THERMOSASH

Security Systems

WINDOWS, DOORS AND FACADES





Thermosash Commercial Ltd

158 Central Park Drive, Henderson Auckland 0610, New Zealand

www.thermosash.co.nz

Thermosash Security Systems

Thermosash offer security windows, doors and facades that are architecturally aesthetic whilst providing custom engineered security-enhanced solutions to suit the demands of the project scope.

The low or medium to high performance human and structural impact products provide security from:

- Forced entry or exit
- Ballistic Resistance
- Blast Resistance
- Flying debris (cyclones)

Our security system solutions are suitable for:

- Mental health facilities
- Youth detention facilities
- Government buildings
- Courts
- Security Facilities
- Correctional facilities
- Data Centres
- Biocontainment facilities
- Consulates

Our Unitised Systems offer the benefits of local off-site fabrication, modern construction techniques, and near limitless design possibilities...

bringing your boldest architectural visions to life whilst delivering practical benefits such as speed of installation, reduced risk, just-intime site delivery, and single point warranty.

Shape the future of urban design and aesthetics with a high performance Thermosash Unitised Facade solution. We have five decades of building envelope experience to bring to your table.

Our Aluminium is **green** to the core.

Thermosash is partnered with a NZ-owned extruder providing the lowest embodied carbon aluminium readily available in New Zealand*. The combination of high recycled content and low carbon virgin material forms the high quality extrusion that Thermosash uses.

*Achieving Toitū Carbonreduce certification which far out performs the global average. (Independent audits to stringent European standard PAS 2050 are regularly undertaken, please contact us for the most up to date carbonreduce CO2e/kg of aluminium figures).

Thermosash recycles 100% of all metal waste products produced during manufacturing operations.

We exclusively use local powder coaters who have stringent chemical handling processes and reuse or responsibly dispose of all waste powder.



Mason Clinic WDHB
AUCKLAND



Wiri Prison



Mt Eden Correctional Facility AUCKLAND

LOW TO MEDIUM SECURITY WINDOWS

DELTAGUARDTM

Thermosash DelatGuard $^{\text{TM}}$ is a security window system developed for low to medium security human and physical structural impact project requirements.

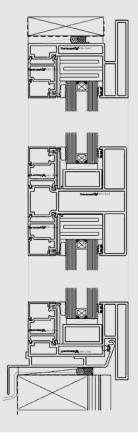
A specifically engineered frame and combined glass suite offering correctional facilities, youth detention, acute and forensic mental health facilities and data centre projects the peace of mind on entry and exit restriction and ballistic and blast control - offering protection to those in the building.

Please Note: DeltaGuard™ is not intended for high security protection where we recommend to use SÄLZER (page 4) for medium to high end security, ballistic, intruder and blast protection.











Mason Clinic E Tui Tanekaha, Auckland (for mentally disabled offenders) - the windows provide security and offer a domestic aesthetic to the building.

KEY FEATURES

- Reinforced frame to take high impact internal loading, external loading or both.
- Designed to mitigate frame parts converting to weapons
- Ability to quickly switch out primary glass if damaged to reduce time a room is unoccupied where necessary
- Glazing pocket designed to accommodate varying glass thickness to meet projects needs
- Glazing options include; polycarbonate, Glass or IGU
- Anti-ligature internal design
- Domestic / residential non-institutional aesthetic.
- Tested for tool damage / destruction intrusion resistance.
- Each system is specifically engineered for your project's needs
- Options available to provide security to restrict transfer of contraband



Wiri Prison, Auckland - security windows with bespoke sash.



Youth Justice, Christchurch - windows installed with specialist security glass.



Mt Eden Prison gate house, Auckland - security glass facade

SUSTAINABILITY

SUSTAINABLE MANUFACTURING

Thermosash manufactures all system components in New Zealand, and primarily source materials where available from the New Zealand market. Our precision machinery ensures optimised material usage with 100% of all metal waste products recycled in the factory, saving on-site waste. We recycle 100% uncontaminated soft plastics, timber, cardboard, paper and 99.5% commercial float glass and IGUs.

ALUMINIUM EXTRUSIONS

At the heart of Thermosash's sustainability journey is a partnership with a local New Zealand owned remelt facility producing extrusions with 80% recycled content and low carbon virgin material, that has resulted in a super low sustainable embodied carbon footprint per kilogram of Aluminium. Our aluminium supplier is audited annually, for up to date figures please contact us.

FACADE OPTIMISATION STRATEGIES

To achieve optimised high performance outcomes we offer our clients the option of a Project Sustainability Analysis that covers different aspects of the full sustainability cycle. When specifying our facade systems, clients can engage us to implement one or several of our Facade Optimisation Strategies to achieve their project sustainability goals. To gain the most from our strategies, talk to us early on in the design phase of your project.

Our Thermosash Sustainability Team can assess and provide analysis reports on embodied and operational carbon engineering optimisation and costs, energy and comfort optimisation and costs, as well as assistance with Green Star credits - these strategies help to guide material selection, shape a more efficient design and provide clarity on ROI payback periods.

REDUCTION OF OPERATIONAL EMISSIONS

Through a full measurement and target reductions audit undertaken by Toitū Envirocare, Thermosash Commercial Ltd achieved Carbonreduce Certification. This provides a baseline for subsequent emission reduction targets going forwards. Please contact us for up to date certification figures.

BENEFITS OF A THERMOSASH SOLUTION

Thermosash is a New Zealand based business and has been engineering and manufacturing specific design facade solutions across the country since 1973. We deliver solutions using our trusted and proven systems, offering increased value in terms of;

- +50 years of experience and expertise in the facade solutions industry in New Zealand, with ongoing trust within the industry
- In-house expertise across the entire process
- Proven experience in complex project delivery
- Totally integrated service with ECI /ECE engineering, producer statement generation, full shop drawings, manufacture and installation.
- Custom engineered high performance solutions tailored to architectural, environmental and structural requirements design and detail to accommodate seismic loads and inter-storey differential movement, as well as wind and other live loads
- Proven durability of systems and longevity of product lifespan
- Responsible procurement and waste management
- Risk mitigation through one provider and one warranty no multiple trades required
- Local precision manufacturing and site delivery logistics
- Expert installation with well-considered strategies and safety methodologies

PREFABRICATED UNITISED SYSTEM ADVANTAGES

- Off-site fabrication and glazing reduces on-site waste and clutter
- Unitised panels can seamlessly incorporate a variety of cladding materials and integrated elements
- Engineered to accommodate project specific environmental conditions and design constraints for high performance outcomes
- Quality assurance and control is implemented across the fabrication process and during on-site installation
- Site installation is quicker due to the modular construction enclosing buildings rapidly and reducing on-site programme time
- On-site delays are reduced during inclement weather fabrication can continue even if site falls behind and Unitised panels can be placed on completed floors in loading crates ready for installation on a just-in-time basis.
- Scaffold and crane requirements are dramatically reduced

COST SAVINGS

- Reduced number of junctions with other trades if Thermosash engineers, manufactures and installs the building envelope elements such as curtainwall, glazed and non-vision unitised panels, rainscreen, skylights, mechanical air louvres, solar shading and integrated elements, architectural metal folding, canopies, balustrades, flashings etc.
- Reduced number of council inspections during construction and possible delays, saving on compliance costs
- Specifically designed and engineered facade solutions that offer high performance and durability which contribute to cost savings on operational energy and maintenance over the lifespan of the building, and maximises ROI



High Commission of India, Wellington - featuring Thermosash PW1000 unitised curtainwall with integrated sliding doors, ballistic rated windows, and skylights.





National Biocontainment Laboratory

WELLINGTON

The enhanced PC3 building features Thermosash PW1000 Unitised curtainwall with double glazed high security glazing, custom print aluminium panels, 6.6m louvre panels and Thermosash PW400 unitised single glazed curtainwall.

HIGH PERFORMANCE SECURITY SÄLZER

For more than four decades SÄLZER have specialised in building security systems, delivering specifically designed and constructed products such as doors, windows, facades and guardhouses to provide diverse security solutions for customers worldwide.

Thermosash is the exclusive New Zealand Schüco Partner. In 2018 SÄLZER became part of Schüco. This partnership allows us to offer these exceptional high-end security solutions for commercial and residential buildings within New Zealand. All SÄLZER security products that we offer will be designed and manufactured by SÄLZER, in Germany, with tried and tested methodologies, high-end quality and certified international standards, and will be installed in New Zealand by Thermosash to exacting requirements.



SÄLZER PRODUCTS ARE TESTED FOR SECURITY PERFORMANCE

SÄLZER windows, doors and facades are rigorously tested according to international standards. They can be adapted to integrate into the building envelope and are available in graduated security classifications against various threat scenarios:

- Forced entry and vandalism resistance
- Breakout resistance from the inside and from the outside
- Bullet Resistance protecting human lives against ballistic attacks from a variety of weapons and ammunition
- · Explosion and blast resistance a security solution can be optimally adapted to individual explosive threat scenarios.

HIGH PERFORMANCE SECURITY WINDOWS

The SÄLZER window range offers aluminium or steel frames with narrow profile face widths designed to provide safety and the ability to integrate extensive and multi-function glazing.

Viewed from the outside they do not look like heavy duty secure elements manufactured to withstand potential threats. Functionally the windows can offer ventilation, thermal insulation, and natural daylight and can be designed to meet the overall architectural intent of the building project.



HIGH PERFORMANCE SECURITY DOORS

The security doors by SÄLZER are adaptable to meet varied building envelope requirements, whether integrating with glazed curtain walling or an architectural residential building facade.

Operating comfort, style and security level are all considered as part of the design process. The doors can integrate automated fittings, access control units and escape door technology.



HIGH PERFORMANCE SECURITY FACADES

The high performance facade offering discrete security with narrow profiles and expansive glazing is based on the Schüco FWS system - combining design elegance with high security.

This facade system allows for insert windows (inward or outward opening, tilt-turn, bottom hung casement), insert doors (hinged or sliding), security skylights and security access systems.

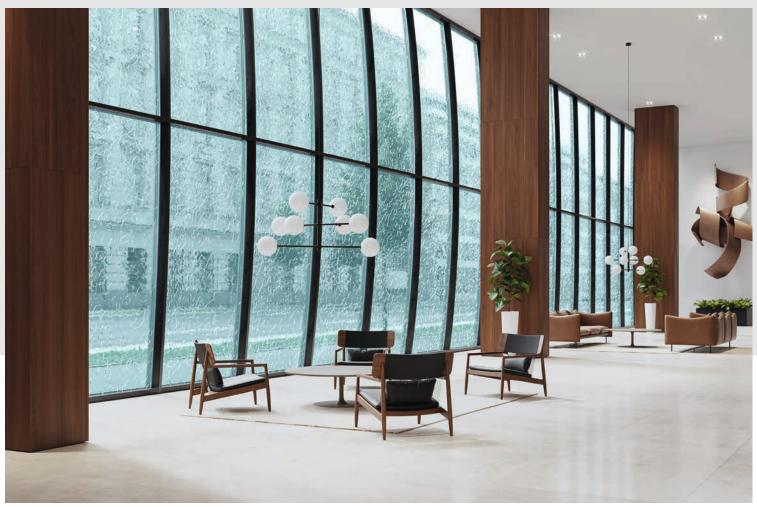


HIGH PERFORMANCE SECURITY GUARD HOUSES

SÄLZER has modular systems for security guard houses, booths and checkpoints developed through testing and certification.

The modules can be configured by selecting the doors, windows, facade and roof requirements, and choosing the level of security necessary for each.





SÄLZER high performance security facades offer design elegance with blast resistant protection. The system allows for insert windows (inward or outward opening, tilt turn, bottom hung casement), hinged or sliding doors, security skylights and security access systems.



SÄLZER security doors can integrate automated fittings, access control units and escape door technology.

OUR BRANCHES

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Thermosash are members of:



