



Thermosash 
BUILDING ENVELOPE SOLUTIONS™

Thermosash Company Introduction

SUSTAINABILITY

Low-Carbon



Our Aluminium is green to the core.

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. To this end, Thermosash has initiated a series of sustainability initiatives.

Low-Carbon Glass

Thermosash's commitment to sustainability also extends to our glass selection, whilst access to low-carbon glass is available, it is in its infancy with limited suppliers. We ensure that your projects benefit from environmentally friendly glazing options, further reducing the carbon footprint of our façade solutions.

Toitū Carbon Reduce

Thermosash is a certified Toitū Carbon Reduce organisation, with emissions generating-activities quantified to produce an audited total value for operational carbon emissions. As part of the carbon reduce program we have progressed several reduction initiatives, including the installation of a 220kW solar power generation system at our Auckland production facility.

Work site Reduction/Elimination/Reuse

By employing multi-use transport equipment, long-life steel crates and stillages, and reusable packing materials, we significantly reduce waste generated during installation. Prefabrication of products allows for efficient waste capture and sorting at the factory, further minimising on-site waste.

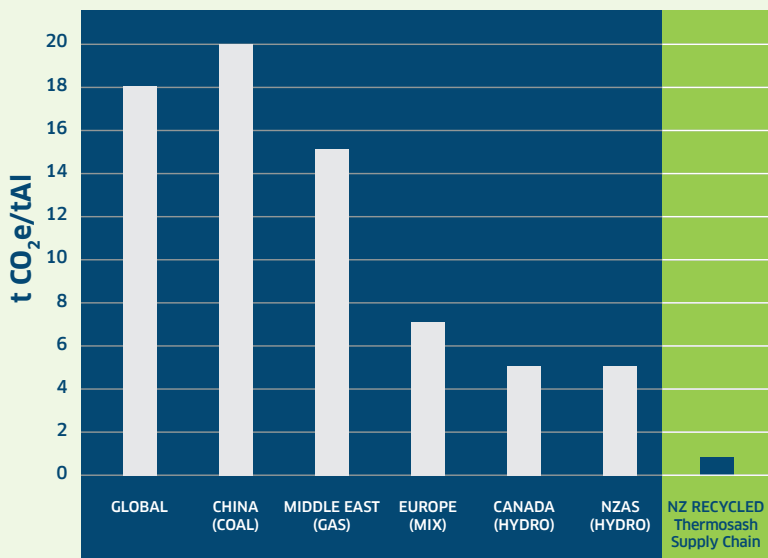
Reduction of Operational Emissions

Through a full measurement and target reductions audit undertaken by Toitū Envirocare, Thermosash Commercial Ltd achieved Carbonreduce Certification with result of 1,369.93 tCO₂e (tons of carbon dioxide equivalent) in the 2021/2022 NZ financial year period.

This baseline for subsequent emission reduction targets going forwards. Please contact us for up to date certification figures.

Low-Carbon Extrusions

At the heart of Thermosash's sustainability journey is a partnership with our supply chain, a collaboration that has resulted in, potentially, one of the lowest sustainable embodied carbon footprints per kilogram of Aluminium anywhere in the world. The key to this achievement lies in our local partnership, a remelt facility, that has a high recycle content of metal, creating a



high strength Aluminium extrusion with very low embodied carbon, using state-of-the-art extrusion presses powered by a renewable electricity grid. **The result:** A super-low embodied carbon, high-quality Aluminium extrusion, crafted from a blend of recycled material and low-carbon virgin material.

With just **1.31 kilograms of CO₂e per kilogram** of Aluminium log (scope 1 & 2), Thermosash is setting a new industry standard, standing **41% lower** than the readily available global alternatives - that's an **89% better** carbon footprint than the global average.





This is to certify that

Thermosash Commercial Limited
 excluding emissions from Woods Glass and Insite Facades under
 operational control

is Toitū carbonreduce organisation certified.

Toitū carbonreduce certified means measuring emissions to ISO 14064-1:2018
 and Toitū requirements; and managing and reducing against Toitū requirements.

A handwritten signature in black ink, appearing to read 'Ana Tatana'.

Ana Tatana — Certifier

Date issued: 26 June 2023 | Valid until: 26 June 2026

Certificate Number: 2023251J | Certification Status: Certified Organisation

Company Address: 41 Poland Road, Wairau Valley, Auckland, 0627, New Zealand

Certification Year Level of Assurance: Reasonable for categories 1, 2, category 4 electricity T&D losses and
 waste landfilled LFGR mixed waste and limited for category 3 & remaining category 4

Please refer to the disclosure page on www.toitu.co.nz for further details.

Toitū carbonreduce is an annual certification programme and this certificate only remains valid with an annual surveillance audit.

TOITŪ
 ENVIRO CARE

JAS-ANZ



WWW.JAS-ANZ.ORG/REGISTER
 Certified by Enviro-Mark Solutions Limited
 (trading as Toitū Envirocare)

Thermosash's Custom Embodied Carbon Calculator

In a move towards leading sustainable construction in New Zealand, Thermosash Commercial proudly introduces a bespoke tool designed to measure and optimize the carbon footprint of our curtainwall panels.

Traditional industry calculators provide broad strokes; Thermosash's innovation lies in a tool that zooms in, offering project-specific calculations of embodied carbon. Our calculator delves into the very materials used in the façade solution, ensuring accuracy in carbon calculations.

Powered by Thinkstep

Developed in collaboration with Thinkstep, a leader in life cycle analysis, Thermosash's calculator benefits from industry-leading expertise. This collaboration ensures that the tool is not just innovative but also robust and reliable.

Detailed Bill of Materials

Unlike other industry calculators, our tool is tailored to the materials actually used in your design. The process involves creating a comprehensive bill of materials, making preliminary sourcing decisions to gather supply chain data, and running the information through the calculator. This meticulous approach guarantees accuracy in your design's embodied carbon projection.

Comparative Material Analysis

Beyond mere calculations, Thermosash's team can assess the pros and cons of alternative material selections. This ensures that your project strikes the right balance between cost-effectiveness, performance, and carbon content, aligning with your sustainability goals.

Material-Specific Analysis

The tool dissects the carbon impact of materials chosen for constructing a panel, providing a detailed breakdown of each element's contribution to the overall embodied carbon. This allows for a granular understanding of the environmental impact, going beyond generic assessments.

Full Envelope Analysis

Thermosash's commitment to sustainability goes above and beyond industry standards. While others might focus on full-building calculators, our tool extends its analysis to the envelope, providing an in-depth understanding of the carbon impact associated with our curtainwall panels.

Precision at Every Level

The tool's functionality extends to calculating embodied carbon at both per-panel and per-square-meter levels, offering flexibility in how the data is applied to your project. This level of precision empowers architects, builders, and project managers to make informed decisions about the environmental impact of their designs.

Our Custom Embodied Carbon Calculator is more than a tool; it's a commitment to a sustainable future in construction, offering a level of precision and detail that marks a new era in environmentally conscious design and decision-making.



ISO Standards



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 Auckland and Woods Glass Auckland have established and successfully implemented these systems, serving as a benchmark for our broader implementation strategy.

The Thermosash Group, with each of its branches, is moving towards ISO certification in a phased approach. The three ISO standards that encapsulate our commitment are:

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.



INTEGRATED MANAGEMENT SYSTEM

Thermosash Commercial Limited | www.thermosash.co.nz

A Thermosash Group Company

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