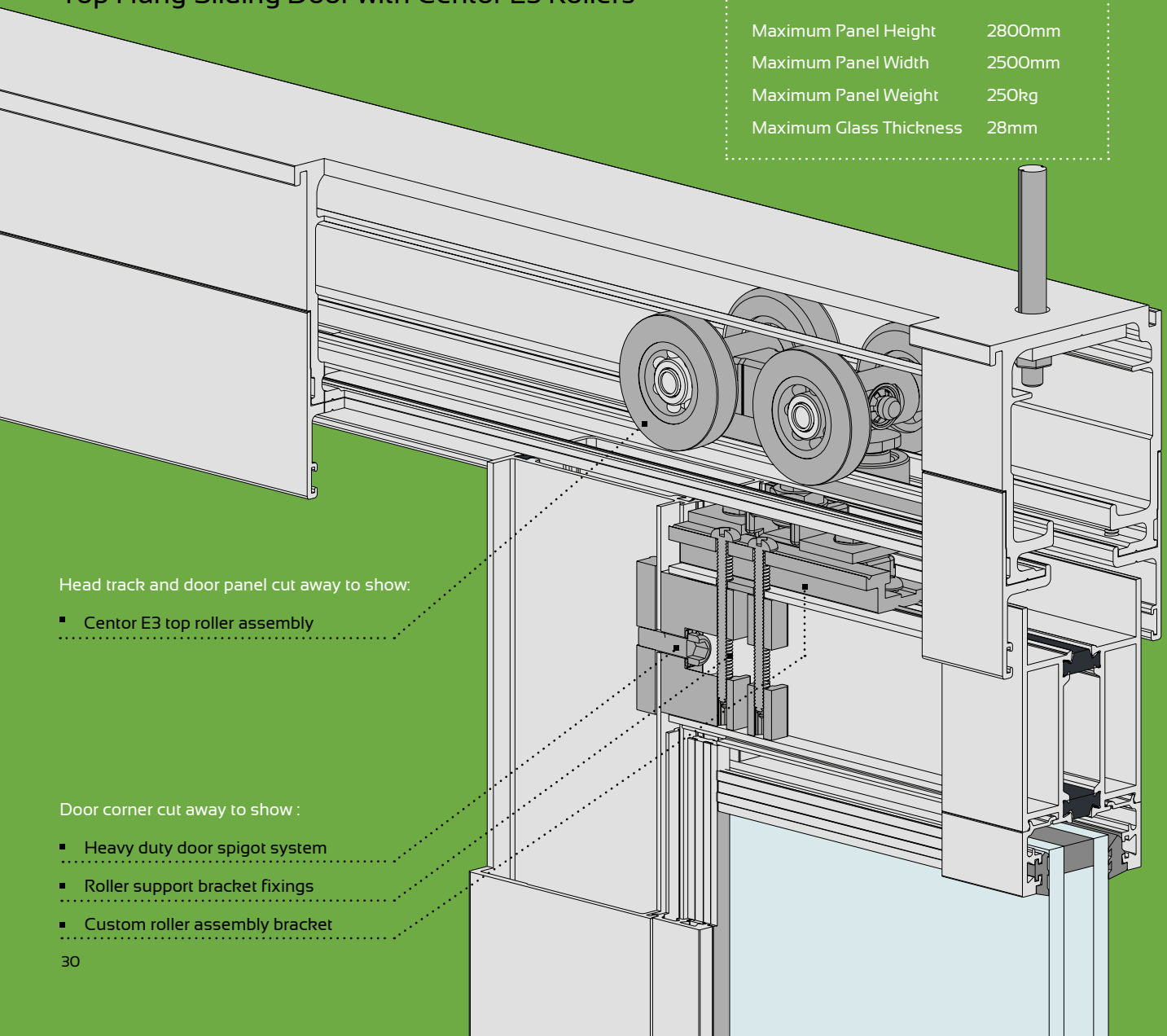
Series 826 FrontGLAZE™ shopfront frames with ThermalHEART™ technology measure 150mm x 60mm and are specifically designed to accept 24mm Insulating Glass Units (IGUs) with glass positioned close to the front of the frame. Series 826 can be supplied with external or internal glazing, and has a wide range of thermally broken sub-frames to cover most installations.

# SERIES 852
# Thermally Broken Door
## Top Hung Sliding Door with Centor E3 Rollers

**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 |



Head track and door panel cut away to show:

- Centor E3 top roller assembly

Door corner cut away to show :

- Heavy duty door spigot system
- Roller support bracket fixings
- Custom roller assembly bracket

## 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 panels incorporating double glazing. By supporting the weight of the panel at the head, the system offers smooth operation and reduces the force required to operate the door

- 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

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.

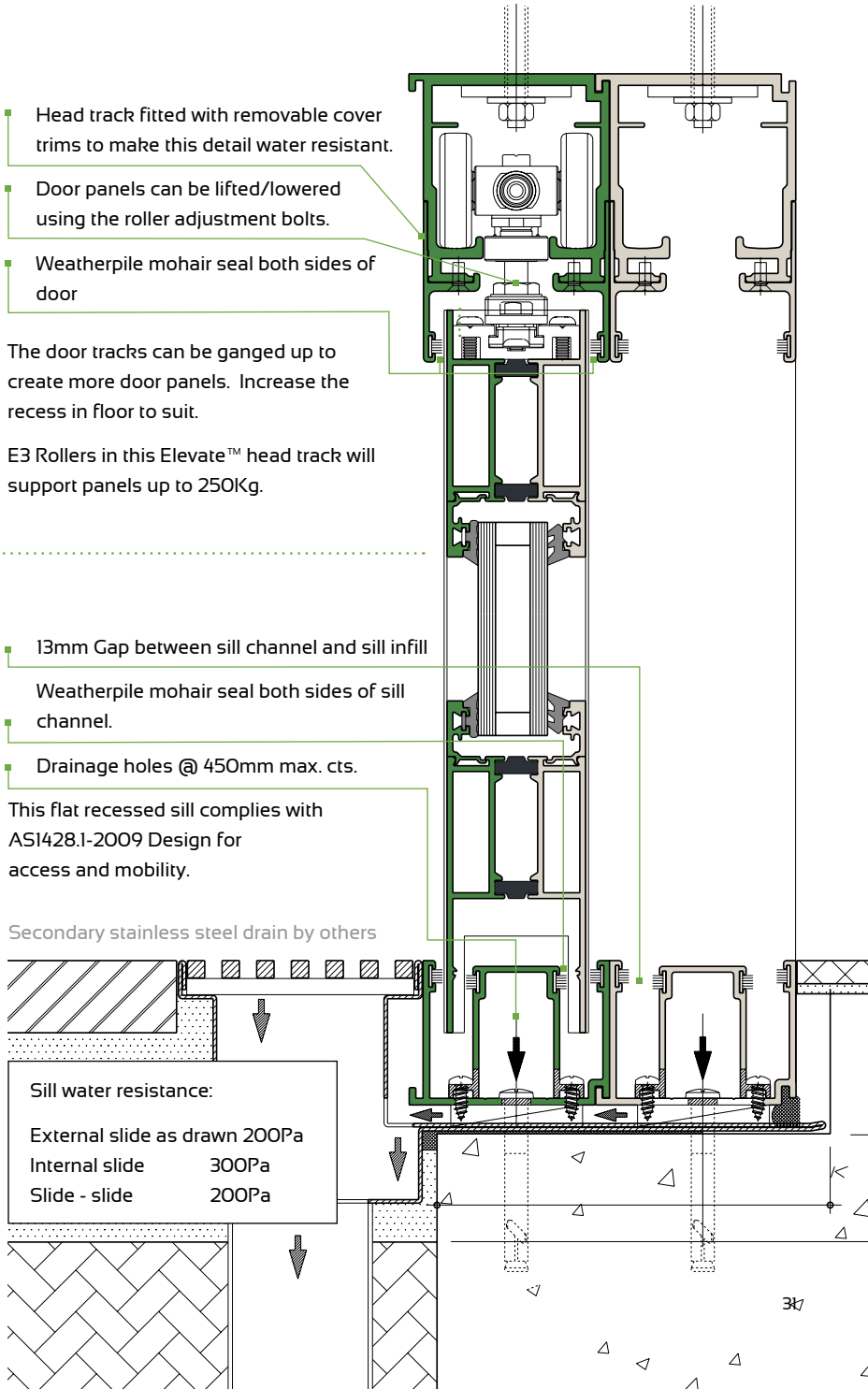
## Sill Detail

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.

- 13mm Gap between sill channel and sill infill
- Weatherpile mohair seal both sides of sill channel.
- Drainage holes @ 450mm max. cts.

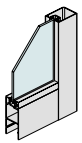
This flat recessed sill complies with AS1428.1-2009 Design for access and mobility.

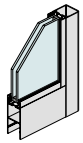
Secondary stainless steel drain by others




### OTHER SYSTEMS

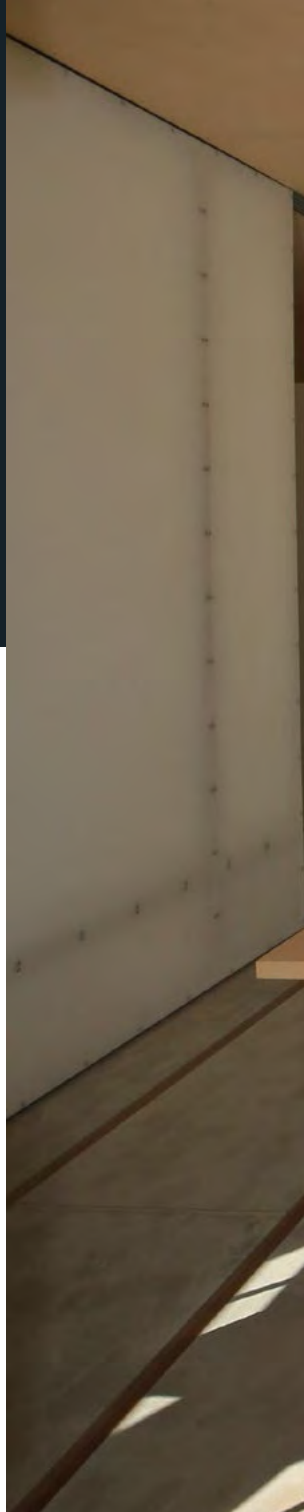
Centor E3 Rollers are also available on Series 50 & 52 commercial doors.


Series 50


Series 52

# 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™ Commercial hinged doors are based on a 50mm frame platform. The 50mm doors deliver significantly higher strength and performance characteristics, enabling large bold panels to be achieved. AWS Commercial hinged doors can be installed as traditional hinged doors, French doors or stylish pivot doors.

## SENSATIONAL SLIDERS

Elevate™ Sliding doors deliver smooth, reliable operation; large, wide openings; and an impressive array of configuration options 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-fold doors give you increased flexibility in design. We offer two Bi-fold systems: one top hung, where all of the load is supported at the head of the door; and one 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.

Beach Pavillion. Building Designer: Clare Design. Windows: Window Makers. Photography: Peter Hyatt.

# 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 unexpected passing showers.

The Elevate™ range of high performance Awning windows incorporate extra strong frame and sashes to provide outstanding strength and weather resistance. These systems are suitable for use in high wind load areas.

A range of latch and locking mechanisms are available, from simple cam handles to manual 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 in incumbent weather.

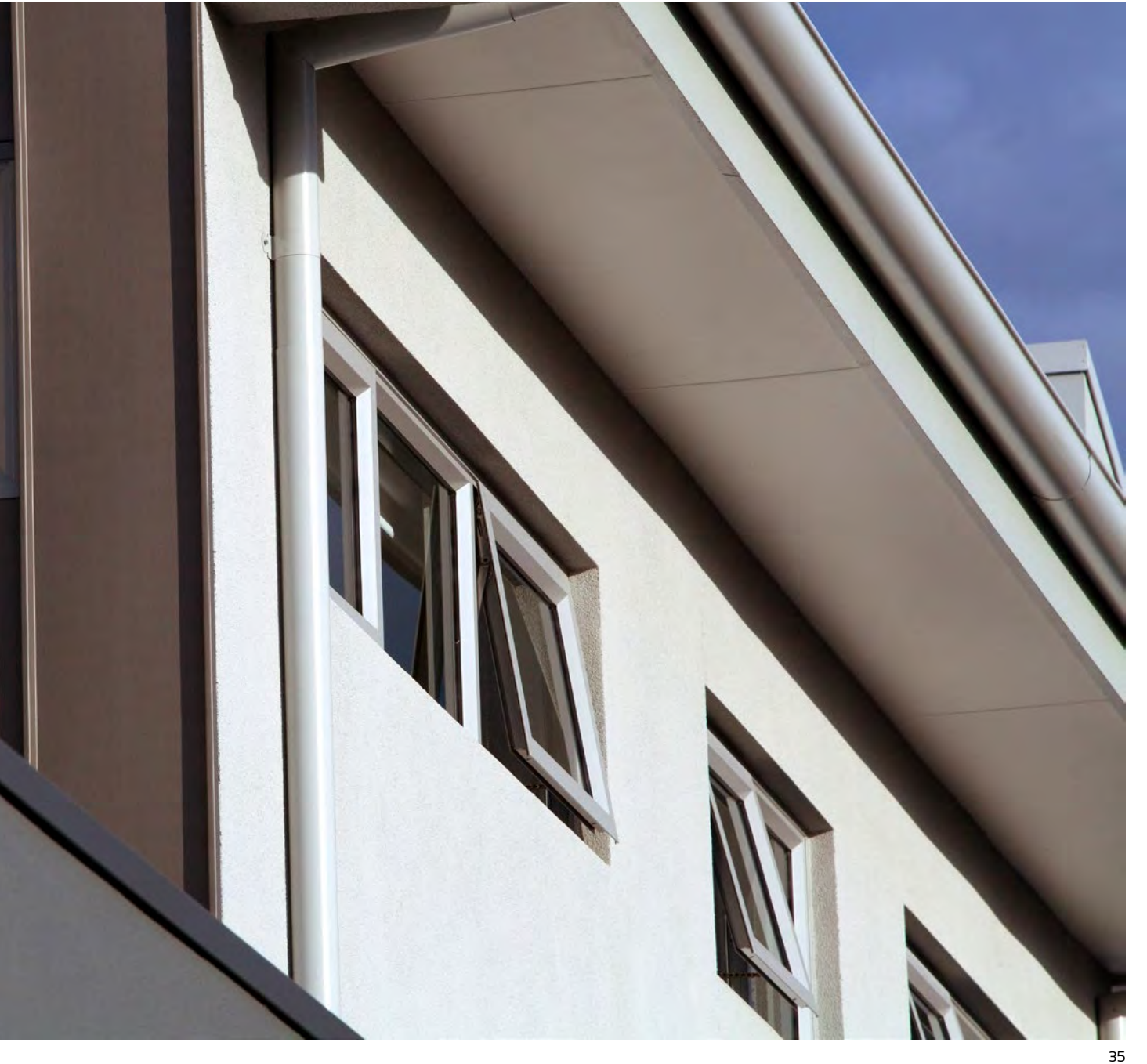
For very large Awning windows, Truth™ Hardware is the ideal choice. The scissor winding mechanism provides excellent strength and closes the sash tightly against the frame.

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™)

Kew House. Windows: Regency Windows. Photography: Robert Hamer.



# 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.

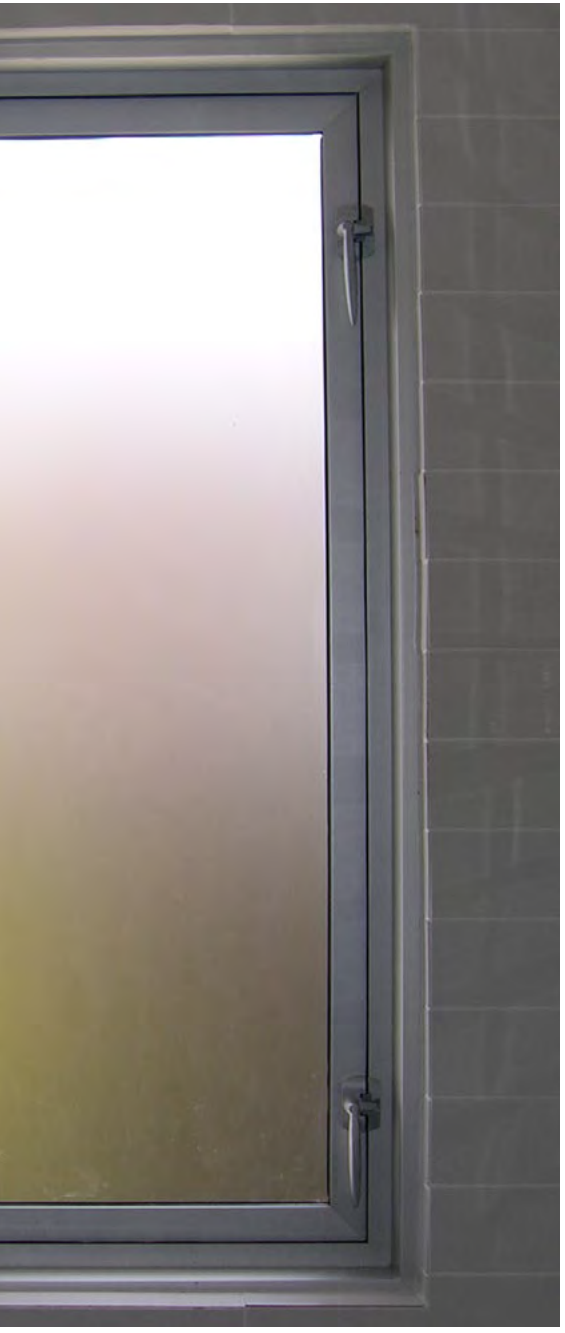
A range of latch and locking mechanisms are available. For very large Casement windows, Truth™ Hardware is the ideal choice. The winder mechanism combined with multi-point jamb latching provides excellent strength and closes the sash tightly against the frame.

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™)



Cootamundra House. Architect: Andrew Verri Architects.
Windows: Taylors Window Supplies Photography: Geoff Comfort.

# 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 delivering 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

Pearl Beach Residence. Architect: Potonga Design. Windows by Superior Windows.

# 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

360 Degree Exposure. Architects: Warren & Janette Brokenborough
Windows by Scope Windows & Doors.

# 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.

Series 417 LouvreMASTER™ Sun Control Shutters

Windows by Manly Aluminium.

# 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 also 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 471 Apartment Sliding Door
- Series 50 Heavy Duty Commercial Sliding Door (Wraparound Sash)
- Series 52 Heavy Duty Commercial Sliding Door (Double Beaded)
- Series 702 SlideMASTER™ Sliding Door (External Sliding)
- Series 704 SlideMASTER™ Sliding Door (Internal Sliding)
- Series 852 Thermally Broken Door

Windows by Superior Windows.
Note: a custom sill detail is used in this application.

Hunters Hill. Windows by MidCity Windows.

# 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 Heavy Duty Commercial Hinged Door (Wraparound Sash)
- Series 51 Light Commercial Door
- Series 52 Heavy Duty Commercial Hinged Door (Double Beaded)
- Series 650 Architectural Hinged Door (150mm)
- Series 852 Thermally Broken Door

Yeronga Apartments. Architect: McNab Developments.
Windows by Queensland Windows.

# 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™ Bi-Fold Door (Bottom Rolling)
- Series 411 ViewMASTER™ Bi-Fold Door (Top Hung)
- Series 412 FoldMASTER™ Bi-Fold Door (Bottom Rolling Centor™)
- Series 831 Thermally Broken Bi-Fold Door (Top Hung)
- Series 832 Thermally Broken Bi-Fold Door (Bottom Rolling)

Pearl Beach Residence. Architect: Potonga Design. Windows by Superior Windows.

Kingston Residence. Architect: TT Architecture. Windows by Viewco Glass.

# RETRACTABLE FLYSCREENS

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 Elevate™ Bi-fold and Sliding doors.

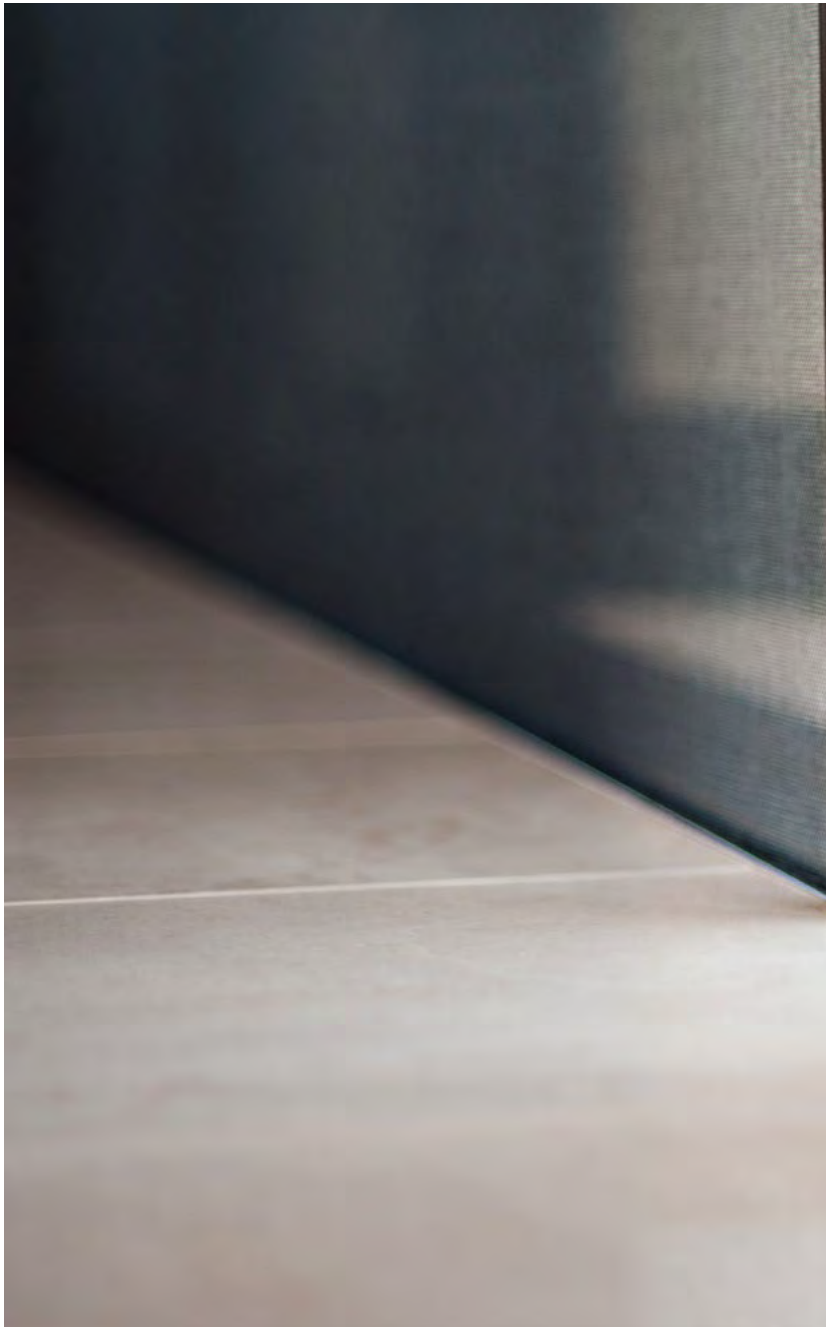
S1E allows homeowners to have complete control of their living environment and can be installed in single or bi-parting configurations. S1E retracts horizontally and discreetly into its frame when not in use a revolutionary solution for those who refuse to compromise on style.

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

For openings wider than 3.9m 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.



Toowoomba Home. Windows by Scope Windows and Doors.

# 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.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Glen Osmond Home. Architect: Marco Spinelli, Architects Ink. Windows by York Glass.
Photography: Hiro Ishino, courtesy of Ouwens Casserly Real Estate.



Glen Osmond Home. Architect: Marco Spinelli, Architects Ink. Windows by York Glass.
Photography: Hiro Ishino, courtesy of Ouwens Casserly Real Estate.

# GLEN OSMOND HOME

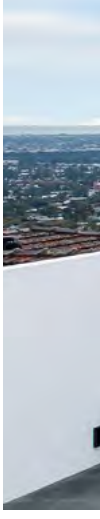
This amazing Glen Osmond home feels as though it is in the treetops, as it looks over the entirety of Adelaide from the living spaces. Located just south of the Adelaide CBD, Glen Osmond is a small suburb in South Australia, which is in the foothills of the Adelaide Hills. The clients wanted to create a home that was free flowing and sat on top of the hill, to maximise the use of their fortunate block.

The brief from the clients to architect Marco Spinelli of Architects Ink was to create a view in every room. Opening the house to the nature that surrounded this home was the most important factor for the architects to consider. The clients also required a home that was quite sustainable and didn't cost a lot to run.

The home has been designed by taking into account the clients, their needs and their lifestyle. The house has been created utilising two separate living spaces. Downstairs

is dedicated to the couple's sons who have their own bedrooms and study area, bathroom and lounge. Upstairs is where the indoor living meets the outside entertainment area, divided by a large sliding door. This is the focal point of the home, where the clients can bring their extended family together and create an open space for them to interact.

To ensure all views were maximised throughout the home, as per the clients' brief, a high quality window and door system was required. The architects also required a window and door system that provided custom, unique solutions for this home as well as an efficient, experienced manufacturer to ensure the glazing was accurate.





Glen Osmond Home. Architect: Marco Spinelli, Architects Ink. Windows by York Glass.
Photography: Hiro Ishino, courtesy of Ouwens Casserly Real Estate.

York Glass & Aluminium completed this project using the Elevate™ Aluminium Joinery range of windows and doors. York Glass worked closely with Marco Spinelli of Architects Ink as well as the clients to ensure a custom glazing solution that worked well for the house and climate.

Elevate™ Series 50 sliding doors were used to create the main indoor/outdoor living space. The multi-stacking doors fold back flush with each other to open up the focal living spaces in this project.

Louvre windows were used in bedrooms and living spaces to create cross ventilation throughout the home.

The windows and doors have been anodised in black for this application, to ensure durability despite being so exposed to the elements in this elevated location.

As the Elevate™ range of windows and doors have been designed, tested and manufactured in Australia, they have been created with the Australian climate in mind. The systems are energy efficient, allowing the clients large spans of glazing.

The strategic use of glazing in this home allows the clients' brief of maximising views to be met. There is a view from every room in the house, allowing the family to embrace their surrounds from the comfort of their home.


GLEN OSMOND HOME

# 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.

UWS Lithgow. Architect: TKD Architects. Windows by DLG Aluminium & Glazing. Photography by Tyrone Branigan.

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.

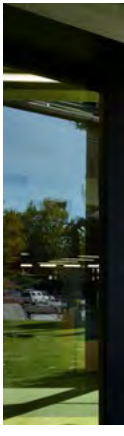
While the exterior of the building retains its original façade, the neglected brickwork has been restored to its former glory. An ancillary wing was also demolished and replaced with a glass lobby flooding the interiors with an abundance of natural light.

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.

# BENDIGO LIBRARY



Bendigo Library. Architect: MGS Architects. Windows by ACME1 Windows & Doors. Photography: Glenn Hester Photography.

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 ACME1 Windows and Doors were chosen to complete the extensive glazing for this project. ACME1 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.

Watch this project's Designer Notes:
**youtube.com/specifyaws**

# 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.

Desert House. Architect: Dunn & Hillam Architects. Windows by GGS Alice Glass & Aluminium. Photography: Kilian O'Sullivan.

# 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.

In addition to it's 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 in the ThermalHEART™ section on page 27.

## STANDARD COLOURS

Pearl White
Gloss 1004

Primrose
Gloss 1005

Paperbark®
COLOURBOND®
Matt 1012

Stone Beige
Matt 1006

Woodland Grey®
COLOURBOND®
Matt 1008

Dune®
COLOURBOND®
Matt 1010

APO Grey
Satin 1001

Anotec
Natural Pearl
Matt 1009

Monument®
COLOURBOND®
Matt 1011

Custom Black
Matt 1002

# SELECTED PEARLS

Citi®
Pearl Matt
3002

Precious Silver
Pearl Kinetic
Pearl Satin
3007

Stormfront
Pearl Matt
3004

Ultra Silver
Pearl Gloss
3006

Silver
Medallist
Pearl Satin
3005

Charcoal
Metallic
Gloss 3001

**KEY**

◯ ThermalHEART® Single Finish/External Colour

◉ ThermalHEART® Internal Colour

Colour Matched Hardware Available

**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 colour matching.

# POPULAR COLOURS

Silver Grey
Matt 2021

Surfmist®
COLOURBOND®
Matt 2022

Rivergum Beige
Gloss
2018

Magnolia
Gloss 2012

Pottery
Satin 2017

Headland®
COLOURBOND®
Matt 2013

Sandbank®
COLOURBOND®
Matt 2019

Doeskin
Satin 2006

Classic Cream™
COLOURBOND®
Matt 2004

White Birch
Gloss 2026

Manor Red®
COLOURBOND®
Matt 2013

Hammersley
Brown
Satin 2008

Jasper®
COLOURBOND®
Matt 2011

Wallaby
Matt 2028

Basalt
Matt 2027

Ironstone®
COLOURBOND®
Matt 2010

Charcoal
Satin 2003

Berry Grey
Satin 2001

Notre Dame
Gloss 2014

Dark Grey
Matt 2005

Blue Ridge®
COLOURBOND®
Matt 2002

Wilderness®
COLOURBOND®
Matt 2023

Pale Eucalypt®
COLOURBOND®
Matt 2015

Windspray®
COLOURBOND®
Matt 2024

Mercy Centre. Architect: JWP Architects.
Windows: DLG Aluminium & Glazing.

# THE RIGHT GLASS FOR HEAT, LIGHT AND SOUND

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

There are three main areas to consider when thinking about windows and glazing for your project:  natural light, solar heat gain and thermal conductivity.

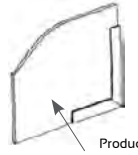
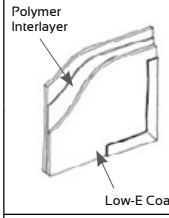
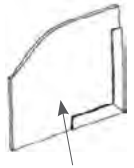
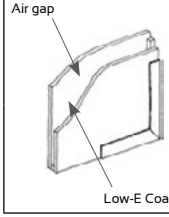
By choosing the right performance glass, you can enjoy your views and natural light while controlling UV and glare. Benefit from the natural warming effect of solar heat during winter and minimise its impact during summer, and insulate your home against excessive heat loss or gain.

By understanding your climate's heating and cooling needs, you can determine your overall glass selection priorities. Performance glass can also help to overcome site limitations so you can still enjoy your views without compromising your home's energy efficiency.

You can combine energy efficient glass with other options, including glass that reduces noise, provides protection from intruders and creates shelter from extreme weather to create the perfect windows for your building project.

# COMPARE THE PERFORMANCE OF SOME POPULAR GLASS CONFIGURATIONS

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 | ATTRIBUTES | GLARE REDUCTION | SOLAR HEAT REDUCTION | INSULATION |
|---|---|---|---|---|---|
| | Ordinary Glass | 4mm 6mm | | | |
|  Produced with colour right through the glass | Viridian VFloat™ Toned | 4mm 6mm<br>Toned offers up to 32% greater solar heat reduction than ordinary glass | | | |
| | Viridian VFloat™ Supertoned | Supertoned offers up to 59% greater solar heat reduction than ordinary glass | | | |
|  Polymer Interlayer Low-E Coating | Viridian ComfortPlus™ Clear | 6.38mm Grade A safety glass. Up to 39% better insulation than ordinary glass | | | |
| | Viridian ComfortPlus™ Green / Grey / Neutral | Green & Grey offers up to 41%, Neutral up to 40% greater solar heat reduction than ordinary glass | | | |
|  Low-E Coating | Viridian EVantage™ BlueGreen | Glass thickness 6mm<br>EVantage offers up to 48% greater solar heat reduction than ordinary glass. This is a reflective Low-E product which can be used in an IGU. | | | |
| | Viridian EVantage™ SuperGreen | | | | |
|  Air gap Low-E Coating | Viridian ThermoTech E™ Clear | Unit thickness 12mm 58mm<br>Up to 68% better insulation than ordinary glass | | | |
| | Viridian ThermoTech E™ Toned & Supertoned | | | | |

First step in solar heat reduction for sunny climates

High solar heat reduction for hot climates or demanding orientations, with no improvement in insulation

Good insulation with lower solar heat reduction for passive solar heating in cooler climates on northern orientations

High solar heat reduction with good insulation and glare reduction for greater comfort in hot climates or demanding orientations

High solar heat reduction for outstanding comfort in hot climates or demanding orientations

High solar heat reduction and superior insulation for outstanding comfort in hot climates or demanding orientations

* The performance indicated in the table is that of the highest performing product in that category for that characteristic, performance will differ by product. For detailed glass performance data visit www.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

## ANDO™, ICON™ & MIRO™

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™.

ando

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

# icon

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

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

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

The ICON™ range includes:

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

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

The smooth, ergonomic MIRO™ range offers good aesthetics as well as a comfortable hand grip with secure and convenient locking features.

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

The MIRO™ range includes:

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

# HARDWARE COMPATIBILITY

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

| | COMMERCIAL SERIES | | | | | | | ARCHITECTURAL SERIES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50/52 | 452 | 453 | 456 | 461 | 471 | 662 | 462 | 463 | 466 | 467 | 468 | |
| | Hinged | Sliding | D/hung | Awning | Sliding | Sliding | Sliding | Sliding | D/hung | Awning | Awning | Awning | |
| **ANDO™** | | | | | | | | | | | | | |
| Single Point Sliding Door Lock | | | | | | ■ | | | | | | | |
| Twin Point Sliding Door Lock | | | | | | ■ | | | | | | | |
| Slimline Sliding Door Lock | | | | | | ■ | | | | | | | |
| Sliding Door Handle (with mortice lock) | | | | | | | | | | | | | |
| Bi-fold Operator | | | | | | | | | | | | | |
| Locking Lever Handle (2-point) | | | | | | | | | | | | | |
| Locking Lever Handle (4-point) | ■ | | | | | | | | | | | | |
| Sliding Window Lock | | | | | ■ | | ■ | ■ | | | | | |
| Chainwinder | | | | ■ | | | | | | ■ | | | |
| Double Hung Window Lock | | | ■ | | | | | | ■ | | | | |
| **MIRO™** | | | | | | | | | | | | | |
| Single Point Sliding Door Lock | | | | | | ■ | | | | | | | |
| Sliding Door D-pull (with mortice lock) | | | | | | | | | | | | | |
| Bi-fold Operator | | | | | | | | | | | | | |
| Lever Handle (2-point) | ■ | | | | | | | | | | | | |
| Lever Handle (4-point) | ■ | | | | | | | | | | | | |
| Lever Handle (with lever compression lock) | ■ | | | | | | | | | | | | |
| Casement Latch | | | | ■ | | | | | | ■ | | | |
| **ICON™** | | | | | | | | | | | | | |
| Twin Point Sliding Door Lock | | | | | | ■ | ■ | ■ | | | | | |
| D-pull with ISEO lock | | | | | | | | | | | | | |
| Flush Pull (with mortice lock) | | | | | | | | | | | | | |
| Bi-fold Actuator | | | | | | | | | | | | | |
| 2-Point Hinged Door Lock | ■ | | | | | | | | | | | | |
| Multi-point (4) Hinged Door Lock | ■ | | | | | | | | | | | | |
| Lever Compression Hinged Door Lock | ■ | | | | | | | | | | | | |
| Casement Latch | | | | ■ | | | | | | ■ | | | |
| Sliding Window Lock | | | | ■ | | | ■ | ■ | | | | | |
| TRUTH™ Winder | | | | | | | | | | | ■ | ■ | |

| ARCHITECTURAL SERIES | | | | | | | COMMERCIAL THERMALHEART™ | | |
|---|---|---|---|---|---|---|---|---|---|
| 668 | 410 | 411 | 412 | 650 | 702 | 704 | 831 | 832 | 852 |
| Awning | Bi-fold | Bi-fold | Bi-fold | Hinged | Sliding | Sliding | Bi-fold | Bi-fold | Door |
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# ONE KEY SOLUTION

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

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

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

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

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

# 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 the tags illustrated here to assist you in selecting the ideal window or door system for your project. Delivering peace of mind always.


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 TESTED-CERTIFIED | BAL40 TESTED-CERTIFIED | SAFE4KIDS TESTED-CERTIFIED | CYCLONE TESTED-CERTIFIED | ACOUSTICS TESTED-CERTIFIED |
|---|---|---|---|---|---|---|
| COMMERCIAL SERIES | Series 50 Commercial Door | ■ | ■ | N/A | | |
| | Series 51 Commercial Door | ■ | | N/A | | |
| | Series 52 Commercial 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 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 | | ■ |



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

| | | | | | | |
|---|---|---|---|---|---|---|
| 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 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 | | ■ |

# SYSTEM PORTFOLIO

**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

## 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

## Commercial Series

Series 50 Commercial Door
Series 51 Commercial Door
Series 52 Commercial 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 662 Sliding Window
Series 668 Awning/Casement Window

## 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 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.

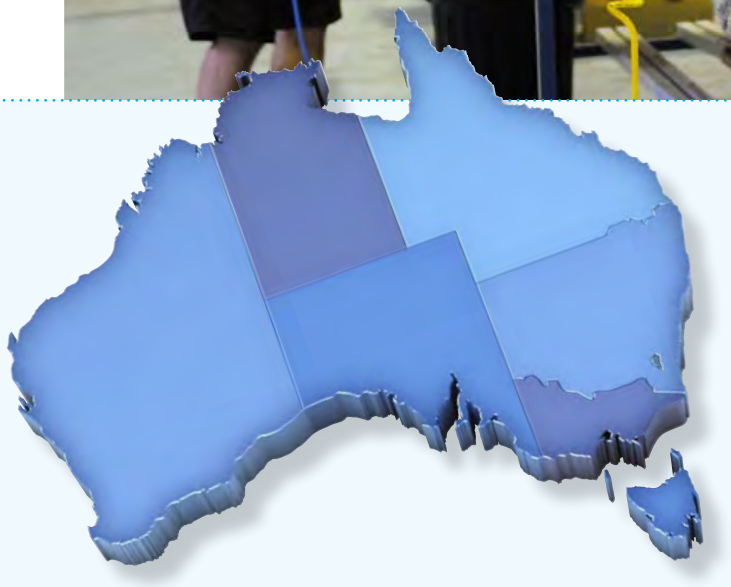
AWS takes great pride in ensuring the efficiency of our network and maintains a close relationship with our licensed manufacturers. This commitment offers you a high level of confidence in selecting or specifying systems from the Elevate™ range of products.

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.



Photos courtesy of Midcoast Windows.



Photos courtesy of AVS Windows and Doors.

# 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, please visit our website

ELEVATEALUMINIUM.COM.AU

and click on "Where To Buy"

# SENSATIONAL SHOWROOMS


Photos courtesy of Taylors Windows.

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.

To locate your nearest showroom, click on the "Find a Fabricator" link on the Elevate™ Aluminium Systems website **elevatealuminium.com.au**



Photos courtesy of Warrnambool Window Systems.



Merewether Residence. Architect: Bourne Blue Architecture. Windows by AVS Windows and Doors.

Come See the All New

# SPECIFYAWS.COM.AU


ELEVATE
ALUMINIUM SYSTEMS

AWS
ARCHITECTURAL WINDOW SYSTEMS PTY LTD

**ABN** 48 067 950 903
elevatealuminium.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