



# GLASS 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 strength 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 specialises 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



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# GLASS

## GLASS TRANSPORT

### VAN FRAILS

Metalcraft Glass Racking External Frails are available for most makes and models of vans, with a wide range of options that can be tailored to suit each customer's specific requirements.

#### External Frail Systems

Roof rack systems that cover both mounting options, gutters and Euro style. Many modern European vans no longer feature traditional roof channels, instead using fixing points located in roof channels with lower load ratings. To overcome this, we provide bracing solutions that integrate internal and external racks, ensuring strength and safety. This system is proven across popular models such as the VW Transporter, Ford Transit Custom, LDV, Toyota Hiace, and more.

- **Strength & capacity** – Aluminium extrusion design supported by galvanised steel top and bottom brackets.
- **Robust structure** – Vertical frames positioned behind each pole for stability.
- **High volume capability** – Designed to maximise carrying capacity.
- **Efficient loading** – Quick load/unload with non-marking polymer retention blocks and scissor clamps.
- **Safety** – Protects users and other road users.
- **Serviceability** – Simple to repair and maintain.
- **Proven performance** – A trusted solution in the New Zealand market.





## Internal Frail Systems

Metalcraft Glass Racking Internal Frails are available for most makes and models of vans, with a wide range of options that can be tailored to meet the individual needs of each customer.

Essentially an adaptation of our External Frail System, the Internal Frail provides leaner-style racks with polymer bearing surfaces to secure glass safely and minimise damage. Glass sits on the van floor (typically on a plywood base or raised blocks) and can be secured using traditional ropes and straps or with our internal retention poles.

Our timber-base internal racks with inlaid slotted bases allow for wider loads, making them especially suitable for window fabricators and installers. The space between the van side walls and the internal racks can also be utilised for shelving or storage.

This design is particularly effective for modern Euro-style vans, which may require floor-to-ceiling bracing to support both roof bars and external frail loading.

## Pull Out Racks & Sliders

For even greater flexibility, pull-out racks on sliders are increasingly popular. Available in both L-frame and A-frame designs, these racks typically extend two-thirds to three-quarters of their length out the rear of the vehicle, providing easier loading and unloading while maximising internal space.



# GLASS TRUCKS

Metalcraft Glass Racking Glazing Trucks provide the convenience of open-body vehicles with large glass-carrying capacity, integrated storage for tools and consumables, and the option to fit our Flat Panel Transportation System, delivering fast loading, safe transit, and reduced handling damage.

## 3.5 & 4.5M Glass Trucks

The Glazing Truck range has been developed for glass companies that need the convenience of open-body trucks with the capacity to carry significant glass loads, while also transporting tools, machinery, and consumables.

We manufacture both 3.5M and 4.5M open-site vehicles. The 3.5M Glazier is an open body design with a lockable workshop and large internal and external glass racks. The larger 4.5M Contractor builds on the same concept, providing increased storage volume and glass-carrying capacity. Both models feature adjustable racks for improved site access and can be extended to handle occasional oversize jobs.

The 3.5M Glazier offers similar overall dimensions to a van with a double frail system, but with significant advantages. Built on a truck chassis, it delivers greater strength, suspension, engine capacity, and load-carrying ability. It also includes a van-sized lockable storage area, internal racks, and roof racks for transporting ladders and accessories.



## 5.2M Glass Trucks

With all the features of the 3.5 & 4.5M trucks our 5.2M range is designed to fit onto these larger trucks.

All glass trucks can be fitted with the Metalcraft Glass Racking Flat Panel Transportation System — a set of components designed to quickly and securely hold window frames in place during transit. This system makes loading and unloading fast and efficient, while dramatically reducing rework caused by transport damage.



## Hybrid Options

We can also retrofit our frail system onto existing trucks.





## Covered Glass Truck

Metalcraft manufactures a wide range of covered glass carriers, from 3 m bodies to 10.7 m bodies. Cab chassis configurations vary from 4x2 to 8x4, with most covered transporters built as curtain-sided units to protect loads while also providing advertising space.



### Design & Configurations

- Smaller bodies (under 5 m): glass racks are carried outside the wheels.
- Larger bodies (over 5 m): racks are stepped in between the front and rear wheels.
- Chassis modifications: we often lengthen the chassis and add extra axles or wheels to increase carrying capacity. This not only meets size and weight requirements but can also reduce road user charges, offering customers a quick payback.

### Glide-Top Roof System

Our glide-top roof allows the full roof length to slide forward to the cab, providing crane access for quick loading/unloading of glass crates into the internal racks. External racks are typically hand-loaded with individual items.

We provide a complete end-to-end solution, managing everything from sourcing the cab chassis (or working with a customer-supplied vehicle) through to the manufacture and fit-out of the body. Each system is tailored to the customer's needs and can include curtain systems for protection and advertising, as well as professional sign writing to deliver a finished, road-ready glass transport vehicle.





# TROLLEY TRUCKS

Our Trolley Trucks combine transport trolleys, purpose-built trucks, and proven handling processes to minimise double handling and maximise efficiency. With options for new builds or retrofits, plus loading solutions such as crane forks and Moffett forklifts, these trucks provide safe, flexible transport for both local and long-haul deliveries.

## Trolley Transport

The Metalcraft Glass Racking Glass Transporting System is designed to reduce double handling of glass and panel products, both in the factory and on site. The system combines transport trolleys, purpose-built trucks, and proven handling processes to deliver safe, efficient transport solutions.

### Flexible Options

The system can be installed on new transporters or retrofitted to existing trucks, allowing customers to re-use much of their existing investment in truck bodies.

## Hybrid Solutions

Hybrid trucks that combine transport trolleys, fixed racks, storage compartments, and full flat panel transportation systems are becoming increasingly popular, offering versatile solutions for complex transport needs.







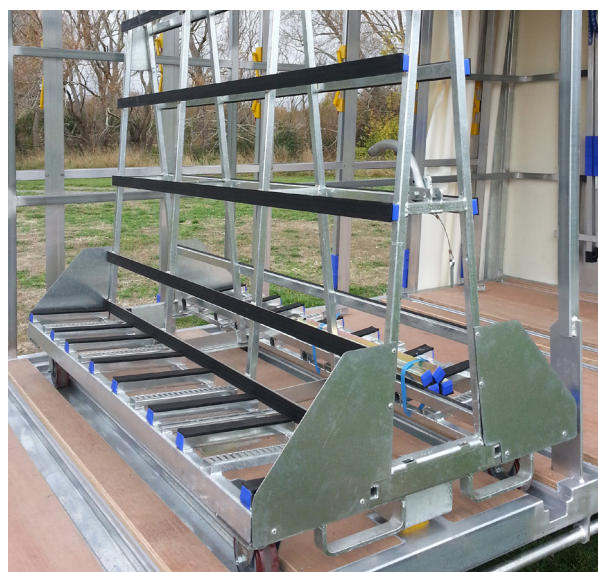
## Trolley Handling

Trolleys are loaded in the factory and secured with safety arms and strap poles for added protection.

They are transferred onto trucks using forklifts or overhead cranes, and locked in place with container-style lock-downs.

Transport trolley trucks load trolleys from one side, while the opposite side carries a full-length glass rack for oversized panels.

Available in multiple sizes and configurations for both local and long-haul deliveries.





# GLASS TRAILERS

Our trailer range spans from small covered glass trailers to large fully enclosed semi-trailers, designed to carry everything from small site deliveries to jumbo glass loads.

## Covered Glass Trailers

Designed can configured to your requirements with retention systems to your specifications.

Every design is built to run as low as possible to improve handling, reduce drag, and incorporate our own lightweight glass securing systems.

Examples of builds include:

- 12 m tri-axle glass carrying trailer
- 11 m tandem-axle trailer with integrated glass trolley transport system
- 6.5 m jumbo glass trailer with internal load racks and full air-suspension system
- 3.0 m small glass trailer with full curtain system
- Site and crane trailer with doors and loading ramps
- 3.3 m × 1.7 m site/delivery trailer designed for retrofit DGU glass and joinery
- 3.7 m crawler crane trailer with solid sides

## Small Covered Glass Trailers

Our small covered glass trailers provide a practical alternative to van racks and pickups for transporting small to medium-sized flat glass loads between the glass company, glaziers, and site.

### Features:

- Fibreglass hard top – weatherproof, durable, and adds structural strength
- Hardwood plywood deck for strength and longevity
- Inlaid slotted base on models with internal racks, for secure positioning of retention poles
- External and internal racks available depending on your requirements
- Compact footprint – typically 1.2 m frame width, 1.8 m overall width including wheels and guards, making them easy to tow and maneuver on site
- Turnkey solution – supplied ready for immediate use

Every small trailer is built to our customers requirements, with design and build flexibility ensuring that dimensions, rack configurations, and retention systems are tailored to each user's needs.





# UTE FRAIL SYSTEMS

We design and manufacture Ute-mounted frails specifically for transporting flat glass sheets. These systems provide an alternative to vans, giving glaziers and installers the flexibility to carry small to large sheet sizes directly to site.



## Ute Frails for Flat Glass

Aluminium construction – lightweight yet strong, reducing vehicle weight without compromising load security

- Raised base blocks and slotted bases – for positioning poles and setting loads securely
- Sliding, non-marking polymer retention blocks – protect glass surfaces from transit rub
- Scissor clamps (optional) – extend reach for securing wide glass sheets
- Height extensions – 125 mm increments, up to 500 mm, for taller sheets
- Configurable racks – single or double external racks, A-frame racks, or wellside racks

### Options & Fit-outs

- Integrated external and internal racks
- Choice of retaining systems to suit sheet size
- LED lighting upgrades
- Branding and signage applied directly to racks
- Options available for ute deck supply and frail.
- Additional toolboxes underdeck boxes available.

### Benefits Include

- Damage reduction – all contact points are non-marking and UV-resistant
- Faster, safer loading/unloading at the factory and on site
- High carrying capacity by maximising rack length and external ledge width
- Strong, durable design using T6 aluminium extrusions with galvanised steel sub-frames
- Simple maintenance – mono-bolted construction allows parts to be replaced or upgraded quickly
- Our ute frails provide a complete, ready-to-use transport solution.



# RETENTION & PROTECTION

## LOAD RETENTION

Metalcraft designs and manufactures a complete range of retention poles and components to secure flat panel products during storage and transport. These systems are fitted to the external and internal rails and racks of vans, utes, trucks, and trailers, ensuring loads remain safe, stable, and damage-free.

### External Sprung Window Retaining Pole

- Constructed from T6 aluminium extrusion with a concave box section for improved strength and easier grip, even in wet conditions
- Spring-loaded locating pin at the top prevents the pole from bouncing out in transit and reduces rattling, with minimal moving parts to save time and avoid user error
- Locating tongue at the base slots into multiple positions on the bottom pole retainer, allowing the pole to be positioned close to the load
- Sliding non-marking polymer retaining blocks transfer pressure evenly across the product, with unlimited positioning options to suit varied load configurations

#### Options include

- Height configurations, height extensions
- Optional scissor clamps



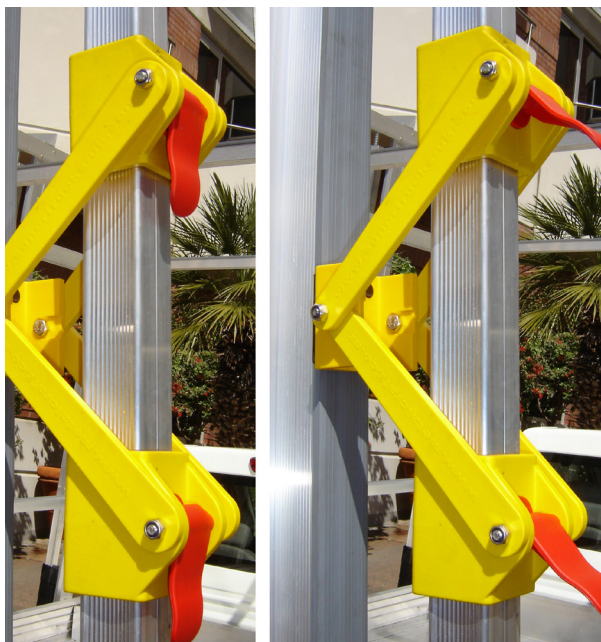
### Internal Strap Retaining Pole

- Shares the same design features and add-ons as the External Sprung Pole
- Secured at the top using a strap and cleat with locking system, rather than a spring pin
- Pole tongue locates into the base slot, while the top strap locks the pole securely to the rack frame
- Sliding polymer blocks then secure the flat panel load in position





## Optional Scissor Clamps



Our frail scissor clamps are built with one purpose in mind: making glass handling faster, safer, and more efficient. By allowing quick loading and unloading, they cut downtime and reduce labour costs, keeping your team productive and projects on schedule. Once secured, panels stay firmly in place, minimising the risk of movement or damage in transit.

Every detail has been considered with safety in mind. Smooth, unobstructive pole surfaces reduce handling hazards, while non-marking polymer components ensure that delicate glass and window finishes remain pristine. The system itself is straightforward to adopt — supported by clear training manuals that make teaching and learning simple.

Flexibility is at the heart of the design. Whether you're moving small panes or oversized flat panels, the clamps adapt easily to different sizes and load configurations, giving you confidence no matter the job. It's a solution engineered not only to protect your product, but to protect your people and your time.



## Retention Pole Systems



Our retention pole system benefits include:

- Work in conjunction with the non-marking polymer blocks for additional securing of tall or mixed-height loads
- Provide greater reach between the top of the pole and the top of the load
- Designed with minimal protrusion, so they do not affect vehicle width or create snag points
- Dual-arm sliding assembly locks with over-centre cams and red levers, which visibly indicate whether the clamp is secured — if unsecured, the red levers stand out clearly as a safety signal

## Spring or Strap Retention

Uses the same design as the Sprung and Strap Poles but replaces the sliding blocks with a continuous non-marking polymer insert

Provides full-surface contact along the length of the load, holding all parts of the flat panel securely

Designed to integrate with Metalcraft's wider transportation system, minimising transit damage while reducing loading and unloading times

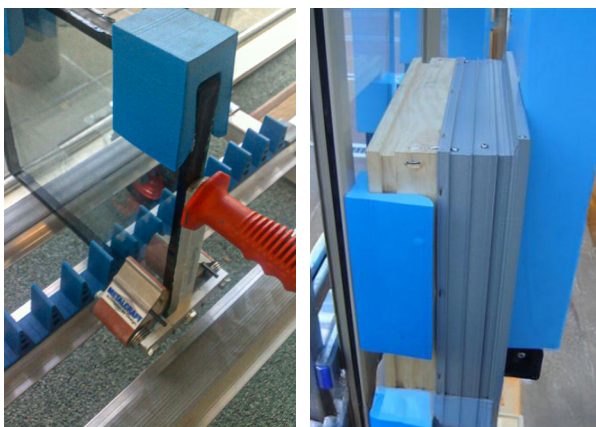




# PROFOAM PROTECTION

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.

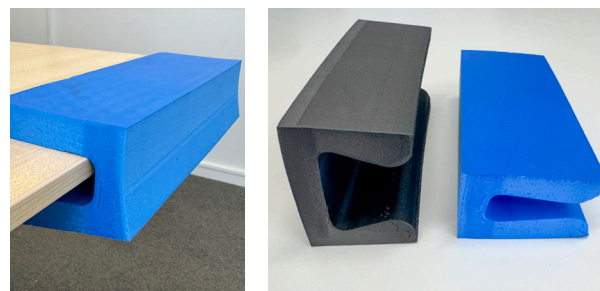
The 20 mm thick bearing surface compresses when strapped or poled into place, holding frames tightly without causing damage.

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

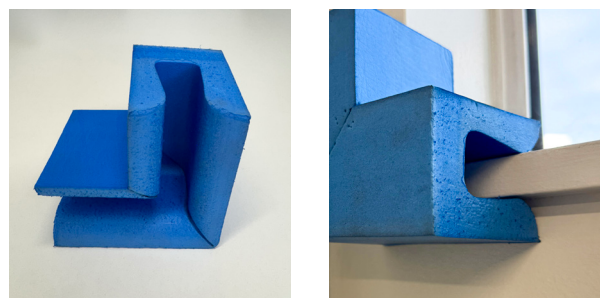
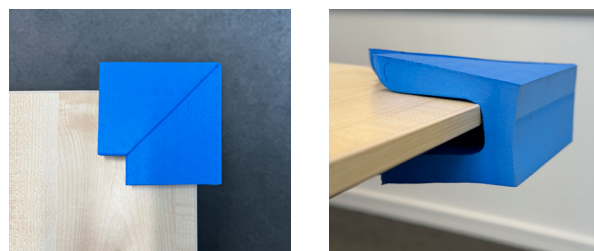


Our **Standard Profoams** (200 × 80 × 50 mm) slot into 19, 25, and 30 mm reveals, or clip easily over aluminium, PVC, and timber extrusions. Supplied in 200 mm lengths, boxed in sets of 100, they’re a flexible solution for everyday glazing.

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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