

altuswindows.co.nz



Product Information Requirements altus.co.nz/bpir

# High Performance Windows & Doors





# **Expand your**

## possibilities

Our residential architecture has come of age. Increasingly, New Zealanders have a sophisticated knowledge and appreciation of how good design can shape the way we live. Homeowners are stretching the limits: they're looking for confident, exciting architecture and products where a stylish materiality works hand-in-hand with supreme functionality.

Large-scale homes demand expansive ideas and bold solutions and the Atlantic High Performance Suite from Altus Windows is not short on these. This range of high-spec doors and windows is a robust system that can carry the load – with ease. An increase in maximum rolling weight per panel means there are myriad configuration options: bigger openings provide bigger views and make bigger design statements.

So when a standard response just won't do, go beyond the expected and expand your design horizons. Because although pioneer of modern architecture Mies van Der Rohe proclaimed "less is more", there are times when, undeniably, more is better.



# Contents

### Products

Euroslider® & Eurostacker®	5
Foldback <sup>®</sup> Bifold	7
Bifold Doors & Windows	9
French & Hinge Doors	11
Awning & Casement Windows	13

### Showcase Projects

Queenstown Getaway	15
Chrysalis Early Learning Centre	19
Ponsonby Renovation	23

### **Euroslider<sup>®</sup> & Eurostacker<sup>®</sup>**

Whichever way you look at it, the Euroslider® and Eurostacker® are a beautifully clean design. They have a discreet 4mm high chevron shaped track, as are the tyres for more evenly distributed loading compared to concave tyres. The result is a smoother slide with minimal effort. It can also carry panel weights of up to a quarter of a tonne and can easily reach up to 3.2m in height, or higher depending on the unit type and application.

#### **FEATURES**

- Unique track profile
- Outside sliding panels
- Fully adjustable with a range of 16mm
- Smooth sill
- Sloped sill trays for continuous drainage
- Continuous drainage gap rather than holes or slots allows the sills to achieve true pressure equalisation
- Smooth and square profile
- Flanged roller tyres for more efficient operation
- Uses spigots thus, no need for plastic grommets

27

#### **SPECIFICATIONS**

106mm & 159mm outside sliding & stacking 40mm door panels. All with equal leg frames on a sill tray. Split mullions for seamless transition to other products i.e. Awning & Casement Windows.

Max height:	3.2m
Max weight:	250kg per panel
Panels:	Minimum - two panels (one fixed, one moving)
	Maximum - as many panels as is practical, all sliding one way or bi-parting from the centre
Options:	90 degree corner Overlights and sidelights

This innovative design provides all the benefits and quality features of the traditional Bifold Door. The panels of the Foldback® doors and windows rest against the side of your home.

This action allows areas to be opened up expansively and creates an uninterrupted flow from indoors to outdoors.

#### **FEATURES**

- Patented skewed head track to allow the panels to rest flat against the house and avoid the need to unclip double action split stiles
- Top rolling operating gear minimises the risk of disturbed performance
- Flat surface sill
- Sloped sill trays with continuous drainage gap rather than slots enables true pressure equalisation
- Uses spigots so no there is no need for plastic grommets
- All stainless steel or aluminium operating gear
- Hinges use lock-up plate technology for easy adjustment

Foldback<sup>®</sup> Bifold

#### **SPECIFICATIONS**

48mm rebate with equal leg frame on a sill tray. It uses box back mullions. The patented skewed outline Foldback® Head carries the rolling gear and allows panels to fold 180 degrees to lay flat against the clad wall.

Max height:	2.4m	
Max weight:	50kg per panel	
Panels:	Minimum - two moving panels	
	Maximum - up to six moving panels (three each way)	
Options:	90 degree corner	
	Sidelights	

### **Bifold Doors & Windows**

Bifold Doors are an elegant way to open up the view from patios and decks and achieve a flow from indoors to outdoors.

The doors have a low-profile, non-trip flush sill. The sill design prevents dirt and debris from building up which makes operation consistently smooth. It also allows for easy cleaning and maintenance.

#### **FEATURES**

- Flat surface sill
- Sloped sill trays for continuous drainage
- Continuous drainage gap rather than slots enables true pressure equalisation
- Top rolling operating gear minimises the risk of disturbed performance
- Uses spigots so there is no need for plastic grommets
- All stainless steel or aluminium operating gear
- Hinges use lock-up plate technology for easy adjustment
- Tested to 50,000 cycles

#### **SPECIFICATIONS**

48mm, 106mm & 159mm Bifold Door can be used with facing reveal or equal leg frames. It has a seamless transition to Awning Windows, Hinged Doors, Sliding and Stacking Doors with no width build up for 106mm and 159mm frames.

Max height:	2.4m
Max weight:	80kg per panel
Panels:	Minimum - two moving panels
	Maximum - up to twelve moving panels (six each way)
Options:	90 degree corner
	Sidelights



### French & Hinge Doors

The traditional design and form of French Doors complement any home. The door panels come in a range of sizes to suit the style and proportions of your home.

This door-set can be conveniently opened one side at a time, allowing you to control the traffic flow, ventilation, and security according to the situation.

Hinged Doors are a practical and timeless design solution, ideal for secondary living areas. They open easily to fold open against the walls, allowing excellent ventilation and light efficiency.

#### **FEATURES**

- Flat surface sill
- Sloped sill trays for continuous drainage
- Continuous drainage gap rather than slots enables true pressure equalisation
- Top rolling operating gear minimises the risk of disturbed performance
- Uses spigots so there is no need for plastic grommets
- All stainless steel or aluminium operating gear
- Hinges use lock-up plate technology for easy adjustment



#### **SPECIFICATIONS**

48mm, 106mm & 159mm Hinge or French Doors. It can be used with facing reveal or equal leg frames. It has a seamless transition to Awning Windows, Hinged Doors, Sliding and Stacking Doors with no width build up for 106mm and 159mm frames.

Max height:	3.2m
Max weight:	80kg per panel
Options:	90 degree corner
	Overlights & Sidelights



# Awning & Casement Windows

Awning and Casement Windows are appropriate for both modern and traditional architecture. They are equal in terms of strength, weatherproofing and style. They are designed to maximise both light and the flow of air in a streamlined, elegant design.

Both Awning and Casement Windows have an optional inframe passive ventilation system, which allows homes to breathe even when the windows are closed, this provides a healthy home environment and reduces condensation.

#### **FEATURES**

- Flanged sash profile and square cut option available
- Flush profiled sash for smooth lines and flat face appearance
- Curved condensation channel for easy cleaning and drainage
- Concealed drainage
- High performance hollow frame
- Square bead

#### **SPECIFICATIONS**

Awning & Casement Windows - 48mm flanged frame & seismic frame, 106mm & 159mm equal leg frames.

Uses screws or T-Spigots for mullions with a split mullion for strip windows. It has the option of mitred or square cut equal leg frames. It also has an optional seismic frame with 16mm inter-storey deflection.

The Atlantic Awning Window seamlessly transitions to Hinged Doors, Sliding and Stacking Doors with no width build up for 106mm and 159mm frames.

### **Queenstown Getaway**

A steep site with difficult access inspired the design of a long narrow form, just one room wide, partially submerged into the hillside following the contours of the land.

The view from the top of Queenstown Hill is truly breathtaking. However, its extremely steep gradient was certainly an issue for the architect Francis Whitaker.

"It's an exceptionally difficult site – extremely steep," says Francis Whitaker. "It's the uppermost section of the highest subdivision in Queenstown, so it can never be built out. However, there was a problem – we had no flat land to build on."

Whitaker's solution was to design a long narrow form, just one room wide, and partially submerge it into the hillside following the contours of the land.

"We had no brief from our clients for the look of the house, but because of the spatial requirements and the large number of rooms, the house simply became a series of narrow layers emerging out of the ground," the architect Whitaker says. "The building actually generated itself. It's the only way it could exist."

### Architects: Mason & Wales

- The topmost floor is effectively a one-bedroom, glassfronted house, with huge indoor and outdoor living areas, and an even more expansive view.
- The Atlantic High Performance Suite visually frames the upper level through a robust aesthetic and precision detailing from; rebated Eurostacker doors with consistent equal height rails through to large Malta 'D' Pull handles.
- "Overall, it's a planar design, with enormous concrete floor plates, supported by stone-clad concrete walls and chimneys that break through the floors, creating an extremely forceful composition," says Whitaker."The top floor is a steel and glass pavilion – again punctuated by the schist columns – with a pop-up roof. The raised roof contributes to a high four-metre stud in this area and admits more light thanks to the Clerestory windows directly underneath it."





ABOVE LEFT Eurostackers open out to a private deck. ABOVE RIGHT Large robust full height Eurostackers meet at a corner pillar and maximise the stunning lake and mountain views.

**RIGHT** An abundance of glass including clerestory windows allows light to flood in.



### Chrysalis

### **Learning Centre**

Architect: Collingridge and Smith

# The eco-friendly Chrysalis Early Learning Centre in Avondale is a distinctive, crescent-shaped building that wraps around two protected trees to create a giant cocoon, or chrysalis.

Architect Phil Smith says his vision for the build was to take the chrysalis idea and to interpret it into a built form.

"The shape was derived from the trees, and we tried to respect these and put in a protective barrier, which then became the playground. The building just naturally wrapped around the playground. Everything was about this layering process."

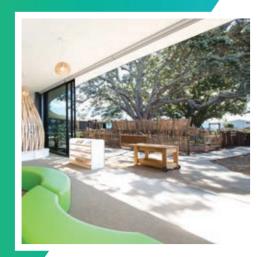
The building has 31 grid-lines radiating from the crescent shape, with 100 "sails" on the exterior. Symbolically, the sails can be seen to reference the children's journey, and they create a link to the Pacific-Kiwi culture – the past and the vision for the future.

Classrooms are large and open, with floor-to-ceiling structures enhancing the cocoon analogy. Indoor-outdoor flow is continuous, with glass sliding doors providing flexiblity of movement opening onto the play area.



The design reflects best practice within the early childhood industry. The classroom sizes are significantly larger than regulation, as is the outdoor play area (double the minimum size) and is accentuated by the indoor-outdoor flow created via the continuous adjustable glass façade of the Atlantic High Performance Suite Eurostackers.

The use of full height Eurostackers with generous openings and level sill thresholds enables friendly connected social spaces for easy interaction.





Hernard

ABOVE LEFT Eurostackers easily provide a 6m opening.
 ABOVE RIGHT Large bench to ceiling windows seamlessly frame the outdoor view.
 RIGHT A connection between the indoors and outdoors is key to the success of this open learning environment.

21



### **Ponsonby Renovation**

### So what do you do when you have lived in a 100 year old home for close to 15 years and you haven't touched a thing?

2016 saw Jo and Richard Graham begin the daunting task of completely renovating their tired old heritage villa in Ponsonby. Not only was it a massive undertaking, the entire renovation was to be filmed as part of Peter Wolfkamp's new TV series, Creative Living.

Along with hundreds of decisions the Graham's needed to make along the way, choosing new windows and doors for the north facing back of the house was high on their list. For this, they sought the expert help of Altus Windows.

The brief for the back part of the house was to make it; warmer, let in more light and have an open concept which would turn a few small spaces into a large social space. "Essentially what we were trying to achieve was that seamless flow between indoor and outdoor spaces. By sliding the joinery over the cladding this is achieved, although not without some detailing challenges. The detailed solution on this project required us to build

### **Designer: Cameron Shields**

some small fin walls to stop the joinery against and to work with the existing eave depth. To achieve a level threshold and NZBC/E2 compliance we needed to form a continuous drainage channel between the fin walls with concrete up stand nibs beneath the fins. The final challenge was to achieve the integration of the outdoor leaner as a continuation of the kitchen bench" says Shields.

The final result is a wonderful marriage between the old and the new. The villas character features are evident, but so to is the modern, open plan living space. Helped in part by the over wall Atlantic Eurostacker® doors and windows.





ABOVE LEFT Over wall Eurostacker® doors and windows that blend seamlessly with the villa details.
ABOVE RIGHT LevelStep® sills provide trip free access.
RIGHT The over wall Eurostacker® creates the ultimate entertainer's social space.

**BELOW** Before shot of the dark living area with obstructed access to the outdoor entertaining area.





