



Thermosash 
BUILDING ENVELOPE SOLUTIONS™

SCHÜCO
PARTNER

Thermosash Company Introduction

HIGH-END RESIDENTIAL

Why Thermosash?

Over 50 years of dedication

Half a century of engineering milestones, and we're just getting started.

Our journey commenced in 1973, in Auckland, New Zealand, when five visionary engineers joined forces to establish Thermosash. Under the leadership of our founder, Mr. Laurie Hayes, we rapidly built our reputation. By 1990, we had become New Zealand's largest commercial window and Curtainwall designer, manufacturer, and contracting company.

Our Expertise

Our core discipline revolves around the design and delivery of specific engineered prefabricated façades. It's in the complexity and customisation that Thermosash truly excels, delivering on aesthetic intent and expertly meeting structural and environmental site-unique constraints

Thermosash Schüco Partnership

Thermosash is the exclusive New Zealand Partner and only licensed supplier in New Zealand of Schüco German engineered, high thermal performance aluminium windows, doors, sliding systems and integrated automation solutions. All suites and brands that Thermosash offers, come with our reputation for being backed by local, in-house engineering, manufacturing and installation.

Pushing Boundaries in Façade Engineering

At Thermosash, we thrive on pushing the boundaries of what's possible in façade engineering to meet project imposed engineering challenges. We don't just meet standards - we often surpass them. Our team of experts are constantly seeking smarter ways to improve facade performance and create solutions that actually work.

Total Clad Solution

Thermosash has the capacity and capabilities to deliver a comprehensive warrantable, buildable, high performance solution for the building envelope.

Our pathway to simplify the entire process includes an integrated service:

- Design + Engineering
- Material Procurement
- Pre-fabrication
- Installation
- Service & Maintenance by contract

Proudly New Zealand-Owned and Operated

Thermosash is a 100% New Zealand-owned and operated for over five decades and has the privilege of playing a pivotal role in turning architectural concepts into buildings that enrich communities and provide safe places to work, live, learn and play.

A Part of the Thermosash Group

We are part of the Thermosash Group of Companies, which includes Thermosash Service and Maintenance, Woods Glass, and WEC (Window Engineering Consultants). Our collective strengths allow us to offer comprehensive solutions.

Our State-of-the-Art Facility

Our main manufacturing facility, situated in Henderson, Auckland, is modern and technologically advanced, equipped with state-of-the-art automated machinery - this facility is the heart of our operations. We continually invest in plant and equipment to remain at the forefront of the industry.

With further facilities in Wellington and Christchurch we have the capacity to tackle multiple projects concurrently while maintaining precision and quality.

Quality Assurance and Compliance

Our commitment to delivering high-performance, quality unitised façade units extends to our comprehensive Inspection and Testing Plan. This plan is a detailed roadmap that guides our efforts to ensure that every unit meets industry standards and your project's specific requirements.

Capacity and Engineering

Delivering successful high performance façade solutions demands specialist knowledge and expertise, we have in-house professional registered structural and façade engineers specifically assessing each façade design for structural and environmental (seismic and wind) loading, and ensure that the façade solution is code compliant.

ISO Certification

Thermosash Group Limited has received HEQ Telarc registered ISO certifications for our Thermosash Auckland facility based in Henderson and the Woods Glass facility based in Penrose, Auckland. For more detailed information on these Telarc registered certifications please see [page 15](#) of this document.

Our Speciality

Custom Engineered Façade Solutions

Our core competency lies in delivering custom engineered façade and curtainwall solutions.

With a rich history and a commitment to quality and innovation, we have established ourselves as a leader in the façade industry. Our specialisation in engineering bespoke solutions stems from a unique combination of key elements that define Thermosash:

Tailored Engineering

Solutions for commercial building façades are complex due to the need to balance performance, aesthetics, engineering and long term value - while meeting building code compliance. Thermosash excels in understanding these complexities and designs compliant custom-engineered façade and curtainwall solutions that work technically and aesthetically. Our team's commitment to meticulous engineering ensures the systems we use in each project are integrated and work together to provide a durable, weathertight facade that delivers a return on investment over the long term.

One key element that sets us apart is our ability to handle a diverse range of designs. Thermosash has decades of experience delivering anything from the most simplified façades to the most intricate and challenging designs across all commercial sectors, from low-rise structures to towering high-rise applications.

Our in-house team of experts thrive on turning architectural vision into reality, no matter how complex.

Performance and Durability

Thermosash prioritises performance and durability. Our façades undergo rigorous testing, adhering to the highest industry standards. This ensures that our solutions not only look good but also contribute to the energy efficiency and sustainability goals of modern construction and international standards.

Collaborative Approach

Thermosash is more than a provider; we are an all-in-one facade solution partner.

Our collaborative approach involves close consultation with architects, builders, and project managers from project inception - so that our custom-engineered façades align with the project's vision, schedule, and budget.

Speed of Installation

The off-site prefabrication of our unitised façades - in a factory controlled environment - offers significant advantages in terms of installation speed and efficiency. By manufacturing the façade panels off-site, including the glazing, insulation, and other non-vision components, it delivers accuracy and precision not achievable on site, and the installation process is greatly simplified by reducing site clutter and the number of on-site staff.

Full Design Solution

We offer a complete design solution, from initial drawings and engineering to manufacturing and final installation. This end-to-end approach ensures seamless coordination and integration of all the necessary components.

We offer a 10-year warranty on our unitised façade systems, demonstrating our confidence in the quality and durability of our products and our commitment to long-term performance.

Sustainability

Thermosash is firmly committed to advancing sustainable construction practices, making environmental consciousness a top priority. At the forefront of the industry, we are dedicated to reducing carbon emissions and championing eco-friendly solutions.

Low Carbon Glass

Thermosash's commitment to sustainability also extends to our glass selection. With access to worldwide low-carbon glass suppliers, we ensure that our projects benefit from environmentally friendly and high performance glazing options, further reducing the carbon footprint.

High-end residential products

Functional, efficient and elegant quality solutions for upmarket living

In Partnership

Schüco is a German company based in Bielefeld developing and supplying innovative luxury window, door and sliding door systems with integrated automation solutions for modern quality living. Through our exclusive New Zealand Partnership with Schüco we are manufacturing and installing their systems in high-end residential projects in New Zealand.

Thermosash sets a high standard for all of the Schüco products we offer; suites are analysed and engineered to suite New Zealand's dynamic environment and comply with New Zealand standards. Locally backed by Thermosash's reputation, in-house engineering, manufacturing and installation.

Energy Efficient Products

Schüco products offer energy efficiency with maximum glazing transparency. Products are designed to achieve high thermal insulation values to provide interior comfort and reduce heating and cooling costs.

Effortless Operation and Automation

The large-format sliding and lift-and-slide doors bring the outside inside and provide functional effortless operation including options for efficient automation solutions. Window and door functions can be regulated via a timer control, smart-phone or tablet

Schüco TipTronic Simplysmart offers concealed mechatronic actuator technology for integrated management to automatically open and close vents, as well as provide modular locking at multiple points.

Solar shading can be managed through integrated concealed solar shading blinds which are virtually unaffected by wind and can be operated via a switch or central system to adjust to temperature, time of day or weather conditions.

Elegant Design

Slim lines, narrow face widths, large openings and level thresholds are all achievable with the Schüco range of innovative quality products.

Indulge your individual style with a range of feature handles for windows, entrance doors and sliders that are elegant and ergonomic to operate.

Photos: Schüco International KG



Innovation and timeless comfort



Alpine Glass House

Alpine Glass House is situated in Queenstown, New Zealand

Designed by Piet Kee Architecture, careful landscaping allows this two storey property to elegantly emerge from the surrounding alpine environment. Innovative building solutions are featured throughout the home and when combined with large monolithic glazing solutions, result in breathtaking views of the surrounding lake district without compromising on privacy.

World class panoramic views

Through the adoption of Schüco's ASS 77 PD.HI sliding system, with floor to ceiling glazing and slender profile widths, occupants can take in the breathtaking views of Queenstown's iconic Remarkables mountain range from the comfort of the well insulated living area. The robust thermally broken sliding system boasts market leading spans with 3.5m x 2.6m sliding doors resulting in weights exceeding 500kgs.

To accommodate these floor to ceiling glazing solutions, automation has been integrated using Schüco's TipTronic solutions. With mechatronic fittings fully concealed within the systems subframe, sliding doors can be effortlessly opened and closed at the push of a button using the buildings main control panel.

Super insulated performance

The combination of Schüco's AWS/ADS 75.SI+, ASS 77 PD.HI and ASS 50 allows the project to secure an average insulation value of R0.66, easily exceeding the code requirements of R0.50 for the Queenstown area. An impressive achievement for a home with large glazing vision areas on both the upper and lower levels.

Joinery solutions delivery by Thermosash include:

- Schüco AWS/ADS 75.SI+ Windows and Doors
- Schüco ASS 77 PD.HI Sliding System
- Schüco ASS 50 Sliding System
- Schüco FWS 50 Skylight Solution

Photos: James Allen Photography, New Zealand





The Pool House

The Pool House is situated in Queenstown, New Zealand

Designed by Yoke Architects, the building harmonises with the existing buildings and fits into the landscape as a stand alone structure. The Pool House is 345m² and accommodates a private indoor pool with a gym and sauna facilities.

Maximum design freedom

On the north facing side of the The Pool House Thermosash installed a thermally insulated Schüco Panorama Design sliding system offering maximum transparency and light penetration, connecting with the outside space visually as well as functionally.

The large Schüco ASE 67 slider comprises of 8 sliding panels 3265mm high x 2350mm wide with 46mm triple glazing and weighing 490kg each.

Thermosash also installed Schüco ASE 67 double sliders, and Schüco AWS 75 / ADS 75 hinged door & fixed window with 46mm triple glazing, as well as a Schuco ADS 75 insulated panel hinged door (75mm panel).

Due to the high thermal performance of the Schüco suites the project has achieved an insulation value of R0.9.

Photos: Thermosash Commercial Ltd



Te Arai Coastal Residence

Te Arai Iti is situated on the North Island of New Zealand

Designed by Bureaux Architects, along the pristine shores of New Zealand's upper east coast. The contemporary styled flat-roof combined with pre-weathered Vulcan panelling allows the structure to seamlessly blend into the white sandy dunes of the surrounding landscape.

New generation concealed Mechatronic Fittings

On the East facing elevation overlooking the coastline, the guest bedroom occupants enjoy access to the external deck areas from the thermally insulated Schüco window and door systems installed by Thermosash. Each of these bedroom units intergrates Schüco's SimplySmart - TipTronic fittings technology in the bottom hung operable sashes at the head. With fittings fully concealed and automation synced to the buildings security protocols, sashes can be effortlessly controlled using a switch whilst producing minimal noise. As coastline conditions are often unpredictable, automation provides occupants an elevated level of confidence when utilising the buildings ventilation systems.

Minimalist sliding door solutions

The open plan living, kitchen and dining area boasts a series of Schüco's panorama designed sliding systems. The ASE 67 PD system minimises visible joinery through sleek perimeter detailing and maximises light penetration through the use of ultra slim, 31mm interlocking mullion. The use of an in-wall track design allows the dining sliders to be fully concealed within the primary structure resulting in a sense of freedom that allows occupants to harmoniously transition from coastline vista to sophisticated dining and eventually be met with the warm, communal outdoor seating area.

Joinery solutions delivery by Thermosash include:

- Schüco AWS/ADS 65 Window and Door System
- Schüco AWS 60.HI Tilt & Turn Window System
- Schüco ASE 67 PD Sliding System
- Schüco ASS 39 SC Sliding System (Internal Shower)

Photos: Thermosash Commercial Ltd





South Island, New Zealand



Pivot Doors with air-lux

SCHÜCO
 IN PARTNERSHIP WITH
air-lux®

air-lux Technik AG in partnership with Schüco opens up new possibilities

Stunning design feature doors

Pivot doors swing on a rotational axis enabling impressively sized door leaves to be installed. They offer a stunning alternative to a conventional side-hung entrance door, providing level thresholds, and the possibility of floor to ceiling installation. Through the Thermosash partnership with Schüco we have access to incorporate the high quality air-lux gasket sealing technology into the pivot door system - enabling ultimate ease of use and superior weather & air-tightness.

Standard and custom large sizes

The standard door leaf can be up to 10m² in area and weigh up to 500kg. Larger doors can span 15m² (5m W x 3m H) or custom designed to a maximum weight of 1500kg. Security features such as alarm glass or bullet-proof safety glass can also be incorporated - glass up to a maximum of 60mm thick can be accommodated.

Materials and finishes

Design freedom is possible with various cladding materials and finishes for the door leaf (which, if not glazed, has a thermally insulated aluminium core), and the high-quality, thermally insulated aluminium frame profiles can be finished off to match the cladding of the leaf.

Electronic Security

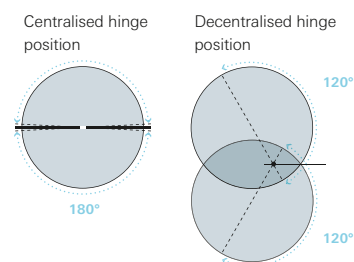
The mechanical and electromagnetic base components of the pivot doors provide a high level of security. In addition to this electronic security devices can be integrated and

linked to modern building management and alarm systems - for reliable monitoring, including with mobile devices such as smartphones or tablets.

Ease of Operation

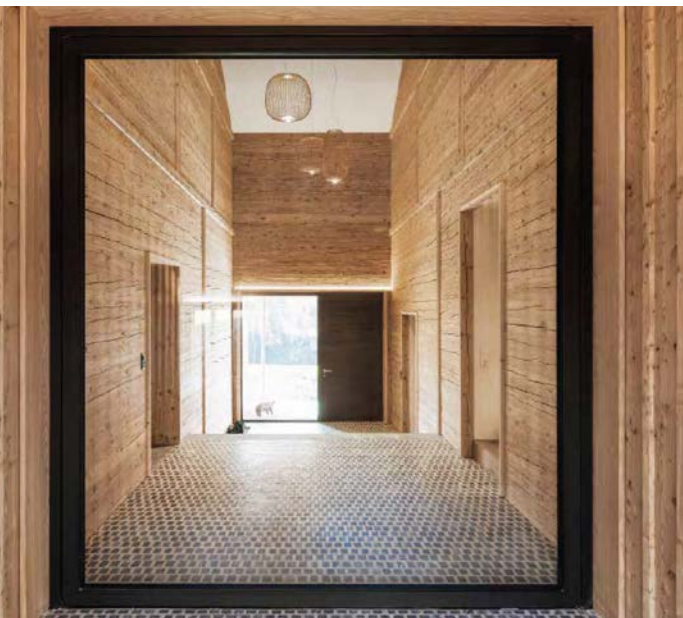
The pivot door is operated from the inside using a push button in the frame profile or in the wall. Outside operation can be by means of a standard smart home system or an entry code. Conventional access control systems can also be connected. When closing, a magnetic contact activates the auto-lock function, which locks after a set amount of time. In the process, the air-lux gaskets (inflatable ring seals) are filled with air, providing a full perimeter seal for the door.

The door movements are controlled and smooth, and large heavy doors can be moved with minimal effort by operating on a specially developed hinge system that can be mounted centrally or off centre. The rotational angles of 90° to 360° can be supported.



Hinge positions and rotational angles of pivot door

Diagram and Photos: Schüco International KG





ISO Standards

At Thermosash, we place paramount importance on ensuring the highest standards in Health and Safety, Environmental, and Quality Management across our operations. In alignment with our commitment to excellence, Thermosash and Woods Glass Auckland facilities have obtained ISO certification in these critical domains.

Thermosash Group has taken a phased approach in this journey of implementing the ISO standards across the other regional facilities as a comprehensive commitment to Quality, Health & Safety and the Environment.

ISO 45001:2018

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Focused on ensuring a safe and healthy work environment for all our employees, clients, and collaborators.

ISO 14001:2016

ENVIRONMENTAL MANAGEMENT SYSTEM

Emphasizing our dedication to environmentally sustainable practices, minimizing our ecological footprint, and contributing to a greener future

ISO 9001:2016

QUALITY MANAGEMENT SYSTEMS

Ensuring that our processes consistently meet the needs of our clients and stakeholders, reflecting our unwavering commitment to quality.

DEDICATED HEALTH AND SAFETY AND QUALITY MANAGERS

Each Thermosash branch supports its own dedicated Health and Safety and Quality Managers. These professionals are instrumental in the day-to-day implementation, monitoring, and continuous improvement of our Health and Safety, Environmental, and Quality Management systems. Their role is pivotal in ensuring that our operations align seamlessly with the rigorous standards set by the ISO certifications.

As we progress on this journey, we are confident that the implementation of these ISO standards will not only fortify our commitment to excellence but also underscore our responsibility towards the well-being of our employees, the environment, and the quality of our products and services. Our phased approach, exemplifies our meticulous and comprehensive strategy in achieving ISO certification across the entire Thermosash Group.



Thermosash in Henderson, Auckland and Woods Glass in Penrose, Auckland have achieved Telarc compliant ISO certifications.

ISO 9001
ISO 14001
ISO 45001



South Island, New Zealand

www.thermosash-schueco.co.nz

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