

Safety Code of Practice 41

1st Edition, February 2009

LIFTING OPERATIONS AND EQUIPMENT



1 SUMMARY

The Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 cover all aspects of lifting that is done wholly or partly by mechanical means. It does not include lifting done entirely by manual handling. Whether lifting objects or persons the risk to people must be minimised. This guide sets out how this may be achieved by forward planning of lifting operations and thorough examination of the lifting equipment. It includes guidance on the use and maintenance of passenger and goods lifts.

Everyone in the University has responsibilities under LOLER, even if they are just a passenger in a lift. This guide defines those responsibilities. A checklist is provided for planning lifting operations.

Any School/Directorate/Department/Unit that is responsible for lifting equipment (which includes hoists, cranes, fork lift trucks, chains, ropes, lifting accessories, jacks and lifting beams) must:

Identify all lifting operations and equipment;

Appoint a competent person(s) to be responsible for each item of lifting equipment owned or used by the School/Directorate/Department/Unit;

Ensure that lifting operations are planned, undertaken and supervised by trained and competent persons;

Maintain lifting equipment;

Examine and inspect lifting equipment as required under LOLER, or in accordance with a written scheme of examination that has been drawn up by a competent person;

Keep inspection, test and maintenance records;

Ensure that before lifting equipment is used, it is examined by the user for any signs of physical damage, and if damaged is taken out of use;

Ensure that lifting equipment is sufficiently strong, stable and suitable for the proposed use;

Ensure that the load and anything attached (e.g. timber pallets, lifting points) are suitable;

Ensure that lifting equipment is positioned or installed to prevent the risk of injury, e.g. from the equipment or the load falling or striking people;

Ensure that lifting equipment and accessories e.g. slings, clamps, are visibly marked with information to be taken into account for its safe use e.g. safe working loads.

Safety Note 41 provides guidance on passenger lift safety.

2 SCOPE

This Guide sets out what managers, staff, students and tenants have to do to ensure the safety of people when using lifting equipment or when using passenger and goods lifts. When an object or person is lifted and lowered there are risks from:

Equipment failure resulting in the object or person being lifted or lowered to fall, injuring persons beneath;

Collapse of equipment or its components which fall onto persons causing injury;

During the operation of lifting equipment persons being injured by being crushed, struck or falling.

NB: In the majority of cases a lifting operation will incorporate an element of manual handling. Safety Guide 37 Ma2

2.1 Definitions

"Lifting equipment" is defined as items whose primary function is the lifting or lowering of a load. This includes: cranes, lift trucks, goods and passenger lifts, hoists, elevating access or work platforms, tractor front-end loaders; and the "lifting accessories" such as ropes, chains, shackles, eye bolts etc.

A "lifting operation" is that which is concerned with use of lifting equipment in the lifting or lowering of a load.

Guidance:

Within the University many Schools/Directorates/Departments/Units will have equipment and operations that they may not traditionally associate with lifting or lowering loads. Examples include ropes used for climbing or work positioning during arboriculture; fall arrest systems for working at height; vehicle tail lifts; mobile elevating work platforms (MEWPs).

Ensure that lifting equipment, machinery and accessories for lifting loads and people are strong and stable enough for the particular use and are clearly marked to indicate their safe working loads;

Ensure that lifting equipment is positioned and installed to minimise risks;

Ensure that lifting equipment which is designed for lifting people is clearly marked to this effect and vice versa for equipment not designed for lifting people e.g. goods lifts;

Cooperate with arrangements made for thorough examination and testing by a 'competent person' (i.e. the 'insurance inspector') followed by resultant remedial work;

Ensure that LOLER is complied with where relevant and the risk of the use of lifting equipment is satisfactorily controlled;

Seek further information and advice as necessary, before lifting operations are undertaken.

3.2 Duties of staff, building occupants, tenants, students

All staff, students and other building occupants e.g. tenants and members of the public, must:

Not use lifting equipment unless they have been properly trained and are supervised by a competent person;

Not travel in goods lifts;

Not overload passenger or goods lifts;

Report any defects associated with passenger or goods lifts to FMD (via the FMD Help Desk, extension 7000);

In the event of being trapped, follow the emergency procedures in the lift and use the telephone or intercom to contact Security (See Safety Note 41 for further information); Never attempt to escape from a broken down lift.

3.3 Duties of the Deputy Head of Maintenance (FMD Operational Duty Holder)

FMD are responsible for meeting the requirements of LOLER in so far as they apply to goods and passenger lifts. Therefore responsibilities for the safe installation, commissioning, maintenance, inspection and test are delegated to the FMD Deputy Head of Maintenance (FMD Operational Duty Holder). The Duty Holder may engage competent third parties to assist with this. The Duty Holder must ensure, where lifting equipment is maintained by FMD, that:

A risk assessment is completed and current for each passenger and goods lift and lifting operation;

The thorough examination of lifts are carried out at the appropriate intervals by a competent person and resultant remedial work is carried out in a timely fashion;

Inspections and maintenance are carried out between the examinations in accordance with

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For <u>complex</u> lifting operations it may be necessary to plan the task on <u>each</u> occasion it is carried out - see Appendix 1.

Guidance: An example of an action sequence for an individual routine lifting operation

Assess the load

Select any appropriate accessories

Check the path of the load

Prepare its setting-down position

Check the condition of the equipment and any accessories

Secure the load

Make the lift

Release the load

Repeat the above as necessary

Check the equipment condition

Return equipment to appropriate place

Where practicable, loads must not be carried or suspended over areas occupied by persons. This is particularly important where the load is being lifted over areas used by persons not engaged in the lifting operation e.g. other members of staff, students or members of the public.

Arrangements must be put in place to prevent unauthorised access to the area under the load e.g. barriers or tapes. It will not normally be sufficient to direct people away from the area, without physical precautions to prevent access.

5 INFORMATION, INSTRUCTION, TRAINING AND SUPERVISION

Appropriate supervision (see LOLER and the Health & Safety at Work etc. Act) will be proportionate to the risk i.e. the level of supervision will be determined by the nature of the work, and the competence of those involved in using the equipment and assisting with the operation.

Information and instruction must be provided for safe use of the equipment. Operators and those supervising the operation must receive training which should:

Enable staff to identify that lifting equipment is, or is not, safe to use; Enable staff to carry out pre-use checks on the lifting equipment, to identify faults or damage; Enable staff to use equipment safely.

6 LIFTING OF PERSONS

A higher risk is recognised when lifting equipment is used to lift persons. More stringent requirements (LOLER reg. 5) are imposed for this equipment. These requirements are for measures to:-

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purpose-made carrier suitably constructed and attached. Nobody should ever be lifted in a loader bucket, on the forks of a fork-lift truck or a similar attachment not designed for the purpose.

Where a person in a carrier (work platform) might fall and be injured:

The carrier should be fitted with edge protection which should be suitable for the purpose and should be securely fixed to the carrier;

The edge protection should be sufficiently high and be either solid, mesh or, if in the form of rails, should have a top rail, intermediate rail and a toe board;

The lifting equipment to which the carrier is attached should have a device to prevent the carrier becoming detached. This includes the basic attachment of the carrier to its lifting machine as well as any other devices necessary, e.g. if a carrier is fitted on a telescopic loader the loader would need to have a hydraulic lock-

Failure through repeated operation;

Malfunction;

Tampering with safety devices.

The inspection schedule that is appropriate will take account of the risk assessment and the equipment manufacturer's information. The person to decide upon this schedule is likely to be the same competent person who condu

The Safety Assessment Federation (SAFed) publishes guides to 'best practice' in the examination and inspection of lifting plant - Guidelines for the supplementary tests of inservice lifts (LG1).

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ASSESSMENT OF RISK:				
TRIVIAL / TOLERABLE / MODERATE / SUBSTANTIAL / INTOLERABLE				
ACTIONS TO FURTHER CONTROL RISK:				
SIGNATURE: DATE:				

Appendix 2: Version control

VERSION KEE	PER REVIEWED	APPROVED BY	APPROVAL DATE
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