

KLIMA[®]

uPVC Windows & Doors

The ultimate in thermal efficiency



Health. Warmth. Comfort.

For most of us building a new house, those three things are going to top our wishlist. And these days you can add another: sustainability.

Klima® delivers the most comfortable of homes while helping you keep power bills under control. Based on a premium series from Europe by Kömmerling but designed and manufactured here to suit Kiwi conditions, Klima® is the ultimate energy-efficient window and door solution. And it's not just a matter of maintaining a snug home in winter – Klima® keeps things comfortable year-round.

The key is the use of uPVC, a natural insulator with low conductivity. Popular in Europe, uPVC joinery reduces the transfer of both hot and cold temperatures and is the smart and sustainable alternative to timber and aluminium. What's more, highly durable uPVC is capable of withstanding New Zealand's harsh sunlight without discolouring or degrading and offers excellent noise reduction.

Inspired by Europe, designed for New Zealand, made for your home, Klima® is the sustainable choice.



Awning window and French door in Klima White with colour matched hardware.



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Sliding Doors and awning windows in Klima White with Urbo colour matched hardware.

The Ultimate in Thermal Efficiency

We Kiwis have a tradition of grinning and bearing unhealthy houses. Even now, a third of our homes are too cold in winter, and more than a third are too warm in summer.

35-50% of heat is lost through windows and doors. Much of the problem lies with our choice of windows and doors and decades of sub-standard housing, which has resulted from poor regulation of the minimum New Zealand Building Code standards and a lack of maintenance*. So, if we want to build future-proof homes that stay comfortable, healthy, and energy efficient whatever the season, we must start by making smarter decisions about windows and doors.

From November 2023, the minimum insulation requirements for cooler climate zones increased to the final performance requirements, as outlined in the H1 Clause of the New Zealand Building Code. Klima® exceeds the highest standard for each zone, capitalising on the natural insulating properties of uPVC, a material well-known to Europeans, who can take it for granted that they can, if they wish, enjoy their homes dressed in t-shirt and shorts 365 days a year.

When used with high-performance glazing, Klima® windows and doors achieve a maximum six-star energy rating under the WEERS (Window Energy Efficiency Rating System) system. In terms of the Homestar scheme, Klima® can help a building achieve a 'top of the class' six Homestar rating. The system is also in harmony with Passive House, the energy-efficient design and construction methodology, whose five key principles include the use of well-insulated, high-performance windows and doors.

Why is Klima® so good? It comes down to the innate low conductivity of uPVC and the clever design of the joinery. The result is a house that's significantly cheaper to heat in winter, cool in summer, and simply healthier year-round.

* Source: NZGBC, 2023.



Stacker sliding door and fixed windows in Klima White with Matt Black AluClip (exterior).

Optimised for New Zealand conditions

How do you test the durability of window joinery? In the case of Klima®, try four years of intense testing in the harsh Australian desert. By using a device that tracks the sun to maximise daily exposure*, those four blazing Australian years produced the equivalent of 22 years of sun exposure in this country.

That shows you just how much work we've put into optimising Klima® windows and doors for local conditions. Essentially, we've taken an already highly successful product and further engineered it to withstand New Zealand's high UV levels and unique conditions. Klima® is designed and built in New Zealand specifically for our place.

There's nothing mysterious here for Kiwi builders either. Klima® windows and doors are installed in exactly the same way as aluminium joinery using the familiar E2/AS1 method. It's business as usual on the building site, but a whole new world of performance for your home.

*Determined by independent testing by Allunga Exposure Laboratory. Visual Assessment of change based on AS/NZS 1580.481.1:1998 Coatings Exposed to Weathering (12 Parameters of Change).



A combination of products in Klima White with Urbo colour matched hardware.



A combination of products in Klima White



Awning window in Klima White



Stacker sliding doors in Klima White



Why choose Klima®?

It may not yet be as familiar as aluminium, but uPVC joinery is set to become a popular option for Kiwi homeowners. How could it not? Designed and manufactured here in New Zealand to suit our uniquely challenging climate, durable Klima® windows and doors deliver warmth and comfort all year-round and are unbeatable for thermal efficiency.

The key benefits of Klima® include:



Thermal efficiency

A thermally efficient home can be cheaper to warm every year, as well as being more comfortable to live in and better for the environment. Clever house design is a key contributor, but you also need great products. Klima® is perfect for the New Zealand climate, achieving a maximum 6 energy stars under WEERS (Window Energy Efficiency Rating) when used with high-performance glazing.



Noise reduction

Excessive noise in a home can raise stress levels, affect concentration, and sleep and generally undermine wellbeing. Klima® not only keeps your home toasty, it also offers excellent noise reduction.



Durability

Put to the ultimate test under a desert sun, Klima® came through with flying colours, showing no signs of degrading or discolouring thanks to the highly durable nature of our optimised uPVC.



Healthier homes

Too many of our houses aren't healthy homes. Klima® windows and doors represent an affordable investment to create a home that is healthier and more comfortable 365 days of the year.



Ease of installation

Klima® uses the trusted E2/AS1 installation method for compliance, reliability, water tightness, and peace of mind.

Product overview



High heat insulation

Klima® achieves an excellent insulation value.

Glazing

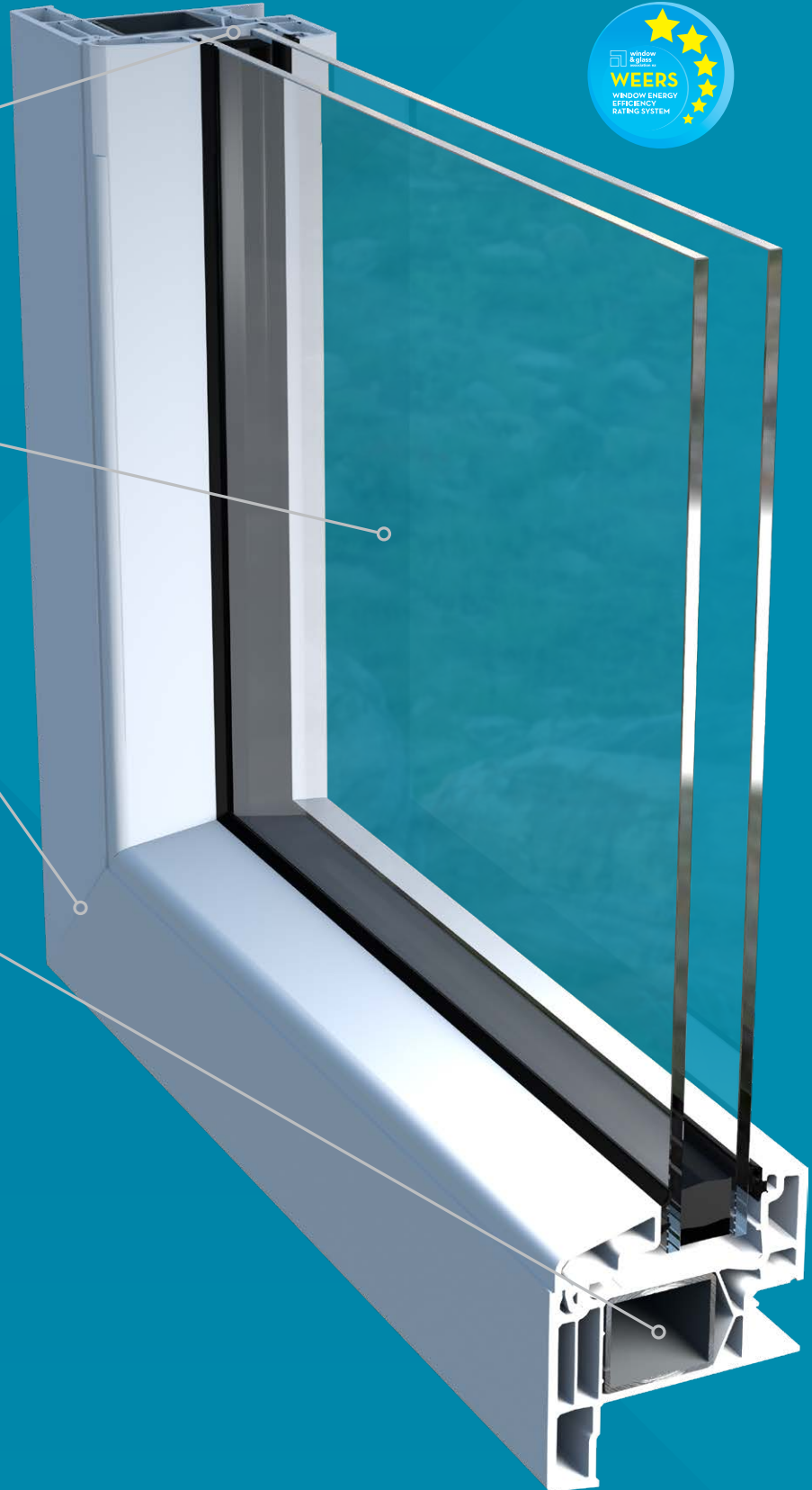
Units are 24mm double glazed.

Corner welds

V-Perfect technology means that our corner welds are unmatched in Australasia for aesthetics and uncompromising quality.

State-of-the-art chamber design

Multiple chambers are incorporated into the design to ensure high heat retention.



Product specs

- ▶ Available in a standard range of windows and doors, with the exception of a bi-fold format
- ▶ Super thick profiles provide maximum thermal insulation. High quality weather resistance, and strength in high wind zones
- ▶ Our window system is rated a maximum 6 energy stars under WEERS (Window Energy Efficiency Rating System) when used with high-performance glazing
- ▶ Seamless welded corners for extra strength
- ▶ 2.4m high sliding doors are possible in certain wind zones
- ▶ Units are 24mm double-glazed
- ▶ Aligns with standard industry installation practices
- ▶ Some window and door formats may not be available depending on the size and performance requirements of your project. Please contact your local manufacturer for options and advice.

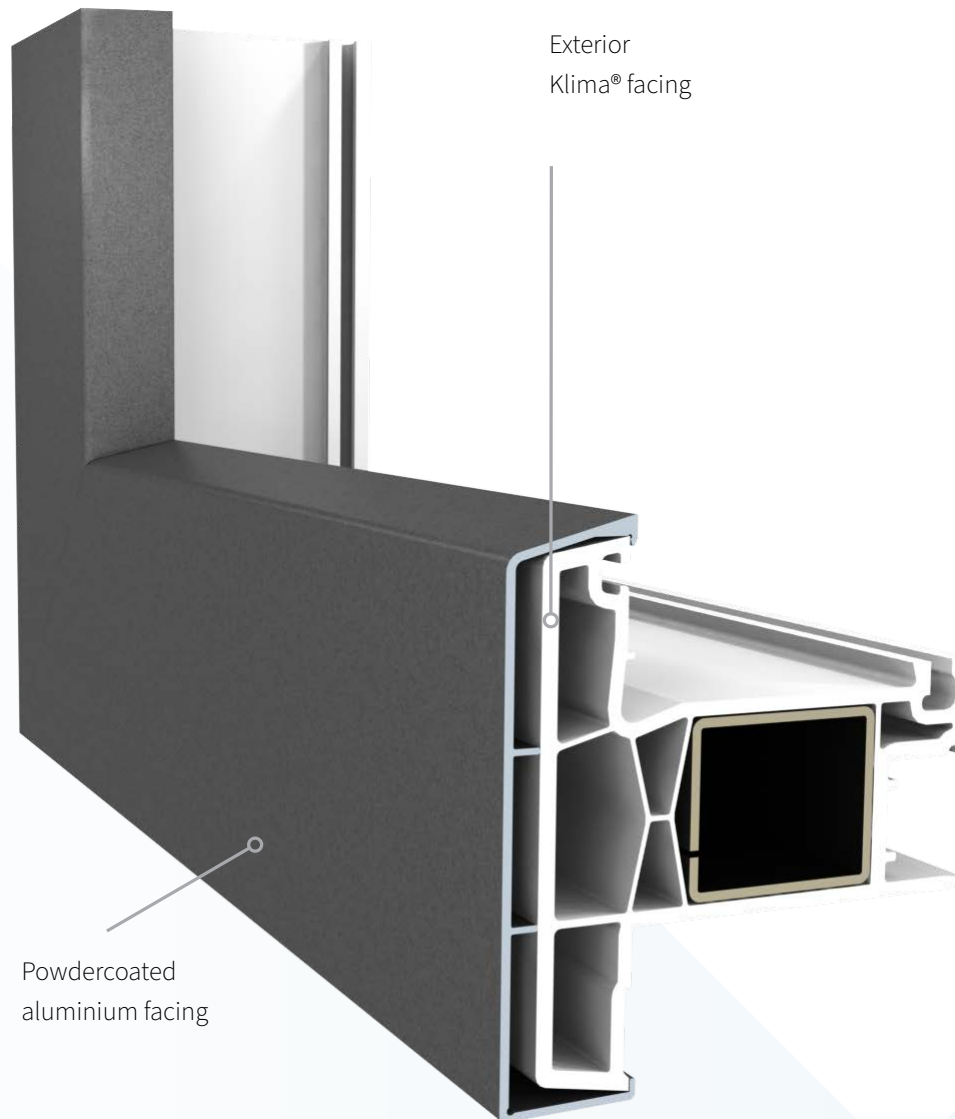
NZ Made

Klima® is the only uPVC manufacturer to design, extrude, manufacture, and assemble uPVC windows and doors in New Zealand, with a purpose built factory in Christchurch. This makes our products ideal for New Zealand's climate. What's more, highly durable uPVC is capable of withstanding New Zealand's harsh sunlight without discolouring or degrading.



AluClip System

Klima® products are only available in white as standard however the AluClip system can be added to allow different exterior colours.



AluClip is a powdercoated aluminium facing that is clipped onto the exterior frame of Klima® joinery for colour customisation, so you can enjoy all the benefits of uPVC joinery in a colour that matches the style of your home.

There are a number of colour options to choose from. A great place to start is our popular colour range of 40 colours, available in Dulux's Duralloy PLUS® or Protecture finishes, each offering a 15 year film and colour integrity warranty. Consult your local manufacturer for a colour brochure and further advice on powdercoating. When you make a final colour selection, use an aluminium colour swatch and assess it in natural light.



A combination of products in Matt FlaxPod AluClip



Fixed window Matt Flax Pod AluClip



Klima® insert window and French door in Klima White



Renovate with Klima®

Experience a warm, healthy home with our insert or replacement windows. Keep the existing character of your home, with the added benefit of watertight seals to stop cold draughts getting in.

Updating your windows may be a good option if you have old timber or aluminium joinery that is draughty, stiff to open and close, and you'd like to improve the function and thermal performance of your joinery. When it comes to upgrading your windows, there are two options to consider: replacement or insert. Klima® offers all the benefits of modern windows while still retaining a similar look to classic timber joinery.

What are the benefits?



Improved thermal performance

The combination of uPVC joinery and high-performance glass enhances the thermal performance of these windows to the highest standard reducing the need for air conditioning to heat and cool your home.



Aesthetics

Updating your joinery and the configuration of your windows and doors lifts your home's curb appeal.



Healthier home

By replacing your windows, you'll experience a healthy home that is warm, comfortable and drier.



Triple glazing

With the bonus option of triple glazing, you'll enjoy the benefits of an enhanced thermal envelope.



Low maintenance

The ongoing maintenance requirements of Klima® uPVC joinery is minimal and doesn't need to be painted like old timber joinery.

Replacement window installation

The old joinery is removed and fully replaced with new joinery.

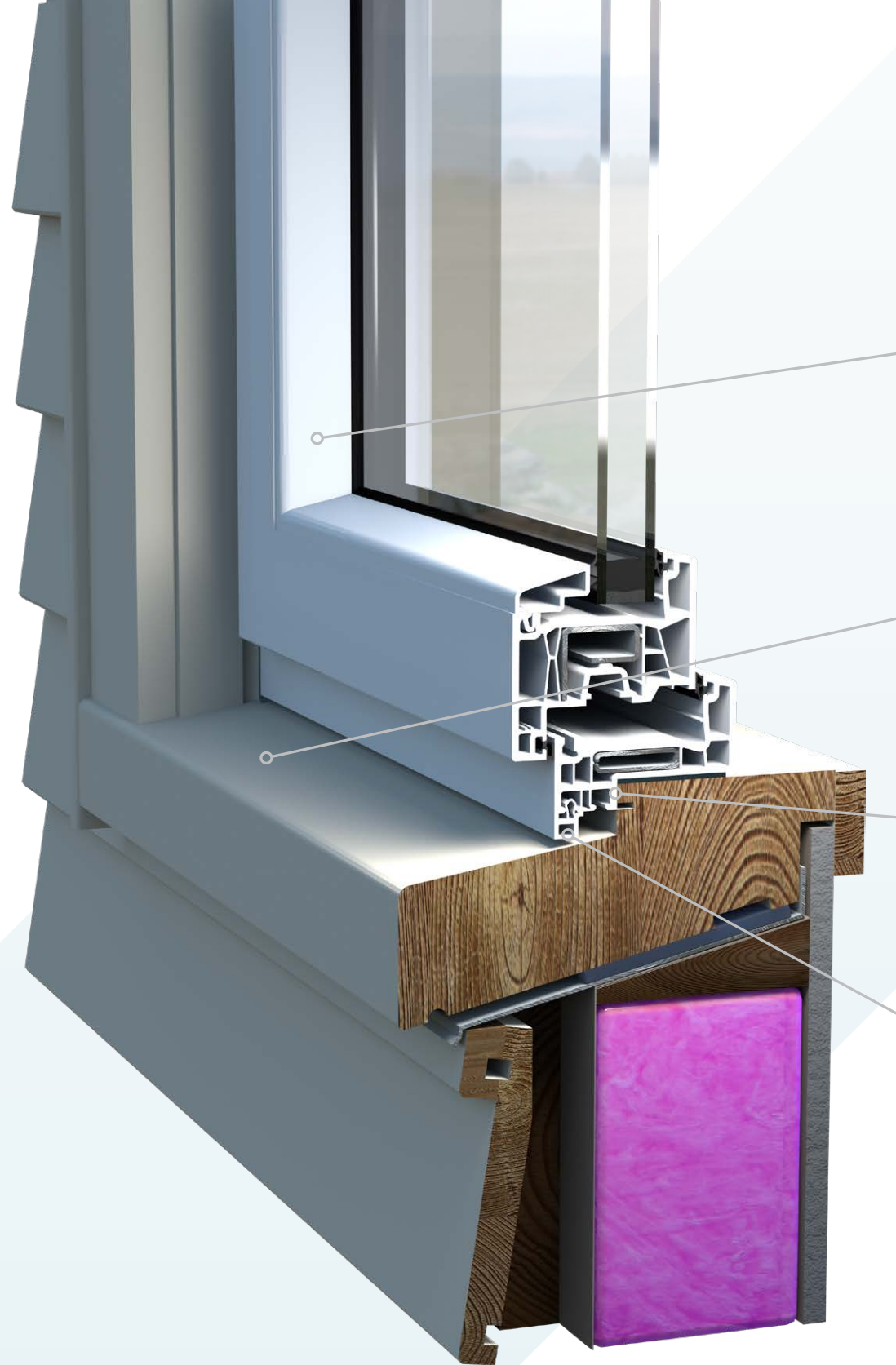
Installation is the same as a new window install and complies with the NZ Building Code E2/AS1.

Drainage is concealed under the facing of the frame.

Klima® replacement windows can be installed into any cladding. Speak to your local manufacturer for more information.

Replacement windows and doors

Replacement windows and doors are suitable for those wanting a complete overhaul of their current windows and doors. The process is simple: existing joinery is removed entirely and a new window or door and framing structure is installed. With full replacement, you have the opportunity to completely transform the style and configuration of your windows and doors. The full Klima® product offering is available for replacement windows and doors, including AluClip and European style Tilt-and-Turn windows.



Insert window installation

Klima® insert windows match the appearance of your old timber joinery but with all the benefits of new windows.

The original timber framing is retained; just the opening windows and internal timber is removed.

The new framing fits perfectly within the old timber rebate giving it a seamless look.

The sill facing is trimmed to match the variety of sill rebates.

Insert windows

With Insert windows, the opening windows and fixed windows are all removed, along with all the internal timber, so just the outside frame is left in place. A new uPVC window is then inserted and the inside is finished and cleaned, leaving you with brand new windows while retaining the existing character of your home. The Insert option is the easiest installation method to update your home with thermally efficient, maintenance-free joinery.

Not sure what's right for your home? Ask your local Klima® expert for advice.

Glass options

Glass can enhance the way your home looks and feels, but it also adds to the warmth and thermal efficiency of your home.

It's a good idea to work through your options to find the right glass for your home. With options to reduce fading and heat loss, and increase year-round comfort, your decisions can have a significant impact on the performance of your glazing.

Choosing a high-performance glass option ensures your Klima® window systems are rated at a maximum 6 energy stars under WEERS (Window Energy Efficiency Rating System).

Some factors to consider and discuss with your manufacturer are the orientation and shading of your home, the climate, and the noise where you live. Klima® is most efficient when paired with a high performance glass.

The AGP System® High Performance Glazing

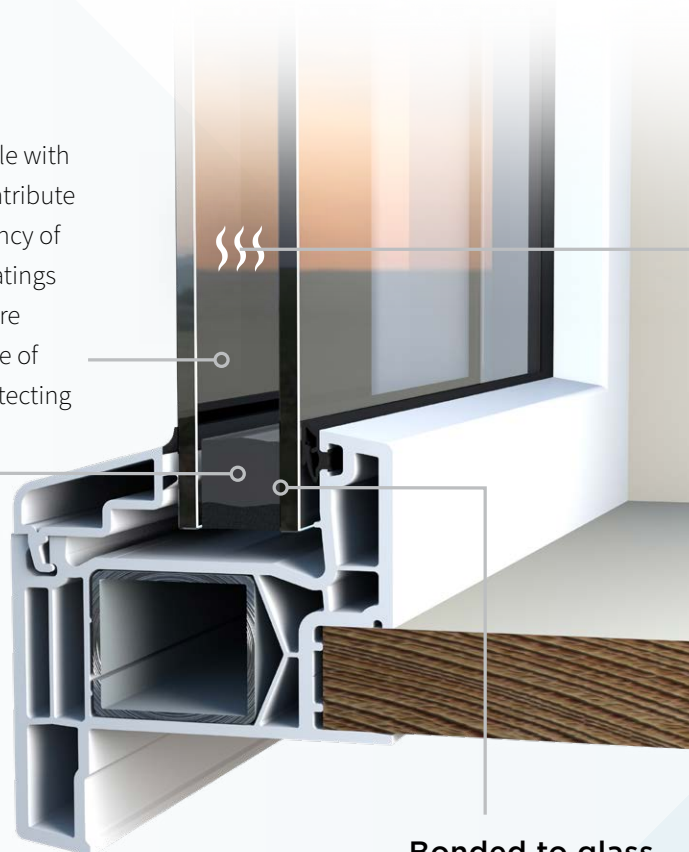
The AGP System® is a double-glazed unit which is made using world-class components and industry leading, global technology. Much like Klima®, this state-of-the-art product has been designed for New Zealand conditions.

Solux-E® or Solux Ultra™

The AGP System® is available with two Low-E options that contribute towards the thermal efficiency of your home. Both Low-E coatings are virtually invisible, and are applied to the inside surface of the exterior glass pane, protecting it from the elements.

ATS - Architectural Thermal Spacer®

A warm-edge spacer that bonds the two panes of glass together forming a double-glazed unit. ATS - Architectural Thermal Spacer® creates an airtight bond to ensure the best retention of argon gas used in The AGP System®.



Argon gas

An inert gas which is used as an insulator to create an additional barrier to heat loss in winter and heat gain in summer, improving thermal performance.

Bonded to glass and secondary sealant

A proven formulation used to ensure durable bonding between glass panes. This creates an airtight seal for the space between panes, providing additional protection for the primary seal.



Solux-E[®] Solux-E[®] is standard with The AGP System[®].

Year-round comfort and energy savings

Solux-E[®] has a low emissivity (Low-E) coating applied to the glass, which is virtually invisible. The Solux-E[®] coating reflects the heat back to the inside, reducing winter heat loss through the glass. The reverse happens during summer helping to limit overheating.



Year-round comfort

Solux-E[®] works to minimise heat flow allowing you to stay warmer through winter and cooler through summer. You'll have less warm air escaping in the winter and less heat entering through the glass in summer without the need to use tinted glass. The measure of heat entering through the glass is known as the Solar Heat Gain Coefficient (SHGC).

Solux-E[®] helps to retain heat in the home, achieving a more stable home temperature and year-round comfort.



Maximises natural daylight

Solux-E[®] provides excellent light transfer and clarity, keeping the view clear and the rooms in the home light and bright.



Smaller energy bills

A more constant temperature means less energy used to heat and cool the home, providing energy savings year-round. Reduced energy consumption (U-value) puts less demand on New Zealand's power grid, reducing the environmental footprint of your home.



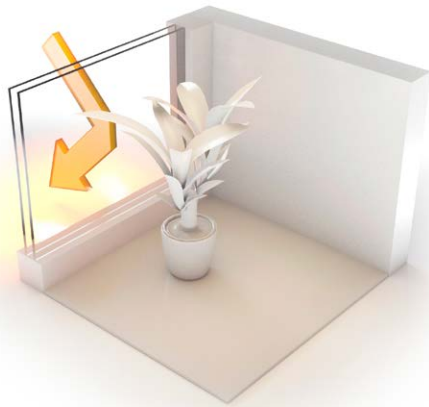
Protects against fading

Solux-E[®] reduces the amount of damaging light coming through the glass reducing fading in soft furnishings and fabrics.

Solux Ultra™

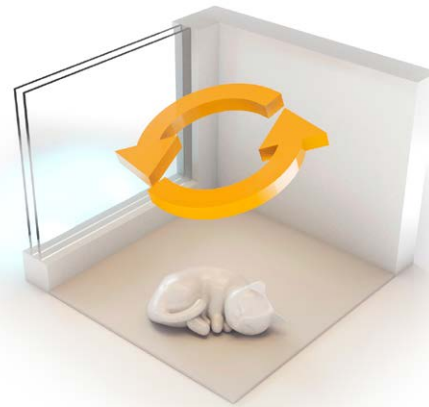
Take your home's comfort to the ultimate level of performance with Solux Ultra™

Due to its superior solar control and performance, Solux Ultra™, is the best choice for homeowners wanting to achieve the highest standard of thermal efficiency for their home and is highly recommended for buildings with a higher window-to-wall ratio. Talk to your manufacturer about upgrading to Solux Ultra™.



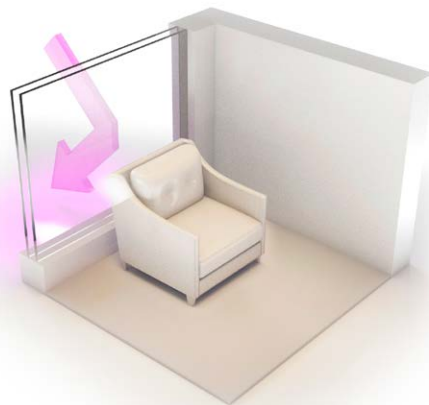
Controls overheating

Lets natural light stream in with less heat entering the home, reducing overheating and also minimising the need to use air conditioning.



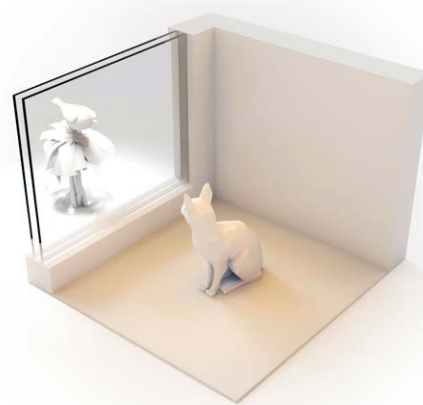
Retains heat

Reflects the warm air in the home back into the house rather than escaping through the glass, retaining heat by a further 9%*. This reduces the energy needed to keep the home warm in cooler months.



Protects against fading

Helps protect furnishings in the home from fading by reducing the amount of damaging light that enters through the glass.



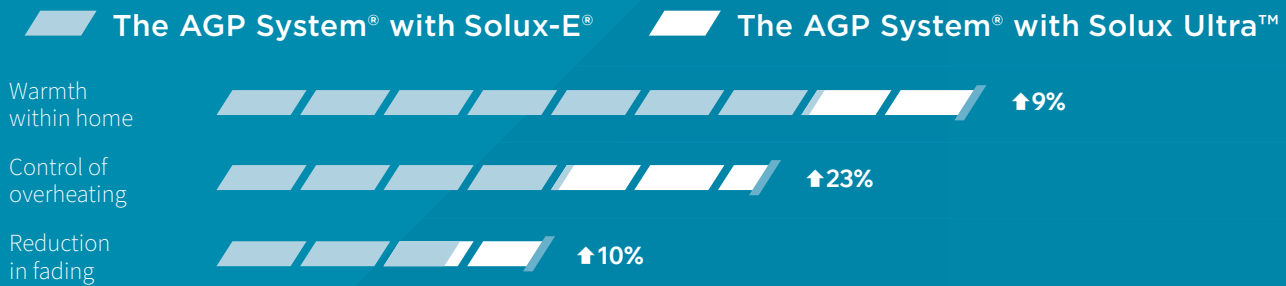
Maximises natural daylight

The brilliantly neutral colour of Solux Ultra™ sets it apart from other Low-E glass and ensures you enjoy natural light and unblemished views all while delivering improved temperature and fading control.

Please contact your local manufacturer for further advice and information.

Solux-E® vs Solux Ultra™ comparison

The AGP System® is available with two Low-E options. Both Low-E options offer protection against overheating and fading while helping to retain heat in the home however, it's important to consider your home's design and your thermal performance requirements when choosing the best product for you.



* Data is indicative only. Data is for glazing placed vertically. Data is not a guarantee of in service performance. Tdw-ISO is a damaged-weighted UV transmittance. U-value calculated using CEN conditions, balance of data calculated using NFRC conditions.

Get greater thermal performance

Your windows and doors are a complete system with each component contributing to the overall performance of your home. For the ultimate in thermal performance, the whole window system needs to work together to deliver thermal efficiency and optimal year-round comfort.

Combining Klima® frames with high performance glass such as The AGP System® will ensure your window systems are rated at a maximum 6 energy stars under WEERS (Window Energy Efficiency Rating System) and comply with the highest insulation requirements of the New Zealand Building Code.





Hardware

Contemporary Urbo hardware is used to operate European multi-point locking systems on Klima® windows and doors.

The range includes innovative options that enhance the appearance and functionality of your windows and doors. High quality Urbo hardware is manufactured in New Zealand and powdercoated in Klima White for reliable performance and durability.

Tilt-and-turn Hardware



Tilt-and-turn window in casement mode



Tilt-and-turn window in hopper mode

Choosing tilt-and-turn hardware for opening windows allows you to swap between side opening or top opening for more ventilation. By turning the lever handle in different positions, the window can open inwards in casement (side opening) or hopper (top opening) mode. Opening inwards, this easy clean European system is ideal for second storey windows. Care needs to be taken when choosing internal window coverings, as some window coverings will clash with the window when using the open-in mode.

Espagnolette fastener

This window fastener offers fine lines and clean shapes in a simple, single handle for standard open out bottom or side opening windows. The Espagnolette handle drives a multi-point locking system for the ability to leave your windows on a secure venting position.



Espagnolette fastener

Lever handle

This classic lever handle is suitable for hinged doors and French doors. The lever handle drives a multi-point locking system.



Lever handle

Sliding door lever handle

A compact handle that is suitable for sliding doors which operates a multi-point locking system, used in conjunction with a quality New Zealand made pull handle.



Sliding door lever handle

Other options are also available. Please consult with your local Klima® manufacturer.



Klima® Entrance Door with vertical grooves in Matt Flaxpod AluClip, and Icon lever handle



Klima® Latitude Entrance Door

A first-of-its-kind entrance door that's reliable, environmentally conscious, and reflects your style to complete your home.

Our new Klima® Latitude Entrance Door is expertly crafted from uPVC profiles for superior thermal performance, no matter the climate you are in. Specifically tailored with sustainability in mind, our Klima® Latitude Entrance Door's inner core is made from recycled materials to create a product that is designed for maximum strength and stability, while also easy on the environment.

Our Klima® Latitude Entrance Door is the perfect companion to a house lot of Klima® joinery for a complete thermal joinery solution that can be customised to suit your unique style.

Why choose our entrance door?



Thermal efficiency

Insulated with a solid SaveBOARD® core made from recycled materials, to prevent the transfer of hot and cold temperatures for maximum thermal performance.



Style

The classic Latitude style tongue and groove or negative detail boards are available in either a vertical or horizontal pattern. Glass inserts are also available.



Durability

Our entrance doors are built to last, expertly designed for maximum strength and stability under a range of weather conditions.

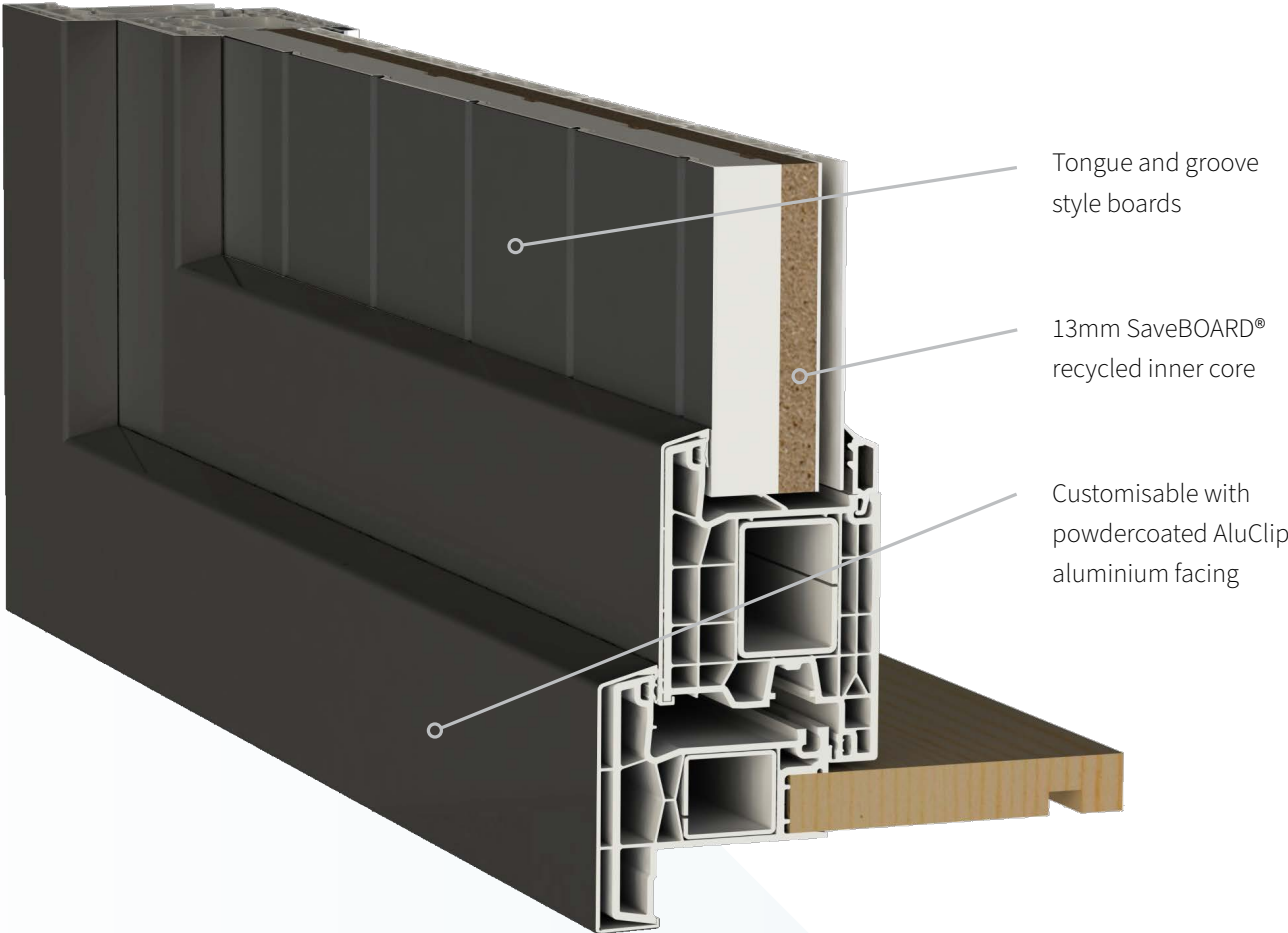


Sustainability

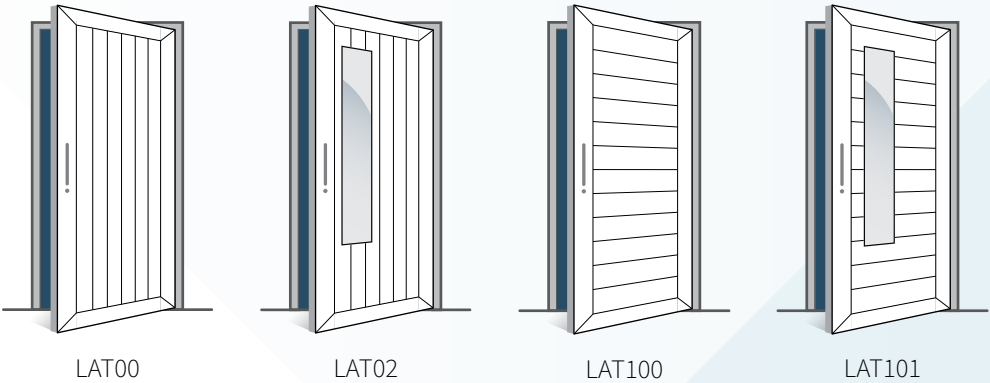
Our entrance doors are made using a SaveBOARD® recycled inner core for strength and sustainability.

Product overview

Klima® Latitude Entrance Door with AluClip



Entrance door configurations

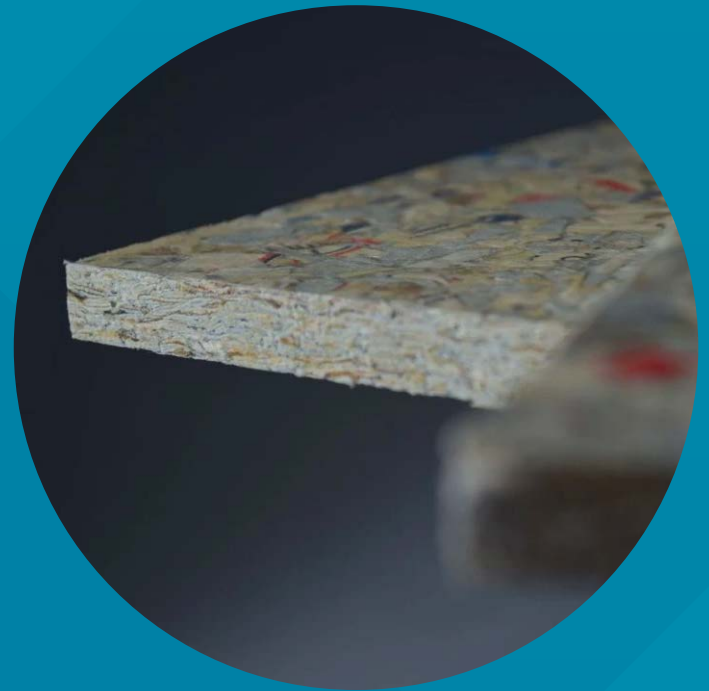


Product specs

- ▶ Available in Klima White as standard
- ▶ The Latitude style door features tongue and groove or negative detail style boards in either a vertical or horizontal pattern
- ▶ The entrance door is compatible with some digital lock hardware options
- ▶ Colour can be customised with an AluClip aluminium facing. See page 10 for further detail
- ▶ Glass inserts are available
- ▶ Multi-locking technology is our standard offering for increased security
- ▶ Discuss hardware and colour options with your local Klima® manufacturer.



Standard Klima® white



Sustainability with SaveBOARD®

At Klima®, we are committed to reducing our carbon footprint and eliminating unnecessary waste going into landfill. Which is why the Klima® Latitude Entrance Door has an inner core that's made by turning our packaging waste back into low carbon materials.

Each panel incorporates a 13mm SaveBOARD® core, utilising waste plastic from our production, along with other companies' non-recyclable waste, as the bonding agent.

The result is a panel that's stronger, sturdier, and more resistant than a standard entrance door. By choosing Klima®, you can be confident that your entrance door is manufactured to the highest standard, while also leaving a low carbon footprint.



A combination of products in Klima White with Urbo colour matched hardware.

Warm Welcome

A clever combination of products mixes the heating standards of the UK with the Kiwi lifestyle

When Alan and Georgina Judd moved into their new build at semi-rural Hamurana, across the lake from Rotoiti, they brought a menagerie with them: two dogs (Tui and Bess), a handful of sheep, some goats, a cow, and an alpaca. The chickens are still to come.

Notwithstanding that small ark's worth of dependents, the Judds' decision to build a new home was all about downsizing and downshifting. Since moving to New Zealand in 2011, the expat English couple had operated a busy B&B just down the road in Hamurana, while also maintaining a 10-acre lifestyle block and caring for the abovementioned animals. They needed a break, and, after spending seven years in a house that was originally single-glazed and particularly cold, they wanted a home that was warm and light.

Since moving in at the start of the year, they've gravitated to the living area – the warmest room in the house – where Alan tends to read and Georgina has set up her spinning wheel. "But whenever the sun's out we'll be on the deck – it gets lovely sun all day and is sheltered from the wind."

There's still landscaping to do, electric gates to install,

chickens to bring home to roost. But they're feeling at home.

"It's light, it's warm, it's got a good living space, and it's very peaceful, looking out over the trees to the lake," says Alan. "For our first attempt at building from scratch, it's been very successful."

Their brief to the architect was straightforward: a simple one-level home, spacious, easy to maintain and well insulated, with views to the lake on the south side and plenty of glazing on the north to capture all-day sun. Visually, they were keen to maximise the contrast between light brick cladding and dark weatherboards.

They got that, and more. Polished concrete floors soak up the sunshine that floods into the house, and the ambient warmth is added to by underfloor heating fuelled by a Marshall wood boiler and a powerful wood fire in the generously sized living area.

To make the most of all this, they selected windows and doors from Klima®, which is renowned for thermal efficiency. Made of highly durable uPVC, Klima® also



Stacker Sliding door in Klima White with Urbo colour matched hardware.



Sliding window and sliding door in Klima White with Urbo colour matched hardware



Awning windows in Klima White with Urbo colour matched hardware

withstands harsh sunlight without degrading or discolouring and delivers excellent sound insulation and impressive ventilation. The Judds found the white joinery enhances the contrast with the dark weatherboards, and a Cola Red Plasma aluminium entrance door for the statement.

Initially, they'd anticipated installing bi-fold doors, but decided instead to use sliders to maximise indoor-outdoor flow. For windows, they chose Low-E glass in a grey tint to protect furnishings. They also like the fact that, with the tint, you can't really see the interior when you're outside, says Georgina. "We sometimes see the cows looking at their own reflections in the door!"



Awning windows in Klima White with Urbo colour matched hardware and a Plasma entrance door in Mannex Cola Red with Yale 142 pull handle



Awning windows in Klima White with espagnolette fastener



Stacker sliding door in Klima White with Urbo colour matched hardware

Manufacturer network

Klima® joinery is exclusively available through participating Altherm, First, and Vantage manufacturers throughout New Zealand.

Our extensive network of manufacturers covers the country. These businesses are independently owned and managed, with knowledge, expertise, and skills to assist with your next building or renovation project.

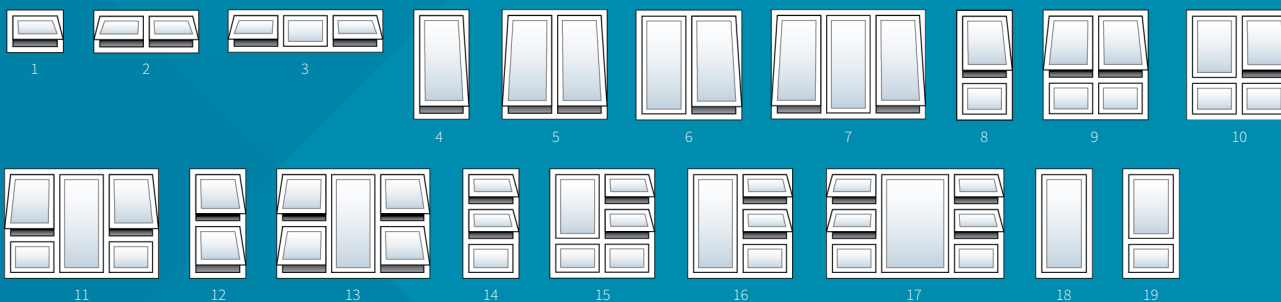
The Klima® brand is owned by APL Window Solutions, New Zealand's leading window solutions company.

See klimawindows.co.nz for manufacturer details.



Configurations

Awning and Insert Windows

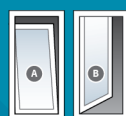


Sliding Windows

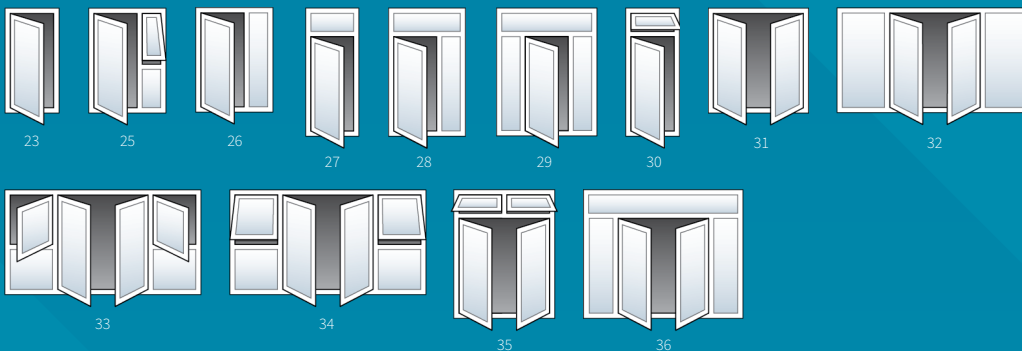


Tilt-and-turn Window

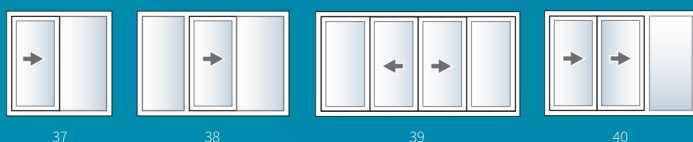
Optional configurations for all windows



Hinged and French Doors



Sliding Doors





Warranty

Our Klima® windows and doors meet or exceed the requirements of the New Zealand Building Code and New Zealand Standards; NZS4211, Performance of Windows, and NZS4223, Glazing in Buildings.

We fully back our Klima® products with a 10-year warranty. Our windows and doors can be expected to have a serviceable life of more than 15-years.

For full terms and conditions please visit klimawindows.co.nz



Care and maintenance

Klima® products meet all statutory warranty requirements and are fully tested to ensure compliance with the New Zealand Building Code. Regular maintenance is needed to keep your warranty valid. If you want your joinery to be looking at its very best for years to come, these simple steps will help.

For windows and doors

- ▲ Clean and remove builder's debris and dust inside of sills
- ▲ Clean every three months – more often in coastal or industrial environments, ideally once a month
- ▲ Clean with a soft brush, warm water, and mild household detergent. For stubborn stains, use a soft cloth with Jif cream cleanser
- ▲ Abrasive steel wool, scrapers, scouring liquids, solvents and thinners will damage the finish
- ▲ Remove build-up in door tracks
- ▲ Exposure to excessive heat, heaters or hot air guns may damage the surface finish.

For hardware

- ▲ Clean powder coated hardware with a wet sponge or soft brush, warm water and mild detergent and rinse with fresh water.

For glass

- ▲ Only use detergents and cleaning solutions recommended for glass
- ▲ Soak glass first to loosen dirt, then use a mild, non-abrasive solution
- ▲ Rinse with water, as cleaning residue can permanently mark glass.



klimawindows.co.nz



Exclusively available through



*Klima® is adapted from
products by European
market leader Kömmerling*

