



WINDOW TRANSPORT CATALOGUE

World leaders in Glass, Windows and
Flat Panel Handling & Transport Solutions



metalcraft
GLASS RACKING

ABOUT US

World leading. New Zealand made. Built to last.

Based in Christchurch, Metalcraft Engineering and Glass Racking is a New Zealand manufacturer specialising in the design and fabrication of flat panel handling and transportation equipment. We serve the glazing, window, and wider flat panel industries with both custom-built solutions and a proven range of handling, transport, and storage systems.

Proudly NZ made and exported worldwide, our equipment is recognised as a world leader in design and innovation. Every product is built to deliver exceptional quality, reliability, and longevity, ensuring our customers gain maximum return on investment through safer handling, reduced damage, and longer service life.

Our investment in the industry includes ownership of 17 aluminium extrusion dies, 8 polymer dies, and 11 plastic injection moulding dies. These resources allow us to create unique components, safeguard intellectual property, and provide true product differentiation.

Since 1991, our guiding principle has been **Innovative by Design**. Combining strong engineering expertise with 3D CAD design and CNC machining, we consistently improve production quality, reduce costs, and deliver equipment trusted across New Zealand and international markets.

CAPABILITIES

At Metalcraft, our strengths lie in the skills of our people, supported by advanced technology and robust systems. With more than 30 years of experience, we combine design, fabrication, and project management expertise to deliver solutions that are innovative, practical, and built to last.

Experience

With a problem-solving mindset, our team thrives on tackling complex challenges in glass, window, and panel handling and transport. Leveraging deep industry expertise, we develop best practices and innovative techniques that improve efficiency, safety, and reliability.

- **Experienced leadership.** Our leadership team brings extensive expertise in operations, product development, and CAD design, combining strategic oversight with a hands-on approach that drives innovation and efficiency.
- **Design excellence.** Design teams specialise in solution conception, product development, and design for manufacture, utilising full CAD and 3D modeling capabilities.
- **Project management & QS.** Accurate costing, efficient scheduling, and clear communication ensure projects are delivered on time and within budget.
- **Production leadership.** Skilled supervisors oversee workflow on the floor, ensuring efficiency and precision across fabrication processes.
- **Skilled tradespeople.** Fabrication teams work confidently with mild steel, stainless steel, brass, and aluminium, supported by apprenticeships that develop the next generation of tradespeople.

Expertise

The combination of skilled staff, advanced tooling, and proven systems allows us to deliver small one-off jobs to large commercial projects. Whether it's a unique custom solution or the manufacture of an entire product range, Metalcraft remains flexible, responsive, and committed to quality craftsmanship.



NEW ZEALAND
MADE



GLOBAL
LEADER



QUALITY &
LONGEVITY



INNOVATION &
DESIGN



EFFICIENCY &
EASE OF USE



SAFETY &
PROTECTION

WINDOWS

WINDOW TRANSPORT



TRAILERS

Metalcraft designs and manufactures a complete range of transport systems for windows, doors, and flat panels. Including trailers, trucks, and demountable frames, available as new builds or retrofit upgrades. Every system can be tailored to suit your requirements and incorporates our proven Pole-Based Window Retention System, which saves time during loading and unloading, reduces damage to frames and is safe.

A-Frame Window Trailer

The Fixed A-Frame Window Trailer is purpose-built for the safe and efficient transport of large and heavy window frames. Constructed from galvanised steel with dual braked wheels (355 mm rims), heavy-duty tyres, and leaf suspension rated from 2500kg up to 3500kg. Combining strength with long-term durability.

The trailer deck is clad in 28 mm hardwood container ply with inlaid slotted bases for secure positioning of poles from the Window Retention System. A 2.4 m pull-out ramp makes loading and unloading easier, while under-deck storage bins and integrated A-frame storage provide added practicality.

- Large capacity, up to 25 m³ of window frames
- Low deck height and ramp reduce lifting strain
- Towable by large SUV s — no truck required
- Non-marking protection reduces costly rework
- Tailored dimensions and features available



A-Frame Trailer continued

Frames are secured using the Metalcraft Window Retention System, which includes foam-clad poles, reveal foams between frames, and retention components that speed up loading/unloading and minimise transit damage. Signage can be mounted directly onto the trailer frame.

- Purpose-designed by specialists in window and glass transportation.
- Faster loading/unloading, reducing labour time.
- Reduced rework due to non-marking foam and polymer protection.
- Large capacity: up to 25 cubic metres of window frames.
- Rated at 2.5T or 3.5T options gross, with a safe working payload of approx. 1,630 kg.
- Low deck height and integrated ramp reduce lifting strain and help prevent injuries.
- Can be towed by large SUVs, avoiding the need for dedicated trucks.
- Tall units (over 2.1 m) can be loaded and secured with ropes and strops.
- 2M, 2.2M or 2.4M high options.
- Built using CNC and automated fabrication for consistent high quality at competitive cost.
- Available in tailored configurations, with custom dimensions and features to suit individual requirements.



T-Frame Trailer

T-Frame trailers provide more window storage for greater capacity and increased deck space with the features of an A-Frame.



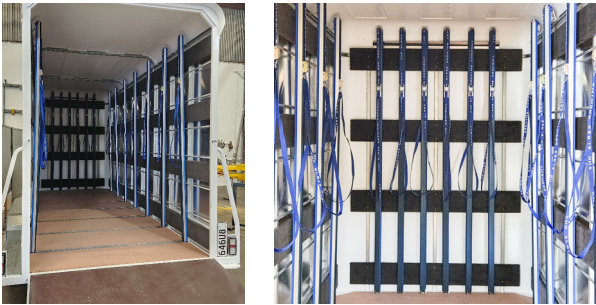
3M Glazing Trailer

The 3M Glazing Trailer is built with a three-metre external rack on each side, combined with a rear fold-down ramp to allow transport trolleys to be winched on board using a front-mounted winch. Curtain sides protect the load from the elements and double as advertising space, while options such as internal racks and container-style rear doors allow the trailer to be customised.



Hard-Sided Trailers

Hard-Sided Trailers are used for transporting crawler cranes and crawlers to site. These trailers are weight-rated, fitted with the latest electronic braking systems, and custom fitted internally to secure specialised equipment. At the rear, pull-out ramps allow cranes or crawlers to be loaded and unloaded safely and efficiently.



Retrofit Upgrades

All new trailers, as well as retrofit upgrades to existing trailers, can be fitted with our Pole-Based Window Retention System. This ensures safe and efficient handling, protects against frame damage, and extends the service life of customer assets. Bearing surfaces are clad in non-marking polymer protection foams, which prevent transit rub and ensure products remain in perfect condition.



Transport Components

Metalcraft Glass Racking transport systems use engineered components that keep window frames secure, protected, and easy to handle across all trailers, trucks, and demountable frames.

Key Components

- Top cleat & poles – integrated cleat for strap pole connection; pin-top option for hardtops
- Strap poles – foam-sheathed with 20 mm copolymer for compression and protection
- Reveal foams – soft separators between frames; moulded for mullions/fins; prevent slip
- Securing straps & stops – outer strap contains the load; safety stop adds redundancy
- Inclinometer – shows load angle prior to unloading for operator safety

How the Load Process Works

- Place frames on deck with reveal foams between each
- Insert poles into slotted base, hook to top cleat, tighten against outer frame
- Compression secures load through the width, reducing movement
- Apply safety stop around full load for final containment

Benefits of the System

- Faster loading/unloading saves time and labour
- Reduced rework – all surfaces are non-marking and protective
- Secure retention – poles apply pressure through the load, not at an angle
- Flexible – strap poles can be positioned within loads to support mixed frame sizes
- Durable – all components are weatherproof, waterproof, UV-resistant, non-marking
- Professional image to customers with neat, reliable presentation

“Our Pole-Based Transport System secures every frame quickly, safely, and without damage, reducing rework, saving labour time, and presenting a professional image on every delivery.”

WINDOW TRUCKS

Metalcraft Glass Racking also designs and manufactures truck bodies dedicated to window and door transport. These are available as complete new builds or as retrofit upgrades to existing vehicles, always incorporating our Pole-Based Window Retention System.



Customers can choose fixed A-Frame or U-Frame structures permanently mounted to the truck, or opt for removable uprights that allow the body to be converted back into a flatbed for general-purpose use. All bearing surfaces are lined with non-marking polymer foams to eliminate transit rub and protect products during delivery.

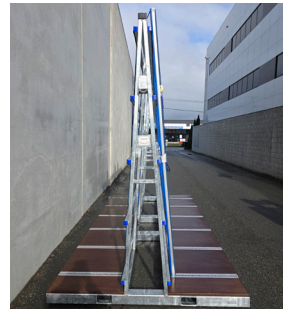
Decks are typically constructed in hardwood ply with slotted bases for pole positioning, with the option of raised hardwood blocks for additional load stability.



DEMOUNTABLE FRAMES

For customers needing maximum flexibility, we design and manufacture Demountable Frames designed specifically for transporting windows and doors.

These frames can be loaded onto trucks, trailers, or Utes and secured using a variety of retention systems. Like all of our solutions, they incorporate the Pole-Based Window Retention System to minimise damage and speed up handling.



Demountable frames are lined with non-marking polymer foams at all contact points, ensuring that finished products are protected throughout transit.

By eliminating the need to double-handle window frames, they save significant time, reduce the likelihood of damage, and improve overall health and safety in factory and site operations. They also maintain a professional presentation to end customers, reinforcing quality and care in delivery.



WINDOW HANDLING

TROLLEYS

Trolley Trees

Designed for the horizontal storage and movement of aluminium window extrusion cut lengths. This approach eliminates the scratching and damage often associated with vertical storage, especially for heavier, wider sections. For longer material, the XL Tree Cart provides additional capacity and strength.

Key Components

- Polymer bearers – soft, non-marking, wear-resistant, and designed with a raised centre so shavings and debris roll off, reducing scratches
- Six storage layers – each with two arms per layer, allowing both bulk storage and easy management of job lots
- Mild steel frame – hot dip galvanised for strength and long service life, with end caps for neat polymer retention
- High-quality castors – load-rated castors ensure smooth operation and longevity under heavy use
- Bolted construction – simplifies transport and reduces shipping cost
- Cut Length Tree Cart features a strong, heavy-duty design that ensures durability and long service life. Its space-efficient layout maximises factory floor area, while quick, two-sided loading and unloading makes handling simple.



Tooth DGU/Sash Trolleys

Designed to simplify the handling, storage, and movement of insulated glass units (IGUs/DGUs) within the window fabrication industry.

Load DGUs straight from the delivery truck directly onto the trolley for quick transfer into the factory. From here, DGUs can be moved efficiently. Because the trolley holds each unit securely at 40 mm spacing and supports them every 300 mm, DGUs remain stable and protected during handling.

The trolley's "toaster-style" layout allows individual DGUs to be selected in sequence, enabling fabricators to prepare loads for vehicle dispatch in the correct order. This reduces double handling and ensures the right products are ready when needed for installation.

Beyond sequencing and movement, the Tooth DGU Trolley also serves as a compact storage solution. With hot-dip galvanised construction, non-marking ABS teeth, and heavy-duty castors, it provides long-term durability while keeping DGUs safe from damage and easy to access until required.



Teeth spaced with polymer to suite window sashes and doors.



TRESTLES & TABLES

Trestle Tables & Workstations



Our prepping tables have a solid 29 mm hardwood plywood tops – stay flat, resist wear, and provide a robust work surface. Polymer-clad bearing surfaces – protect flat panels from scratches and transit rub

Features Include

- Roller axles under-table – house rolls of rubber and mohair for easy access, speeding production times
- Optional under-table storage – provides space for boxes of consumables or tools
- Customisation available – many window fabrication teams have strong preferences for their workstations, and we frequently build tables tailored to individual staff or factory requirements

Factory Trestles

Factory trestles are available in a variety of sizes, from fixed singles through to large trestles designed for commercial windows. Strong, galvanised frames combined with polymer-clad bearing surfaces provide long-term durability and reduced rework, even in high-volume production environments.



Prepping Tables



A complete range of factory and site trestles designed specifically for window fabricators. Built for strength, safety, and efficiency, these trestles and tables provide stable work surfaces for manufacturing window frames and processing flat panels, while reducing the risk of damage and rework.

- Non-marking polymer bearing surfaces prevent scratches, dents, or swarf damage
- Height adjustment options ensure ergonomic working positions and safer handling and length extensions adapt trestles for larger windows or specialist work
- Castors or rubber feet enable either mobility or fixed positioning
- Top bar configurations single or ladder-style frames, in roll-formed steel or aluminium
- Standard lengths – 2.5 m or 3.1 m, with extensions available

Site Trestles

Site trestles are designed for installation work and are built to fold for easy transport and storage. Adjustable legs create a flat working surface even on uneven ground, while non-marking polymer tops protect finished frames and glazing products during site work.



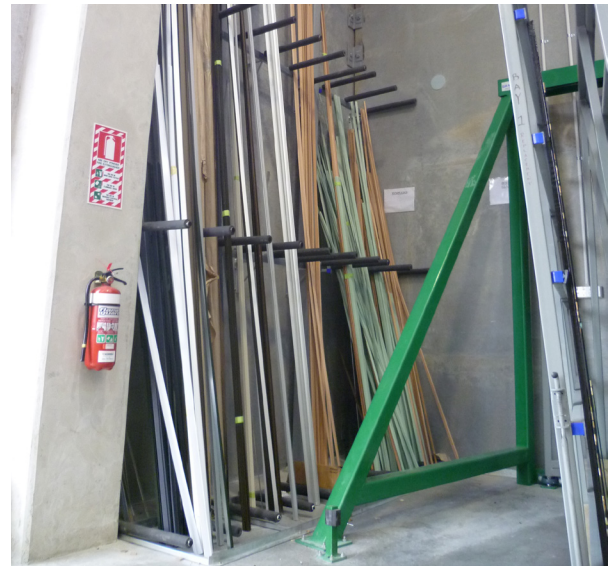
STORAGE

Metalcraft has worked closely with the window fabrication industry to design and manufacture storage systems that are tailored to the handling of aluminium extrusions and finished goods. Our racks are built to protect product finishes, improve floor space efficiency, and reduce rework from surface damage.

L-Frame Storage Systems

L-Frame racks are commonly used for the storage of raw aluminium lengths.

- Designed for long extrusions where stable leaning support is required.
- Bearing surfaces can be finished in timber or our non-marking polymer.
- An extruded sleeve for separating bars has been specifically developed to protect aluminium from scratching or denting.
- Compact design makes them ideal where floor space is at a premium.



A-Frame Storage Systems

A-Frame racks provide a flexible option for storing both raw aluminium and finished window or door units.

- Frames are angled equally on both sides, allowing dual-side storage.
- Available in various sizes to suit factory layouts and stock volumes.
- Bearing surfaces can be clad in polymer, timber, or foam rubber to protect anodised and powder-coated extrusions.
- Suitable for job lot storage as well as spare stock.
- Secured to the wall and floor for stability and safety.



Post Storage Systems

Post racks are designed for finished goods such as windows, sashes, and door units.

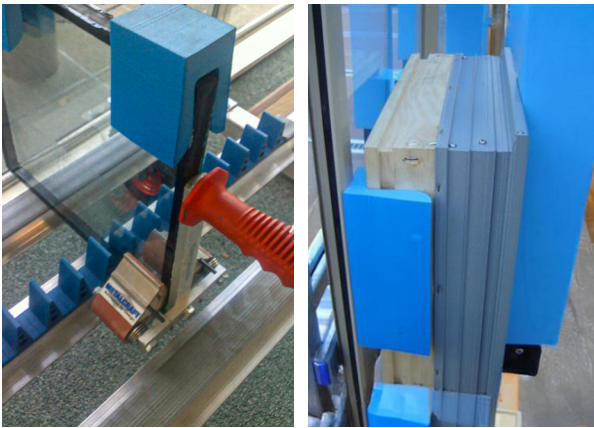
- Feature full-height non-marking polymer bearers on leaners, preventing marking or scratching of completed frames.
- Can be configured with bases set directly on the factory floor, with raised base blocks, or on raised floors, depending on workflow needs.
- Various leaner designs available to suit different product sizes and factory layouts.
- Ideal for safe storage of finished product ready for dispatch or installation.



PROFOAM PROTECTION

Metalcraft ProFoams are purpose-designed separators that clip onto window and door reveals, providing a soft, non-marking buffer during storage and transportation. Made from durable closed-cell copolymer, their natural “springiness” ensures that once poled or strapped into place, ProFoams hold windows and doors snugly, minimising movement and reducing damage.

The ProFoam Advantage



ProFoams were developed to solve the common problems fabricators experienced with traditional carpet spacers, which often slipped or failed in transit. Their shaped profile clips firmly over window and door reveals, staying securely in place under pressure. This design eliminates product movement, reduces “settling” during transport, and ensures consistent separation between units.

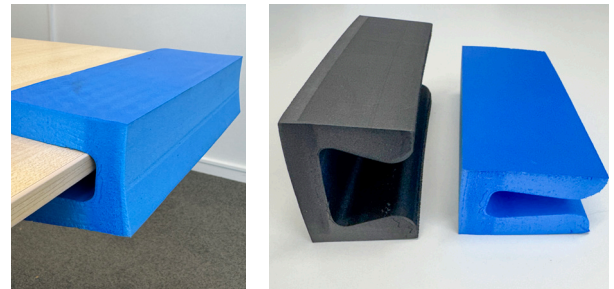
The 20 mm thick bearing surface compresses when strapped or poled into place, holding frames tightly without causing damage.

The flexibility and resilience of the copolymer material means ProFoams return to their original shape even after long periods of compression. Breakages are minimal, giving the product a long service life and making it a reliable, cost-effective choice. In addition to protecting windows and doors, many customers also use ProFoams for IGU/DGU edge protection, and longer lengths can be manufactured on request.

Reveal Corner Face ProFoams

For aluminium surfaces meeting wooden frames, the Reveal Corner Face Foams provide tailored protection. At 100 × 100 mm wide and 60 mm high, they clip securely onto reveals at corners, shielding finishes from damage where different materials meet.

Standard & XL ProFoams

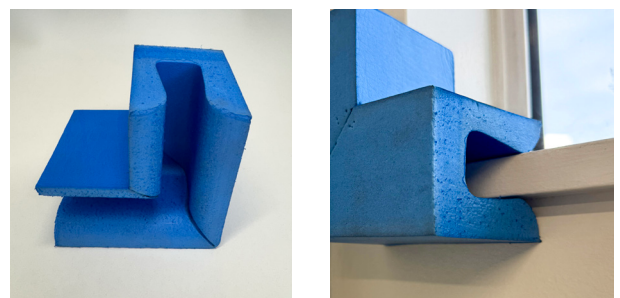
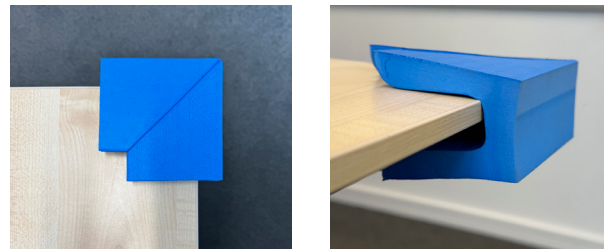


Our **Standard Profoams** (200 × 80 × 50 mm) slot into 19, 25, and 30 mm reveals, or clip easily over aluminium, PVC, and timber extrusions. Supplied in 200 mm lengths, boxed in sets of 100, they’re a flexible solution for everyday glazing.

For larger openings, the **XL Profoams** (76 × 76 mm) are designed for doors, sliders, and commercial suites — giving the same ease of use, with extra scale for heavy-duty jobs. Slot fits 38–50 mm material.

Corners Reveals ProFoams

For extra protection at junctions, Corner Reveals clip neatly onto reveals at corners. Measuring 100 mm long on each side and 76 × 51 mm in profile, they keep vulnerable edges safe from damage.





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METALCRAFT GLASS RACKING

Talk to us today about a tailored transport solution. Proudly New Zealand made and trusted worldwide in glass handling.

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