

SAFE USE OF VACUUM GLASS LIFTERS

Applies to: Woods Powr-Grip MRT4, MRTA8, P11104, Bohle Veribor, Cladman, Probst Glass Lifters, and all powered/glass-specific vacuum lifting frames

Purpose

Vacuum glass lifters are designed for lifting, handling, rotating, and installing **glass sheets, glazing units, curtain wall panels, and smooth-faced architectural materials**.

They use powered (battery/air) vacuum pumps and specialised sealing pads for safe handling of fragile materials.

This leaflet provides safe-use guidance to prevent suction failure, dropped glass, glazing breakage, and personal injury.

Before Use

- Inspect the lifter – Check frame, pads, seals, pump, battery, hoses, valves, and suspension point for cracks, leaks, or damage.
- Verify SWL – Ensure the lifter's rated capacity exceeds the weight of the glass panel.
- Inspect vacuum pads – Check for cuts, nicks, hardening, contamination, wear, or embedded debris.
- Check sealing lips – Must be flexible, clean, and free from defects.
- Inspect vacuum system – Check pump operation, valves, vacuum reservoir, alarms, and gauges.
- Test vacuum retention – Apply the lifter to a test surface and confirm it holds vacuum for the required time without drop.
- Battery-powered models – Ensure batteries are fully charged and management system is functioning.
- Inspect tilt/rotate mechanisms – Ensure locking pins, rotation bearings, and tilt functions operate correctly.
- Surface condition – Glass must be:
 - clean
 - dry
 - smooth
 - free of coatings, dust, or film that interferes with vacuum
- Confirm environmental conditions – Strong wind greatly increases risk when lifting glass; assess the site.
- Ensure operator competence – Only trained personnel may use glass vacuum lifters.

During Operation

- Position the pads centrally on the glass for correct weight distribution.
- Ensure all pads have full contact on flat surface — adjust arms if needed.
- Engage vacuum and confirm:
 - vacuum gauge reaches required pressure
 - warning systems are active
 - secondary vacuum circuit is operational (if fitted)
- Perform two-stage checks: visual seal engagement + gauge reading.
- Lift slowly and vertically — avoid angled lifting.
- Use tag lines to steady the panel.
- Maintain clear communication between operator, slinger, and installer team.
- Keep all personnel well clear of the glass — breakage risk is high.
- Avoid sudden movement, shock loading, or rapid rotation.
- Tilt/rotate only with locking pins secure and under full control.
- Continuously monitor vacuum levels during the lift — stop immediately if gauge drops.
- For long-distance lifts:
 - activate dual-circuit vacuum (if available)

- check audible/visual alarms are active
- Keep away from edges of floors or scaffolds to prevent wind-snatching.

Do Not

- Exceed the lifter's SWL or panel size limits.
- Use on cracked, damaged, wet, or contaminated glass.
- Lift porous, textured, or coated surfaces unless rated for them.
- Use damaged pads or seals.
- Ignore alarms, gauge drops, or vacuum loss indicators.
- Lift glass in high winds without specific risk assessment.
- Shock load, bounce, or drag the glass.
- Stand beneath suspended glass.
- Use improvised slings, straps, or fittings with vacuum frames.
- Leave suspended glass unattended.

After Use

- Release vacuum slowly and ensure pads detach cleanly from glass.
- Inspect pads and seals for damage or contamination.
- Clean pads with mild detergent — avoid solvents.
- Check battery charge levels; recharge immediately.
- Inspect hoses, valves, frame, and mounts for wear or leaks.
- Return tilt/rotation assemblies to locked position.
- Store lifter in a clean protective case or rack, out of UV exposure.
- Remove any damaged equipment from service.
- Maintain LOLER inspection, pad replacement interval, and service records.

Safety Reminders

- Glass is hazardous — keep clear of the load zone at all times.
- Vacuum must reach full pressure and be stable **before lifting**.
- Never lift on wet, dusty, or coated surfaces.
- Use dual-circuit vacuum systems when available.
- Wind is a major risk factor — stop work if conditions worsen.
- Only trained personnel may operate glass vacuum lifters.
- Conduct full pre-use checks every shift.

Support and Maintenance

For service, inspection, and spare parts, contact your local Lifting Gear and Safety Depot

Depot List

Bristol: 0117 9714883

Avonmouth: 0117 9550456

Newport: 01633 334450

Port Talbot: 01639 540007

Pembroke: 01646 574000

Plymouth: 01752 474488

Fareham: 01329 550988

Redruth: 01209 70399