



LIFTING GEAR & SAFETY

SAFE USE OF POWERED STAIR CLIMBERS

Applies to: Escalera, Stanley/PowerMate, Zonzini Domino, Liftkar, GKS, Probst, and all powered stair climbing / stair robot equipment

✓ Purpose

Powered stair climbers are designed to safely move heavy loads up and down staircases using motorised tracks or powered step-lifting mechanisms.

They reduce manual handling strain and allow controlled movement of machinery, appliances, drums, gas cylinders, IT equipment, furniture, or materials.

This leaflet provides safe-use guidance to prevent tipping, runaways, entrapment hazards, and equipment overload.

⚙ Before Use

- Inspect the stair climber – Check frame, tracks/wheels, motor housing, battery, lifting toe/plate, straps, brakes, and handle system for cracks or defects.
- Verify SWL – Ensure the machine's rated capacity exceeds the weight of the load.
- Check battery – Ensure battery is charged, secure, and free from damage or leaks.
- Inspect belts & straps – Confirm all securing straps, ratchets, and lashing points are intact and undamaged.
- Check toe plate – Ensure lifting plate is fully secure and free from bends, cracks, or loose fixings.
- Inspect stairway – Confirm stairs are:
 - structurally sound
 - dry and free from debris
 - wide and strong enough for equipment + operators
- Check environment – Ensure adequate lighting, landing space, and clearance at top and bottom of stairs.
- Test movement – Run the climber unloaded to verify correct upward/downward direction, braking, and speed control.
- Ensure operator competence – Only trained personnel should operate powered stair climbers.

🚧 During Operation

- Secure the load using all provided straps and lash points.
- Position the load centrally and low on the climber's toe plate.
- Maintain a firm two-handed grip on handles.
- Use correct operator stance – feet clear of tracks/wheels and body behind the load.
- Keep the machine aligned centrally on the stairs.
- Operate at slow, controlled speed at all times.
- Maintain clear communication between top and bottom operators where two-person operation is required.
- Use landing brakes or stabilisers before repositioning on landings.
- Ensure exclusion zones at top and bottom of staircases.
- Stop immediately if load shifts, noise changes, or machine becomes unstable.
- Use additional spotters for long loads or narrow staircases.

Do Not

- Exceed the machine's SWL or length/height limits.
- Use on broken, uneven, spiral, or very narrow stairs without a risk assessment.
- Allow the load to be carried unsecured.
- Operate the climber on steep gradients not rated for the machine.
- Place hands or feet under the load or near tracks/wheels.
- Use climber without battery properly locked in position.
- Allow untrained personnel to operate powered stair equipment.
- Move sideways across stairs or attempt turning mid-stair flight.
- Leave the machine running or load unattended on stairs.

After Use

- Lower the load fully, shut down power, and remove battery.
- Clean tracks/wheels to remove grit and debris.
- Wipe down frame, handles, and toe plate.
- Inspect for damage, cracks, or loose parts.
- Recharge batteries in a safe, ventilated charging area.
- Store climber in a dry, secure location.
- Tag out and report any defects immediately.
- Maintain PUWER inspection records and battery health logs.

Safety Reminders

- Always secure loads with straps before climbing or descending.
- Maintain slow, controlled movement at all times.
- Ensure stair structure is safe and strong.
- Keep stairways clear of bystanders.
- Never exceed SWL or attempt to carry passengers.
- Wear appropriate PPE: safety boots, gloves, and high-visibility clothing.
- Only trained and competent persons should operate stair climbers.
- If unsure, stop and re-assess — stair work is high risk.

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