

SAFE USE OF VACUUM LIFTERS

Applies to: Probst VPH, Probst VS/SM series, battery-powered vacuum lifters, hand-held vacuum lifters, and similar stone/concrete slab vacuum lifting devices

Purpose

Vacuum lifters are designed for safely lifting, handling, and positioning slabs, kerbs, pavers, tiles, precast units, and dense stone or concrete products using suction pads.

They eliminate the need for manual handling and reduce the risk of back injuries, crushed hands, and uncontrolled load movement.

This leaflet provides safe-use guidance to prevent suction failure, dropped loads, seal damage, and misuse.

Before Use

- Inspect the unit – Check frame, handle, pad, seals, pressure gauge, battery/motor, and suspension point for cracks, wear, or contamination.
- Verify SWL – Ensure the vacuum lifter's rated capacity exceeds the weight of the slab or product.
- Inspect suction pad – Check for cuts, wear, nicks, deformation, debris, or embedded grit.
- Check sealing lip – Must be clean, flexible, and free from damage.
- Inspect vacuum system – Ensure pump, venturi system, or manual vacuum mechanism operates correctly.
- Check vacuum gauge – Ensure gauge rises to the recommended level before lifting.
- Battery models – Ensure battery is fully charged and correctly fitted.
- Air-powered models – Ensure air supply pressure and fittings are correct.
- Inspect lifting gear – Hooks, chains, and harness points must be compatible and undamaged.
- Surface condition – The material surface **MUST** be:
 - smooth or lightly textured
 - non-porous
 - clean, dry, and free from dust or debris
- Test vacuum – Apply pad to a test surface and check hold before attaching to a load.
- Ensure operator competence – Only trained personnel should use vacuum lifters.

During Operation

- Position pad centrally on the load for maximum holding force.
- Engage vacuum fully and confirm gauge reaches required level.
- Perform a secondary check tug before starting to lift.
- Lift vertically — avoid side pulls or twisting the pad.
- Keep hands clear of the underside of the slab.
- Move slowly and avoid jerk movements which may compromise suction.
- Maintain exclusion zones around the load path.
- Use tag lines to steady the load if needed.
- Ensure suction is maintained throughout the lift — monitor vacuum gauge continuously.
- Immediately lower the load if you see:
 - vacuum loss
 - pad peeling
 - gauge dropping
 - changes in tone/noise
- For porous or textured materials, use only approved pads rated for such surfaces.

Do Not

- Exceed the vacuum lifter's SWL.
- Use on rough, damaged, porous, or heavily textured surfaces unless rated for them.
- Use damaged suction pads or sealing lips.
- Use on wet, muddy, icy, or dusty surfaces.
- Lift cracked or weak materials.
- Allow anyone beneath a suspended load.
- Shock load, drag, or swing slabs while suspended.
- Use with damaged gauges, leaking hoses, or weak battery.
- Use vacuum lifters on flaking or loose-surfaced products.
- Leave loads suspended or unattended.

After Use

- Release vacuum slowly and evenly and remove lifter carefully from the slab.
- Clean suction pad and sealing lip with mild detergent and dry fully.
- Inspect for cuts, tears, cracks, and embedded debris.
- Check vacuum gauge, hoses, filters, and pump operation.
- Recharge batteries immediately after use.
- Store with pad protected from UV, sharp objects, or deformation.
- Tag damaged or weak vacuum units out of service.
- Maintain LOLER / PUWER inspection records.

Safety Reminders

- Always check the surface condition of the slab — vacuum failure risk is higher on rough surfaces.
- Never exceed SWL or use on unsuitable materials.
- Maintain full vacuum pressure throughout the lift.
- Keep clear of the load at all times.
- Use proper PPE: gloves, steel-toe boots, hi-vis, and helmet.
- Only trained personnel should operate vacuum lifting equipment.
- Perform full pre-use checks before 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 703990