

Safe Vehicle Tailboard Goods Lift Operations

Information Sheet

May 2020

This information sheet provides basic information and highlights legal responsibilities in the use, maintenance and examination of vehicle tailboard goods lifts (tail lifts). It is aimed at employers, the self-employed and employees who work with tail lifts which are used for operations involving deliveries and collections of goods and materials.

It is **not intended** for the users of lifts used specifically for lifting people into vehicles such as wheel-chair lifts or ambulance patient lifts.

A tail lift is a mechanically operated platform mounted on a vehicle for the purpose of loading and unloading that vehicle, by raising or lowering loads between the level of the body of the vehicle and the ground. Loads are commonly placed on pallets to facilitate them being moved by using a pallet truck. There is a variety of basic designs, including column, cantilever, slider, and tuck-away.

What the law requires

Designers and manufacturers must make sure that tail lifts are designed and constructed safely and that relevant information is provided to customers. Importers and suppliers of tail lifts should check that equipment they are putting on the market has CE certification and marking¹.

New tail lifts must:

- be **CE marked** in accordance with the relevant directives of the EC,
- be accompanied by an **EC Declaration of Conformity** or an **EC Declaration of Incorporation** in accordance with the relevant directives of the EC, and
- be accompanied by instructions for use and information about the rated capacity for all load positions.



A tail lift should not be taken into use for the first time unless it has been examined and tested by a competent person in accordance with the relevant Regulation².

The regulation also requires that:

- a tail lift is thoroughly examined by a competent person at least once in every 12 months,
- a report of thorough examination is completed by the competent person, and
- any tail lift which undergoes any alteration or repair, where the alterations or repairs are relevant to the safe operation of the equipment, is examined and tested by a competent person before the equipment is returned to service.

The **Safety, Health & Welfare at Work Act, 2005** requires that:

- the risks associated with the use of the tail lift must be identified and assessed, and protective and preventive measures for protecting safety are written down in a safety statement, and
- people who operate the tail lift must be trained in its safe use.

The **Safety, Health & Welfare at Work (General Application) Regulations, 2007** further require that (non-exhaustive):

- the risk of persons falling from the tail lift must be prevented³,
- the tail lift must be:
 - regularly inspected and maintained
 - strong and stable enough for the particular use
 - marked to indicate safe working loads, and
 - installed and positioned to minimise any risk.

Record keeping

The owner of the tail lift should retain records of risk assessments, examinations and inspections, and a copy of the thorough examination report should be kept in the cab of the vehicle⁴.

¹ CE marking is a certification mark that indicates conformity with health, safety, and environmental protection standards for machines sold within the European Economic Area (EEA) in accordance with the European Communities (Machinery) Regulations 2008 (S.I. No. 407 of 2008), as amended.

² Regulation 52 of the Safety, Health & Welfare at Work (General Application) Regulations 2007 – SI No. 299 of 2007.

³ Regulation 45(b)(ii) of the Safety, Health & Welfare at Work (General Application) Regulations 2007 – SI No. 299 of 2007.

⁴ Regulation 54 of the Safety, Health & Welfare at Work (General Application) Regulations 2007 – SI No. 299 of 2007.

Training requirements

An operator must be trained and competent before operating these lifting platforms and they need to follow documented procedures for maintenance checks and use. A person is deemed competent where, having regard to the task of operating a tail lift and the hazards involved, the person possesses sufficient training, experience and knowledge to carry out the operation safely.

Training should cover:

- the controls
- safe working load, load charts and working load limits
- any operating limitations of the type of tail lift, and
- safe working procedures, including the correct use of any fall prevention equipment.

All tail lift operations are potentially hazardous and should be planned, to make sure that they are carried out safely and that all foreseeable risks have been taken into account. Poor planning is one of the major causes of accidents arising from lifting operations. Typically, tail lift accidents involve people falling from, or slipping on tail lifts, or being struck by a falling load. Other risks, such as those arising from moving parts, or of the mechanism failing, should also be assessed. The risk of people falling should always be considered because tail lifts involve working at a height, that is, on the body of the vehicle or on the platform itself.

What causes tail lifts' accidents

- people falling off the vehicle body or the lifting platform
- loads falling off the vehicle body or the platform
- crushing or cutting of body parts between the moving platform and the vehicle or ground
- platform mechanism failure
- platform or vehicle structure failure
- vehicles or pedestrians colliding with tail lifts while in use.

Tail lift operational considerations

The employer must make sure that any tail lift is suitable for the task to be undertaken and has capacity to carry the required loads.

Preventing falls on or from the platform or vehicle

An employer must make sure that suitable and sufficient measures to prevent an employee falling a distance liable to cause personal injury are taken, and that work equipment for lifting goods is provided such as to prevent the risk of the user falling, if the risk exists.⁵

Some tail lift manufacturers have developed guard-rail solutions, and while it is not a legal requirement that tail-lifts are supplied with these, there is a legal duty on the employer to determine a safe system of work by risk assessing the task and deciding if fall prevention measures are required.⁶

Fall prevention measures, for operator and goods, can be placed into several categories as listed:

- Safety gates/guard-rails (fixed, folding or detachable)
- Roll stops (integrated into the platform, or an addition to the platform edges)
- Additional equipment such as flaps, bridge plates, run up ramps that are able to be deployed as load restraint
- Safety chains/straps

These should form a fixed part of the tail lift wherever possible, but can be detachable where its operation makes fixed equipment impractical. The manufacturer of the tail lift must be contacted in regard to the fall prevention equipment that can be provided for the tail lift. Any form of modifications should only be carried out (if required) by the manufacturer, to ensure the safety of the tail lift and continued compliance with the requirements of the Directive.



Typical example of column lift with runner mounted 3 position gates



The employer should consider the surface of the vehicle body and the lifting platform for the possibility of people slipping and falling, and where appropriate, provide surfaces with increased slip-resistance. Selecting the right slip resistant safety footwear is a vital measure to prevent slips, trips and falls.

⁵ Regulations 98(c) and 45(b) of the Safety, Health & Welfare at Work (General Application) Regulations 2007 – SI No. 299 of 2007

⁶ Sections 8(e) and 19 of the Safety, Health & Welfare at Work Act 2005

Positioning of tail lifts for safe use

The area in which a tail lift is to be used must be assessed to make sure it is suitable before the lift is put into service. The following key points should be considered:

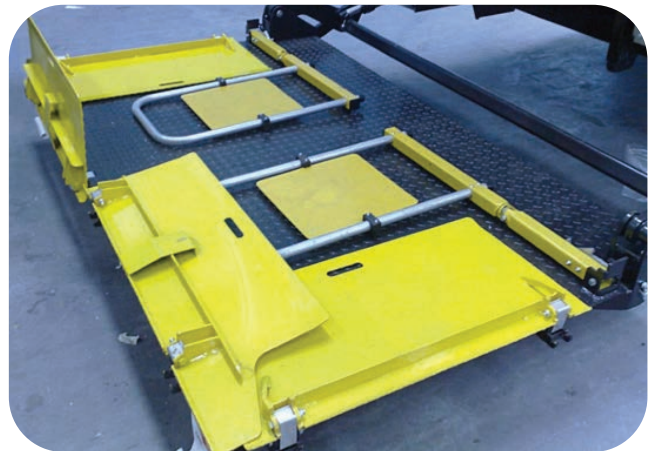
- Is there space to lower the tail lift safely?
- Can the vehicle be parked safely without causing an obstruction?
- Load presentation – is the load in a suitable condition to be moved?
- How heavy is the pallet: can it be manoeuvred without causing injury or losing control of the load?
- Is the ground surface suitable and are there any slopes or inclines?
- Is there pedestrian activity and is it appropriate and possible to restrict pedestrian access to the area?
- Are there other vehicles and vehicle movements in the work area?
- Is the tail lift conspicuous to others, e.g., during poor weather and low light conditions?
- Can a suitable route to the point of delivery be planned and agreed?

The employer has a duty to train the operator so that they are competent to make these assessments. Untrained people should not be involved in the delivery process.

Maintenance, Checks and Inspections

In addition to the thorough examination by a competent person, daily pre-use inspections should be carried out. Planned maintenance should be organised depending on tail lift operations and the environmental conditions in which it typically works. A good way of doing this is to follow the manufacturer's maintenance and operation instructions.

Daily pre-use checks should confirm, among other considerations, that markings, warnings, decals, and reflective material are in good condition.



Typical example of a slide away tail lift with folding "p" gates and 3-way folding ramps

Useful Information

1. IS EN 1756-1:2002 + A1 2008, Tail Lifts - Platform Lifts for mounting on Wheeled Vehicles - Safety Requirements Part 1: Tail Lifts for Goods. (www.nsai.ie)
2. HSA online courses on Managing Workplace Transport Safety at www.hslearning.ie
3. Health and Safety Executive, UK - Reducing the risk of falls from tail-lifts: http://www.hse.gov.uk/foi/internalops/sims/cactus/5_09_01.htm
4. Preventing Falls and Falling Loads from Tail Lifts available from <https://www.preston.gov.uk/GetAsset>.

Practical ways to prevent tail lift incidents:

Risk area	Risk	Suggested control measures
Mechanical failure	Failure of the lift	<p>The owner should make sure that:</p> <ul style="list-style-type: none"> • the tail lift is thoroughly examined by a competent person every 12 months, • a system of ongoing monitoring or regular inspections is in place which will detect deterioration in sufficient time to allow remedial measures to be taken, and • the SWL and load diagrams are displayed on the platform. <p>The operator should:</p> <ul style="list-style-type: none"> • carry out visual walk-around checks of the tail lift in the folded out position every day the lift is being used, and • report any defects, or unusual noise or looseness immediately.
	Unintended operation	The operator should carry out a complete operation check of the equipment before use, particularly after a repair.

Practical ways to prevent tail lift incidents: (Continued)

Risk area	Risk	Suggested control measures
Falling from the vehicle or platform	Fall from height	The owner should develop a safe system of work and consider the use of guard-rail solutions on the platform. The operator should push the load on and off the platform, rather than pulling it, to minimise the risk of falling over the edge.
	Slipping from the vehicle or platform	The owner should: <ul style="list-style-type: none"> consider the use of increased slip resistance surfaces on the vehicle body and the lifting platform, consider the use of guard-rail solutions on the platform, and place distinctive markings at the edges of the platform. The operator should: <ul style="list-style-type: none"> wear slip resistant footwear, and if it is necessary to ride on the platform try to stand sideways, where possible, and use guard-rails, where appropriate.
Crushing or sheering	People being caught between the moving platform and the vehicle or the ground	The operator should: <ul style="list-style-type: none"> stand a safe distance from the moving parts of the platform, and wear steel-toe-capped footwear.
Falling load	Load falling on operator	The operator should make sure that: <ul style="list-style-type: none"> people stand well clear of the lifting operation, only one pallet is moved at a time on the platform, and the load on the platform is positioned an equal distance from each side and as close as possible to the vehicle. The operator should: <ul style="list-style-type: none"> make use of safety chains or straps, roll stops (integrated into the platform, or an addition to the platform edges) or other ancillary equipment such as flaps, bridge plates, run up ramps that are able to be deployed as load restraint, and when moving the load onto the platform or unloading at the ground, push, rather than pull, the load to avoid the load rolling or falling over on to them.
Restricted space	Striking other structures	The operator should: <ul style="list-style-type: none"> park away from adjacent obstacles, check tail lift clearances from adjacent structures and vehicles (as specified by tail lift supplier), check that the extending lift mechanism will not contact or approach adjacent structures and vehicles, and use proper care if work is in a restricted area.
Striking people	Striking fellow workers or member of the public	The operator should: <ul style="list-style-type: none"> be aware of the possibility of other people in the vicinity - they should be told to clear the area, be aware of the possibility of people out of sight, and if lifting in an area to which the public have access, cordon off the area and provide alternative safe passage for pedestrians.
Roadside, kerbside or workplace deliveries and collections	Being struck by other vehicles	The owner should: <ul style="list-style-type: none"> develop a roadside/kerbside delivery procedure, and maintain reflective flags, tape or platform lights in good condition. The operator should: <ul style="list-style-type: none"> turn on vehicle hazard warning lights when operating tail lift work on the side of the vehicle nearest to footpath or away from moving traffic, wear high-visibility clothing when carrying out deliveries/ collection operations, and use cones to mark out the work area and to warn pedestrians, drivers and others in the vicinity.

Further Information and Guidance:

Visit our website at www.hsa.ie, telephone our contact centre on **1890 289 389** or email wcu@hsa.ie
 Use BeSMART, our free online risk assessment tool at www.besmart.ie
 Check out our range of free online courses at www.hslearning.ie

