

# BS 7255: 2001

The British Standards Committee has published what it describes as a 'vital' safety guide for lift engineers and owners.

BS 7255: 2001 was prepared by the British Standards Technical Subcommittee MHE/4/1; and replaces BS7255: 1989, which has been withdrawn.

There were 8 reasons for the introduction of a replacement version and these were as follows:

- tradesmen having an increased awareness of hazards and therefore taking more care over their actions;
- employers and owners positively striving to provide an ever safer workplace;
- changes in UK legislation;
- the emergence of Harmonized European Standards, in particular BS EN81-1, BS EN81-2 and BS EN 81-3;
- the trend away from prescriptive clauses (e.g. provisions and procedures) towards risk assessment methodology as the basis for determining safe systems of work;
- the delineation of responsibilities for safety

management, between the owner and the lift industry itself.

- changes in training requirements;
- the need to have a code of practice that covers lifts of any age, whether or not they conform to current British or European standards.

The new code will assist 'duty holders' to meet their obligations under the Health & Safety at Work Act; and other relevant health and safety legislation, including:

- The Lifts Regulations: 1997
- EN81-1/2: 1998
- LOLER Regulations: 1998
- PUWER Regulations: 1998
- CDM Regulations: 1994
- Personal Protection Equipment Regulations: 1992
- Workplace Regulations: 1992

The 'Scope' section of the Code states: "This British Standard gives recommendations for safe working practices (supported by training) for:

- owners of permanently installed lifts serving defined landing levels;



# - A Lift Owner's Guide

- persons having effective control of the premises where such lifts are installed;
- persons responsible for, and involved in, the design, installation, thorough examination, inspection, testing, service, repair and dismantling of such lifts;
- other persons working within the premises".

Clause 4 of the Code is the main section relating to the responsibilities of 'lift owners' and/or persons having effective control of premises where lifts are installed.

BS 7255: 2001 provides the 'lift owner' with definitive guidance in terms of his/her responsibilities and those of the 'industry'. This clear division of responsibilities provides a framework for both owners and the 'industry' to create a safer lift environment.

The owner is defined as the "legal entity having right of possession of a lift and responsibility for its safe working". The NOTE to this section suggests that the 'owner' is usually the landlord or proprietor of the building in which the lift is situated.

Personsworkingonliftsaremorelikely to meet an 'owner's representative';

such as a Building Manager, LA Manager, Service Engineer, Property Agent, Facilities Manager, Caretaker, Guard, etc. The owner must ensure that their representatives understand their responsibilities.

Clause 4.1.1 requires that all persons working on a lift or related equipment: "should possess demonstrable competence in basic lift safety and procedures, or be under relevant supervision".

NOTE 2 states that "A suitable level of qualification is EMTA NVQ EOR/202, although other equivalent qualifications can exist".

Clause 4.1.2 requires owners to provide employees, visitors, contractors and authorized persons with "Clear written instructions relating to site emergency and first aid procedures...." where risk assessment identifies a need.

Clause 4.1.3 requires that "Training should be provided to all persons who are authorized to carry out the safe release of trapped passengers."

- Clause 4.1.4 requires that "The competency of all trained persons be assessed and documented annually".

Clause 4.1.4 requires that "The competency of all trained persons be assessed and documented



# BS 7255: 2001

## - A Lift Owner's Guide

annually."

Clause 4.1.5 requires that "Information and instructions should be given to all occupants of the premises who could be affected whenever any works are carried out on the lifts, indicating any relevant effects on their working environment or their health and safety".

Clause 4.1.6 requires that "All employees within the premises should be made aware of the meaning of all signs displayed in lift areas or when lifts are being worked on". In addition, it is the owner's responsibility to ensure that all persons working within a well are made aware of all relevant safety signs.

It is the owner's responsibility to ensure that only authorized persons undertake any work carried out on lifts.

The owner, or the site person in charge of any works should appoint a person, to be responsible for liaising with the contractor in relation to safety matters.

The owner should ensure that a Safety File is obtained at the end of any installation or major refurbishment works; this file should be made available to persons who subsequently work on the lift.

Clause 4.3.1 states "The owner and the lift contractor should undertake a risk assessment to establish safety measures to ensure the safety of persons engaged in undertaking the work and persons using the lifts."

Clause 4.3.2 states "The safety measures identified by risk assessment should be implemented wherever practicable."

The owner has a responsibility to put in place the necessary arrangements to facilitate the safe release of trapped passengers. The owner

must ensure that only trained and authorized persons undertake the release of passengers trapped in the car.

The lift owner should consider the following improvements to existing lifts to meet the recommendations made within BS 7255: 2001; your lift maintenance contractor should be able to provide you with a Safety Audit relating to these items.

1. The lift well should be fitted with lift shaft lighting, controlled by at least two-way switching from the lift machine room and the lift pit.
2. A car top control station should be fitted, where it is necessary for personnel to travel on top of the car. The layout and design of the various functions on the car top control is important; your lift maintenance contractor can advise on this particular aspect.
3. An 'up test limit switch' should be fitted within the lift well; the purpose of the switch is to stop an ascending lift car when on inspection control, such that escape is still possible through the terminal landing doors.
4. In situations where two or more lifts share a common lift well, a full height division screen should be fitted between the lifts.
5. Permanent safety signs should be displayed in clearly visible positions where a risk exists.
6. All switched socket outlets installed on the car top should be provided with RCD protection.



7. An emergency lighting system should be provided on the car top to operate in the event of failure of the normal supply lighting.
8. All rotating parts on the car top should be painted yellow.
9. A safe refuge space on the car top should be clearly identified.
10. In situations where lifts do not have a safety gear or other means to prevent free fall, the owner should ensure that a safety sign is displayed in a prominent position on the top of the lift car.
11. Precautions should be taken to prevent persons falling into excessive voids.
12. In situations where there is a risk of persons working on the car top becoming trapped and where no means are provided for escape via either the car or the well, an alarm or voice communication system should be installed.
13. All switched socket outlets installed in the pit should be provided with RCD protection.
14. An emergency lighting system should be provided in the pit to operate in the event of failure of the normal supply lighting.
15. All rotating parts in the pit should be painted yellow.
16. A safe refuge space in the pit should be clearly identified.
17. In situations where a mechanical restraint is positioned under a pit, the restraint should be electronically interlocked such that the lift cannot be moved when the restraint is in position.
18. A mechanical restraint should be provided in the lift pit for all hydraulic lifts. The owner should ensure that an additional safety sign, visible from the access point, is prominently displayed by all hydraulic lifts, to indicate to authorized persons entering the pit that the mechanical restraint needs to be placed in position before entering.
19. Any removable pit restraint should be coloured yellow.
20. In situations where a permanent means of access to the pit cannot be provided, a suitable portable means of access should be made available.
21. A suitable counterweight screen should be provided on all lifts; or prominently displayed safety signage should be in place.
22. Where there is a risk of a person working in the pit becoming trapped, an alarm or voice communication system should be installed.
23. In situations where a door other than a landing door is provided for access to the pit, an appropriate warning notice should be displayed.
24. Appropriate barriers should protect open lift entrances.
25. Each lift should have a unique identification label/notice at or adjacent to the lowest and highest entrances; the identification method should correspond to that used in the machinery spaces or pulley rooms.



# BS 7255: 2001

## - A Lift Owner's Guide

26. All switched socket outlets installed in the machinery space and pulley rooms should be provided with RCD protection.
27. An emergency lighting system should be provided in the machinery spaces and pulley rooms to operate in the event of failure of the normal supply lighting.
28. In situations where access to the main switch, within the machinery spaces or pulley rooms, is difficult or remote from the lift machine and/or controller, either or both of the following should be provided:
  - a) a suitable stopping device should be fitted on or adjacent to the lift machine;
  - b) a means of interrupting the mains supply, on or adjacent to the controller.
29. Notices should be prominently displayed within each machinery space giving appropriate guidance on the treatment of electric shock.
30. All rotating parts in the machinery spaces and pulley rooms should be painted yellow.
31. Any equipment necessary to effect the safe release of lift users should be suitably stored within the machinery space. Handwheels should be coloured yellow.
32. Manufacturers or other authorized instructions for the safe release procedures should be clearly described and prominently displayed in the machinery space.
33. Each lift and component part thereof, located within the machinery spaces and pulley rooms should be uniquely identified, with the identification corresponding with that placed on the landings.
34. A safe means of access should be provided to all machinery spaces and pulley rooms. A permanent safety sign should be displayed on the outside of machinery spaces and pulley rooms.
35. Electrically insulated mats, conforming to the Low voltage Electrical Equipment (Safety) Regulations 1989 should be provided in front of each controller and where necessary at the rear.
36. Accurate electrical and hydraulic circuit and schematic diagrams for each installation should be available within the machinery rooms.
37. An appropriate system of recording modifications to the electrical or hydraulic circuits should be adhered to, subject to risk assessment.
38. The entrance doors to machinery spaces and pulley rooms should be kept locked to prevent unauthorized access.
39. All permanently installed lifting equipment provided within the machinery spaces or pulley rooms should be clearly marked with its safe working load.
40. In situations where the lift machinery and equipment occupy a small space within a larger room, such equipment should be segregated from the rest of the room. □