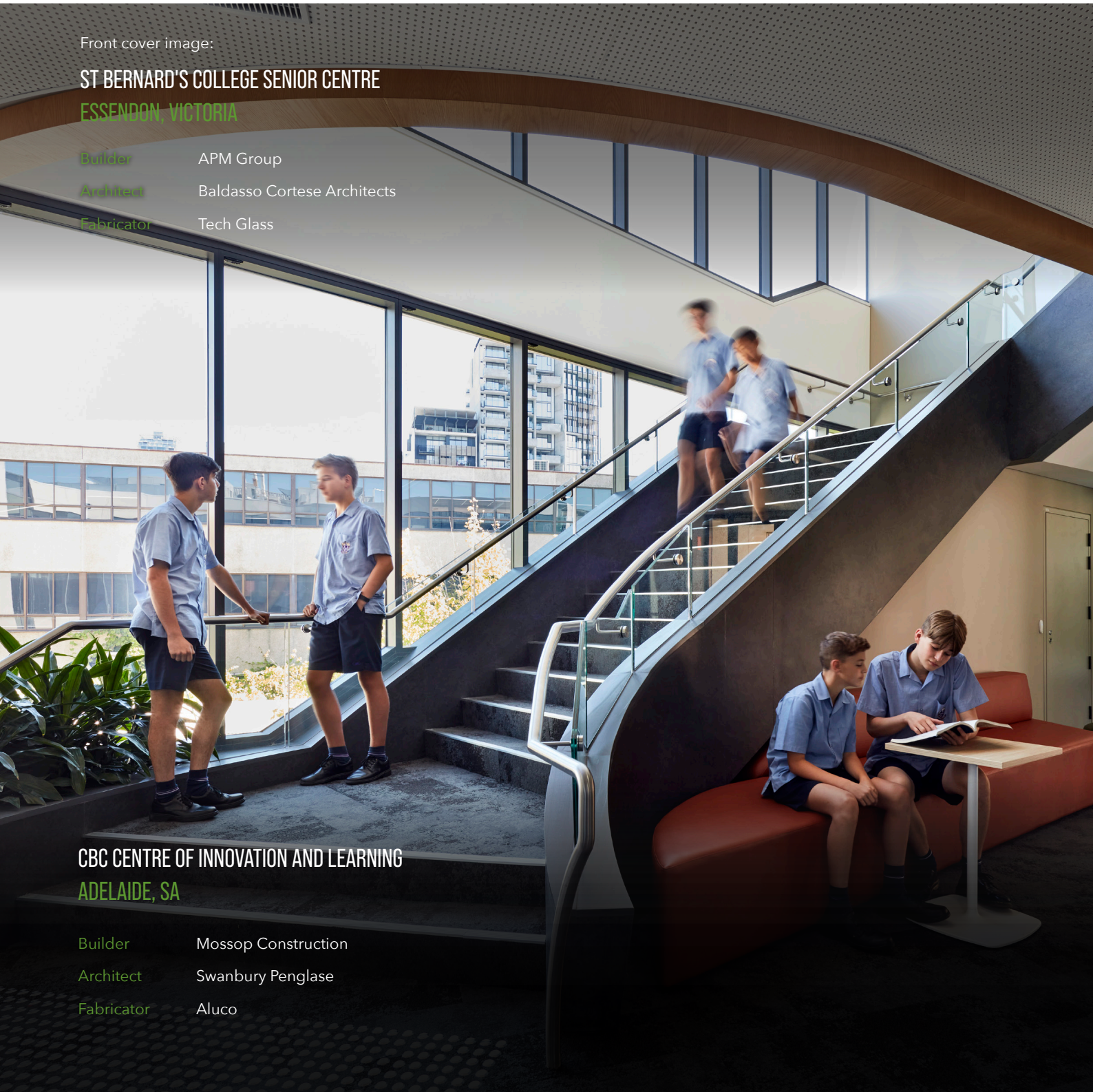
EDUCATION SECTOR

alspec®
EVERYTHING ALUMINIUM & HARDWARE

Aluminium Windows and Doors for Learning Environments

Learning environments are being created with a variety of spaces that are aesthetically pleasing, comfortable and offer opportunities for important social interaction. Alspec understands that a healthy learning environment plays a large part in how students learn.

Students spend much of their time looking at screens and boards but they will often shift their focus to a window and look outside to regain focus, ponder and feel inspired. Let us take you through specifying Alspec for your next learning environment project.



Front cover image:

ST BERNARD'S COLLEGE SENIOR CENTRE
ESSENDON, VICTORIA

Builder	APM Group
Architect	Baldasso Cortese Architects
Fabricator	Tech Glass

CBC CENTRE OF INNOVATION AND LEARNING
ADELAIDE, SA

Builder	Mossop Construction
Architect	Swanbury Penglase
Fabricator	Aluco

Important Considerations

Energy efficiency

Energy efficient windows and doors that help reduce heating and cooling loads, therefore reducing a learning environment's environmental impact.

Consider Low-E glass.

Acoustics

Learning environments can be noisy spaces but we also need to consider noise from a variety of sources. Surrounding noise from local traffic or playgrounds can be distracting, as can sound travelling from adjacent learning spaces.

Accessibility

Smooth transitions between spaces is a key design consideration to ensure all students have the opportunity to participate in activities.

Reducing barriers such as elevated door sills is essential for wheelchair access.

Ventilation

Proper ventilation is essential for maintaining good indoor air quality. Windows need to be easily opened to allow for natural ventilation and promote air circulation around the learning environment.

Natural light

It takes no expert to understand that natural light improves a student's overall health, wellbeing and concentration. Specify large windows that allow ample daylight to enter the space, whilst minimising glare.

Standards

AS 1428.1 design for access and mobility.
Consideration must be made for visual indicators, construction tolerances and levels, grates, openings, continuous paths of travel, ramps, luminance control and opening of doorways.

Sash sizes (individual panel).

Hardware

Door hardware needs to be durable and able to withstand frequent use. Operational force is a key consideration. In other words, how easy is it to use?

Consider lever handles over doorknobs.

Consider appropriate locking mechanisms and door closers.

Thermally Broken

THERM A FRAME

THERMALLY BROKEN WINDOW AND DOOR SYSTEMS

Thermally Broken Range of Options

As we look to reduce the environmental impact of our educational building, considering the thermal performance of the facade should be a major consideration.

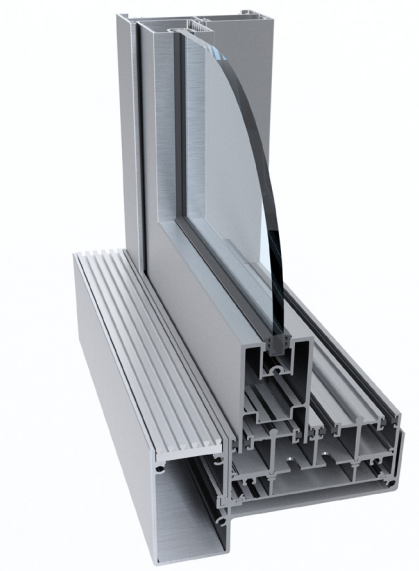
Thermally broken windows and doors not only offer reduced building energy consumption, they can also provide a more comfortable and healthy indoor environment.

Product Range:

- Thermally Broken Awning & Casement Window
- 101.6mm Flush Glazed Thermally Broken Framing
- 150mm Flush Glazed Thermally Broken Framing
- 101.6mm Centre Glazed Thermally Broken Framing
- 150mm Centre Pocket Thermally Broken Framing
- Thermally Broken 50mm Commercial Door
- Thermally Broken Sliding Door

ProGlide UltraFlat

High Performance Wheelchair Accessible Sliding Door



The ProGlide UltraFlat Sliding Door from Alspec allows architects and designers the freedom to achieve expansive openings whilst also offering a weather resistant wheelchair compliant sill to AS1428.1 without the need to compromise on performance or aesthetics.

Specifying Alspec's ProGlide UltraFlat Sliding Door ensures the client receives a solid, durable, high performance product offering a continuous accessible path of seamless transition between internal and external floor finishes.

Designed and manufactured in Australia to meet the extremes of the Australian environment, the Alspec ProGlide UltraFlat Sliding Door is the first choice amongst architects, builders, homeowners and fabricators when performance and quality matter.

Maximum Recommended Sizes	
Height	3150mm
Sash Width	1800mm
Weight	200kg per panel

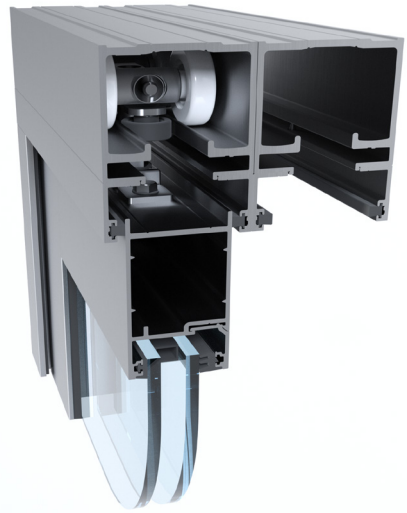
Key Features

- AS1428.1 wheelchair compliant sill ideal for accessible spaces
- 630Pa water resistant sill
- Large sliding panels for internal use, as room dividers, creating flexible spaces
- Inside or outside sliding panels, allowing multiple panel designs
- Allows up to 4 panels stacking in each direction
- Heavy duty aluminium profiles
- Accepts up to 13.52mm single glazed and up to 28mm double glazed units, allowing the designer to achieve the most demanding thermal and acoustic specifications
- 90-degree, post-free corner option
- Heavy duty rollers up to 200kg per panel
- Integrated flush grate sub sill, for a clean level-access solution

Hawkesbury

Top Hung Commercial Sliding Door

For Internal Use



The Hawkesbury Top Hung Sliding Door from Alspec offers architects and designers unrivaled design flexibility with the freedom to achieve large expansive openings whilst also offering a weather resistant and wheelchair compliant sill.

Specifying Alspec's Hawkesbury Top Hung Sliding Door ensures the client receives a solid, durable, high-performance product offering a continuous accessible path of seamless transition between internal and external floor finishes that is capable of large panel sizes up to 3000mm in height and 2500mm in width. Multi-stack configurations are available.

Designed and manufactured in Australia to meet the extremes of the Australian environment, the Alspec Hawkesbury Top Hung Sliding Door is the first choice amongst architects, builders, homeowners and fabricators when performance and quality matter.

Maximum Recommended Sizes	
Height	3000 mm
Sash Width	2500 mm
Weight	300kg per panel

Key Features

- Powered by exclusive rollers from Centor Architectural the Hawkesbury Door features top-rolling hardware for smooth, trouble-free operation
- 19mm glazing pocket accepts up to 13.5mm single glazed
- Double glazing option accepts up to a 28mm IGU
- Panel heights up to 3000mm subject to project requirements and site conditions
- Weatherseal technology keeps wind, rain and cold air where it belongs

Hunter Evo

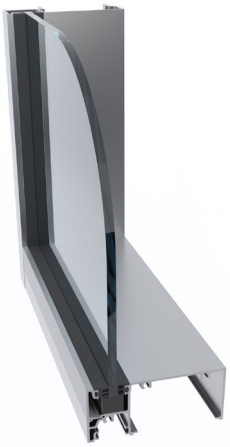
Flush Glazed Framing

Hunter Evo Flush Glazed Framing is the most versatile and flexible of the Alspec Commercial Framing Systems. Available in a frame depth of 101.6mm x 50mm and 150mm x 50mm, it is ideal for external facades of all sizes.

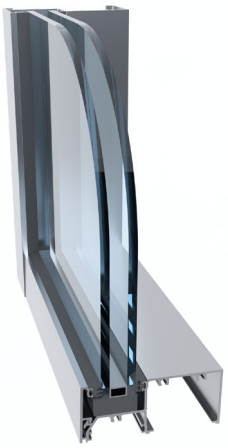
With its straight cuts and flush glazing, the Hunter Evo not only looks good but is easy to fabricate and easy to install. It is suitable for a range of glazed glass thickness options to address the most demanding energy requirements.

With self draining sub sills it also solves water leakage problems. The system can be internally or externally glazed along with incorporating the flexibility and appeal of gently curved or faceted frame installations. The Hunter Evo also provides a seamless interface with Alspec's extensive product offer.

Single Glazed



Double Glazed



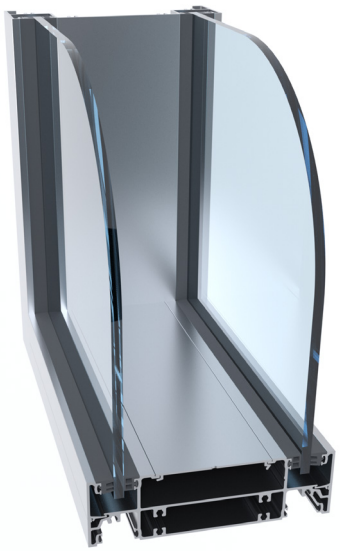
Maximum Recommended Sizes		
	101.6mm Frame	150mm Frame
Height	4200mm	4500mm
Width	2400mm	2400mm

Key Features

- Sharp unbroken lines
- Flush glazed appearance
- Robust frame
- Good weathering
- 4mm – 14mm single glazed
- 15mm - 30mm double glazed
- Easily adapts to Alspec's awnings and hinged doors

Hunter Evo

Flush Glazed Acoustic Framing



Hunter Evo 150mm Acoustic Framing is the ideal system when sound reduction is paramount. Featuring dual 19mm glazing pockets with 100mm airspace, the Hunter Evo Acoustic Frame is ideal for educational learning environments and other applications where acoustics are an issue.

Featuring straight cuts and flush glazing, the Hunter Evo Acoustic Frame not only looks good but is easy to fabricate and install. Providing a seamless interface with the Hunter Evo Flush Glazed Framing system as well as accepting 35mm and 50mm awning sashes, this system offers the flexibility and performance demanded for modern build environments.

Maximum Recommended Sizes	
Height	4500mm
Weight	2400mm

Key Features

- Superior acoustic performance
- Sharp unbroken lines
- Flush glazed appearance
- Robust frame
- Good weathering
- Glass types include 6mm up to 14mm
- Easily adapts to Alspec's awnings and hinged doors

Solaire™

For Solar Control

The Solaire™ range of self-mating louvre fins has been developed to provide both architects and fabricators with a flexible yet simple solution to external solar control requirements that seamlessly integrates with Australia's unique architectural landscape. By utilising a range of self-mating, clip-together blades and accessories, the Solaire™ product can be used as:

- Horizontal fins
- Vertical blades
- Window hoods

The Solaire™ range has been built on the back of Alspec's architectural systems knowledge, which balances the needs of both form and function. Alspec's design is a robust solution that offers our customers an economical and flexible fabrication option.
With countless configurable sizes and aesthetic possibilities, the Solaire™ range is the perfect solution for your next residential or commercial project.

Key Features

Environmentally Friendly

- Solaire™ Blades reduce direct sunlight and solar gain.

Elegant Smart Design

- Flexible fitting options to exceed market requirements.
- Available in a wide range of powder coated or anodised finishes.
- Innovative locking bar improves rigidity and "clip" strength.

Built to Last

Aluminium will not rust, rot, crack or perish under Australia's harsh conditions.

View-Max

Sliding Window

The View-Max Sliding Window offers unparalleled levels of flexibility by allowing designers and architects the choice of 76mm (Derwent) or 101.6mm (McArthur Evo) framing to cater for both the slimline applications and those of a more robust commercial design.

The View-Max Sliding Window offers the flexibility of single and double glazing options and integrates with a number of design initiatives unique to Alspec such as the proprietary locking, roller and drainage systems.

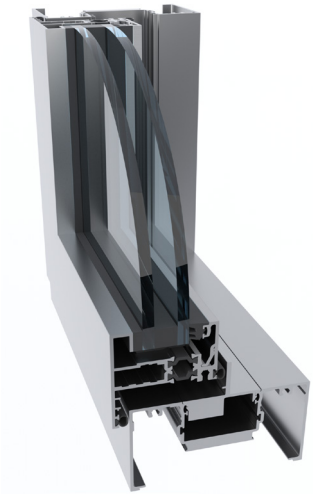
Maximum Recommended Sash Sizes	
Height	1600mm
Width	1200mm
Weight	50kg

Key Features

- Commercially designed to suit 76mm and 101.6mm framing
- Developed specifically for multi-storey residential, schools and architecturally designed housing
- 4mm up to 10.38mm monolithic glass and up to 18mm double glazed units
- Superior thermal and acoustic performance (refer to test reports)
- Superior weather performance
- Minimal processing, cost effective and simple fabrication

50mm

Awning & Casement Windows



Alspec's range of awning and casement windows are ideal for learning environments. The awnings and casements can integrate with a number of Alspec Commercial Framing systems by using different awning adaptors.

The 50mm sash offers the benefit of overlapping internal and external seals to achieve superior weather performance.

Various glazing options for single and double glazing are available. All awnings and casements can be used with a range of available stays and operated with chainwinders or cam handles, locking or non-locking. With the use of our chainwinder adaptor, insect and security screens can easily be added from the inside of the building.

Maximum Recommended Sizes	
Height	1800mm
Width	2400mm
Weight	90kg

Key Features

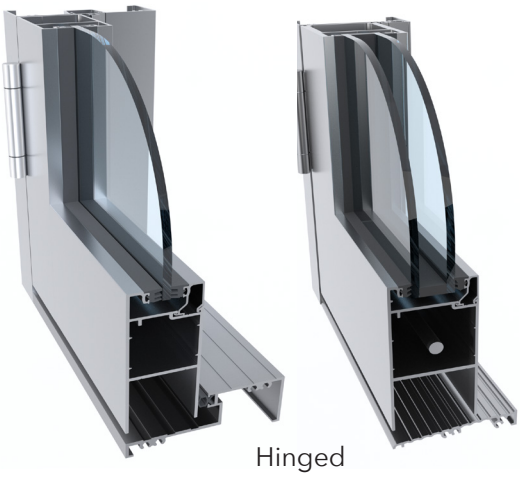
- Wide range of applications
- Integration with a number of Alspec Commercial Framing systems
- Superior weather performance
- Various glazing options including double glazing
- Electric winder option

Swan Evo

45mm and 70mm Shopfront Door

The Alpsec® Swan Evo™ 45mm Hinged Door is a versatile door that is easy to fabricate and install. Suitable for a wide range of applications, it can be used in hinged, pivoted or sliding configurations. The Swan Evo™ integrates seamlessly with the Alspec® commercial framing systems.

Featuring a new and improved clamping spigot set for superior performance and easy fitment, integrated heal and toe block and captive glazing option, the Swan Evo™ provides the ideal solution where superior operation and performance are required. Glazing could not be simpler with the colour-coded wedges from standard Alspec® systems being utilised to deal with the many diverse glass options.



Hinged

Maximum Recommended Sizes	
Height	3050mm
Width	2400mm
Weight	225kg

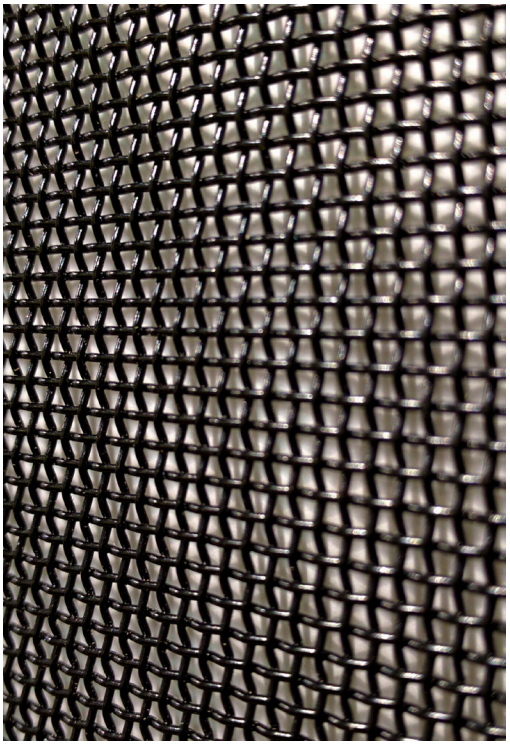
*Varies depending on hinged, pivot or sliding door used. Check Technical Manual for further details.

Key Features

- Stronger sash through the use of custom designed clamping spigot set
- 19mm glazing pocket accepts up to 13.5mm single glazed
- Double glazing option accepts up to a 38mm IGU
- Colour-coded glazing wedges for ease of identification
- Easily adapts to Alspec's McArthur Evo and Hunter Evo framing systems
- Range of thresholds such as disabled ramp
- 45mm available in hinged pivoted of sliding options, 70mm available in hinged option
- Panel heights up to 3050mm subject to project requirements and site conditions

Security Screens

INVISI-GARD
SECURITY SCREENS



At the heart of every Invisi-Gard security screen and security door is our high tensile 316 marine grade stainless steel mesh. The grade 316 mesh used in Invisi-Gard sets the world standard in terms of its quality, precision and longevity.

Invisi-Gard security doors and screens are without question the best investment for your family's safety. They are also the best investment for the look and value of your home.

With a range of products for varying applications and environments, Invisi-Gard's reputation as a quality brand reassures home and business owners that their property is protected by a dependable product, backed up by its lifetime warranty.

Key Features

- Heavy duty extruded aluminium perimeter frame for extra strength. 10x the strength of the Australian Standard in terms of absorbed energy.
- Invisi-Gard has been designed by Alspec's in-house R&D team and manufactured in Australia by our Licensed Dealer Network.
- Invisi-Gard's 316 Marine Grade Stainless Steel Mesh is a high tensile woven mesh resulting in an exceptionally strong, corrosion resistant product.
- With over 400 dealers nationwide, Invisi-Gard is Australia's largest network of licensed fabricators.
- Invisi-Gard is supported by a lifetime warranty from Alspec, a wholly Australian owned company that has been in business for more than 45 years.
- Invisi-Gard is BAL rated to protect your home against bushfires in areas from BAL-LOW up to and including BAL-40.

SAMUEL GILBERT PUBLIC SCHOOL

CASTLE HILL, NSW

Builder	Hutchinson Builders
Architect	Fulton Trotter
Fabricator	CVD Commercial Glass, St Marys

TRINITY LUTHERAN COLLEGE, SENIOR LEARNING CENTRE
MOLENDINAR, QLD

Builder	Stokes Wheeler
Architect	Burling Brown Architects
Fabricator	Malone Glass

KURRAJONG CENTRE FOR SENIOR LEARNING

SPRINGFIELD ANGLICAN COLLEGE, QLD

Builder	Condev
Architect	Fulton Trotter Architects
Fabricator	CKA Windows

Products Used

McArthur Evo 101.6mm Centre Pocket Framing

ProGlide® High Performance Sliding Door

Air-Flo® Plus 125mm Framing

Open, full of light and with incredible amenity: that's how the new Kurrajong Centre for Senior Learning at The Springfield Anglican College has been described.

Designed by Fulton Trotter Architects and constructed by Queensland firm Condev, the facility features purposefully well-shaded tall glazed facades, comprised of Alspec aluminium window and door framing solutions.

For fixed window framing locations, the McArthur Evo Centre Pocket Framing System was selected. With its secure and visually appealing finish, the McArthur Evo framing utilises centre pocket construction, where the panes of glass are slid into a 3-sided "pocket" frame. Available in frame depths of 101.6 or 150mm x 44.4mm, this style of framing is favoured by architects for its attractive appearance and by builders for its ease of installation.

To provide access to the facility and the range of learning and meeting spaces, ProGlide High Performance Sliding Doors and Swan Evo 45mm Commercial Doors were the Alspec products of choice. ProGlide doors are well known for their robust construction and dependable performance in high use environments while the Swan Evo doors can be adapted to a multitude of situations in hinged, pivoted or sliding configurations as required.

To promote natural ventilation, bays of Breezway Louvre Windows were added to the learning spaces. These secure, easy to operate louvre windows are a great way to reduce mechanical cooling costs, and encourage fresh air into the learning environment. When closed, the louvres form a weathertight seal against wind and rain.

CENTRAL COAST GRAMMAR SCHOOL

ERINA HEIGHTS, NSW

Builder	Reitsma Construction
Architect	NBRS
Fabricator	AJ Aluminium

Products Used

ProGlide® High Performance Sliding Door

Hunter Evo 150mm Double Flush Glazed Framing

Awning and Casement Window

Adaptable, flexible and student-centred: that was the brief and that is what has been delivered for this new school campus on the Central Coast of NSW. The end result was achieved through the combination of innovative design, latest technologies and high quality Alspec window and door framing componentry.

Located at Erina Heights in NSW, Central Coast Grammar School was looking to add a new Junior School campus that was more suited to modern teaching practices. The school is an independent, coeducational school with nearly 1300 students from Kindergarten to Year 12. Since opening in 1985 with just under 200 students, the school has undergone a host of upgrades to cater for the growth in pupils, with the new Junior School campus being the largest project to date.

To make classroom spaces flexible and simple to adapt, Alspec ProGlide Ultra Flat Sliding Doors were installed for both internal and external interfaces. Functioning as both access doors and “openable walls”, the doors were configured with four large panels (one fixed and three slidings). The wide-spanning doors allow a classroom to expand into a larger open space when needed or easily closed to create a more delineated environment, while natural light is maintained at all times.

The same sliding doors were used to connect the breakout and foyer areas outside the classrooms to the outdoor garden and terraced play spaces, again providing a flat and safe interface between internal and external floor finishes. Meanwhile, above both internal and externally facing doors, sections of Alspec’s Hunter Evo Flush Glazed Framing were combined with operable louvres to encourage natural ventilation.

Support

Alspec's national specification team are ready and waiting to help.

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