

LIFTING EQUIPMENT

1.0 INTRODUCTION

“Lifting Equipment” means work equipment for lifting or lowering loads and includes attachments used for anchoring, fixing or supporting it.

Lifting equipment includes lifting beams, passenger lifts, goods lifts, document lifts, access cradles, personnel lifting platforms, scissor lifts, a vehicle inspection hoist, ropes used for climbing during tree surgery or structural examination, vehicle tail lifts, fork lift trucks, mobile elevating work platforms etc.

2.0 LIFTS

- The placing on the market and putting into service of lifts and safety components is controlled under The Lifts Regulations 1997.
- The use, inspection, maintenance and keeping of appropriate records of lifts and general lifting equipment is governed by the Lifting Operations and Lifting Equipment Regulations 1998. (LOLER).
- LOLER does not apply to escalators. This equipment is covered by more specific regulations, namely section 19 of the Workplace (Health Safety and Welfare) Regulations.
- The main danger points arising from lift installations are the presence of deep shafts, of moving parts, gaps, traps and the possibility for machinery to start without warning. Inspections of lift installations are to be carried out only by specialised contractors. No persons other than trained engineers from the lift service company are to interfere with any lift mechanisms.
- BS 5655 – 6 2011 is the current standard that is also issued as a European standard. Properties constructed before 31 May 1979 need to comply with the earlier British Standard of BS 2655. Premises built after this date or are refurbished need to comply with the current standard so far as it is reasonably practicable, e.g. there will be circumstances in which not all the precautions are feasible. Specialist advice should be sought.

The following aspects need to be taken into account:

- Engineering examination of plant. All machinery identified as lifting equipment is subject to the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER), which came into force on the 5th December 1998 and which includes lifts in managed residential, office and commercial premises. Lifts are required to be inspected by a competent person at 6 monthly intervals (with a few rare exceptions such as paternoster or continuous type lifts for which the interval is 12 months). This usually involves an Insurance Company engineering surveyor.
- Reports need to be obtained at the correct intervals, copies made available to commercial tenants or displayed in a prominent location at managed properties. A suitable location might be the lift motor room.

- Arrangements for routine maintenance of lifts need to be established, especially for passenger lifts. A suitable contract agreement drawn up with the inspecting and maintaining contractor is required. Engineers are required to complete an adequate list recording all maintenance carried out, a copy of which must be placed inside a suitable document wallet and left in the lift motor room following each visit. Additional copies are to be sent to appropriate Managers within the Company.
- Arrangements must be in place for the emergency assistance to persons trapped in a lift. A working alarm bell that is regularly tested must be on site. If a telephone system is provided, a connection to a manned point from which assistance can be given whilst the building is in use must be established.
- Emergency hand winding (up or down) for motor and sheaf driven lifts needs to be established with instructions displayed in the motor room on how to carry out hand winding and how to release the brake. Hydraulic lifts generally have a control valve to permit this to take place. Clear operating instructions must be displayed to ensure that employees/tenants do not put themselves or others at risk if permitted to carry out these instructions. Some hydraulic lifts require two persons to co-ordinate an emergency release of trapped persons.
- **No one is to carry out hand winding operations unless they have received adequate training, are confident in their ability to perform the operation safely and are authorised to do so by management.**
- Lift motor rooms must be kept locked at all times to prevent access to moving machinery by unauthorised untrained persons. All rotating components must be guarded to prevent accidental entrapment and clearly signed (painted bright yellow) to give adequate warning of such dangers. Hand winding wheels are not normally guarded; these are to be painted yellow.
- No storage of other than lift engineering spare parts is to be permitted in lift rooms.

3.0 ESCALATORS

LOLER does not apply to escalators. This equipment is covered by more specific regulations, namely section 19 of the Workplace (Health Safety and Welfare) Regulations.1992

Periodic thorough examination of escalators is covered in HSE guidance PM 45. The following key points must be observed:

- Competent trained persons must undertake inspections at six monthly intervals and maintain adequate records of the maintenance work and inspections carried out. Only specialised contractors will carry out this work. No employees are to interfere with escalator equipment.
- Emergency stop devices must be prominently sited with warning and instruction notices on the safe use of the escalator displayed. These are the standard illustrations shown in the guidance note normally affixed within the motor room.

- Injury between the moving stair and the sidewall must be prevented, on new escalators this is achieved by the use of a curved fillet plate. With older escalators this may not be practicable so parallel lines are usually painted to indicate the area within which each passenger should stand.
- Lift and escalator motor rooms must remain clean and free from dust/dirt to avoid a potential fire hazard.

4.0 WINDOW CLEANING GANTRIES, CRADLES ETC

These must be regularly examined, tested and certified by a competent specialist engineer at six monthly intervals.

- The equipment must not be used unless in-date certificates are available on site.
- Only adequately trained, authorised personnel are to use the equipment, unless they are specifically authorised, suitably equipped with appropriate personal protective equipment (safety harness etc.) and accompanied by an experienced operator
- Window cleaning cradle systems using bronze or phosphor bronze hold-down bolts are not acceptable due to the risk of metal fatigue.

5.0 OTHER EQUIPMENT

LOLER applies to all lifting equipment used for work activities in “the workplace”.

Specific guidance is necessary for each application. Generally:

- The lifting equipment is to be suitable for the intended duty in the intended environment.
- The lifting equipment is to be of adequate strength and stability for the intended duty and that everything attached to it and used in lifting is of adequate strength.
- Where the equipment is used for lifting persons the equipment is provided with means to ensure so far as is reasonably practicable persons using it are prevented from being crushed, trapped or struck or falling from the carrier.
- The lifting equipment has suitable devices to prevent the carrier falling. Where this cannot be prevented for reasons inherent in the site and height differences, the carrier is to be fitted with an enhanced safety coefficient suspension rope or chain and the rope or chain is inspected by a competent person every working day.
- The lifting equipment is such that a person trapped in any carrier is not thereby exposed to any danger and can be freed.
- The lifting equipment is positioned or installed in such a way as to reduce as low as reasonably practicable the risk of the equipment or load striking a person, or the risk from a load drifting, falling freely, or being released unintentionally and is otherwise safe.

- Machinery and accessories for lifting loads are clearly marked to indicate the safe working loads.
- Any equipment not intended for the carriage of persons is to be clearly identified as such.
- Every lifting operation involving lifting equipment is to be properly planned by a competent person, appropriately supervised and carried out in a safe manner.
- Before any lifting equipment is put into service for the first time it is to be thoroughly examined for any defect (unless new and/or certified).
- Lifting equipment for persons is to be thoroughly examined every six months, other lifting equipment every twelve months.
- Equipment brought in from another undertaking are taken for use in another undertaking (e.g. hire equipment) is not to be used unless accompanied by physical evidence that the last thorough examination has been carried out.
- Persons making the thorough examination must notify the employer of any defect in the lifting equipment, which in their opinion is or could become a danger to persons. Where there is a defect in the lifting equipment involving an existing or imminent danger of serious personal injury the person making the thorough examination must send a copy of his report to the relevant enforcing authority. Following notification the equipment is not to be used before the fault has been rectified.
- Reports of all defects to lifting equipment and records of all thorough examinations are to be retained as long as the lifting equipment is in operation.