

**SAFETY INFORMATION SHEET**  
**CONFINED SPACES**  
**LIFT PITS AND SHAFTS AS CONFINED SPACES**

## **INTRODUCTION**

This Information Sheet is one of a series produced by the LEIA Safety and Environment Committee on topics relevant to the lift and escalator industry. Whilst every effort has been taken in the production of these sheets, it must be acknowledged that they should be read in conjunction with the relevant legislation, codes of practice etc. They should not be taken as an authoritative interpretation of the law but guidance to it.

## **CONFINED SPACES**

Views are occasionally sought from the Association regarding whether lift pits and shafts should be treated as 'confined spaces' as required by the Confined Spaces Regulations 1997. The Association's view is that ***only on rare occasions will such locations need to be treated and controlled as a confined space.***

The Confined Spaces Regulations 1997 defines a 'confined space' as any place, including chamber, tank, vat, silo, pit, trench, pipe, sewer, flue or other similar space in which, by virtue of its enclosed nature, there arises ***a reasonably foreseeable specified risk.*** The specified risks include a risk of serious injury to a person arising from fire or explosion; loss of consciousness or asphyxiation of any person at work arising from gas, fume, vapour or lack of oxygen.

Under these regulations a confined space has two defining features. Firstly, it is a place which is substantially (though not always entirely) enclosed and, secondly, there will be a reasonably foreseeable risk of serious injury from hazardous substances or conditions within the space or nearby.

The guidance states that confined spaces may not necessarily be enclosed on all sides. ***The application of the Confined Spaces Regulations therefore depends on the presence of a reasonably foreseeable risk of serious injury.***

In most cases the atmosphere breathed by the lift engineer will be the same that is breathed by the passengers etc. However the atmosphere in the lift pit or machine room located below ground level may require particular attention.

### **Identification of confined spaces**

Whether a lift pit, machine room or shaft should be treated as a confined space will depend on the results of the Risk Assessment conducted at that particular location. The diagram in Appendix 1 may assist. ***Under normal circumstances lift pits, machine rooms and shafts will not present any risk in terms of contamination, oxygen deficiency/ enrichment.*** However it is essential that careful consideration is given to potential sources.

Particular situations, that may be identified during the Site Survey and resulting Risk Assessment which may result in the lift pit, machine room and / or shaft being treated as Confined Spaces include: -

- Contamination arising from adjacent plant (e.g. exhaust fumes), processes, gas mains or surrounding land.
- Liquids and gases such as LPG leaking into the lift pit from adjacent plant, installations and processes.
- Contamination by substances some distance away may arise. This could be from floors well above the lift pit where fumes - heavier than air (from such activities as using adhesives during the laying of floor covering, argon gas welding) could fall down the shaft and accumulate in the pit/machine room.
- Air conditioning equipment installed in lift areas containing compressed refrigerant gases
- Hydraulic accumulators containing nitrogen at high pressure

The Site Safety Survey and resulting Risk Assessment should identify these possibilities and judgements will need to be made whether they are likely to occur.

Owners, occupiers and those in control of premises have clear duties under the Health and Safety at Work etc. Act to provide a safe place of work. They will have unique knowledge of the hazards and risks present on their premises and their own risk assessment of their premises may have identified confined space issues which may otherwise not be obvious and therefore not identified in the Site Safety Survey and risk assessment carried out by the lift contractor. Ask for any details relating to any concerns regarding the quality of the atmosphere.

Construction (Design & Management) Regulations 2015 now apply to all construction work; if your work is considered to be construction work, the client is obliged to provide pre-construction information which may give useful information to assist this risk assessment process. During the course of the project, CDM will require that activities are co-ordinated with regards to health and safety which must take into account the risks from confined spaces.

If it is likely (i.e. reasonably foreseeable) that serious injury could result from working in the pit or any other area then appropriate action must be taken. The simplest action is to remove, or increase the distance, from the source of the contamination. If this is not possible then controls such as monitoring the air before accessing and during the whole working period must be introduced. The operation of a 'Permit to Work' system in order to control access into the work area until the monitoring of the air has been undertaken is the most common control measure.

It may also be necessary to ventilate the area using mechanical means. If this is done, monitoring of the air must still take place to ensure that the ventilation is effective. Where a space is classified as 'confined' then rescue facilities must be immediately available when work is being carried out in that area. Provision and training of those involved must take place prior to entering the confined space.

In cases of doubt expert advice must be sought.

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For further guidance of this information sheet contact your company Safety Advisor or the LEIA Safety and Training Manager. Also information on considerations raised here can be found on the HSE web site under confined spaces

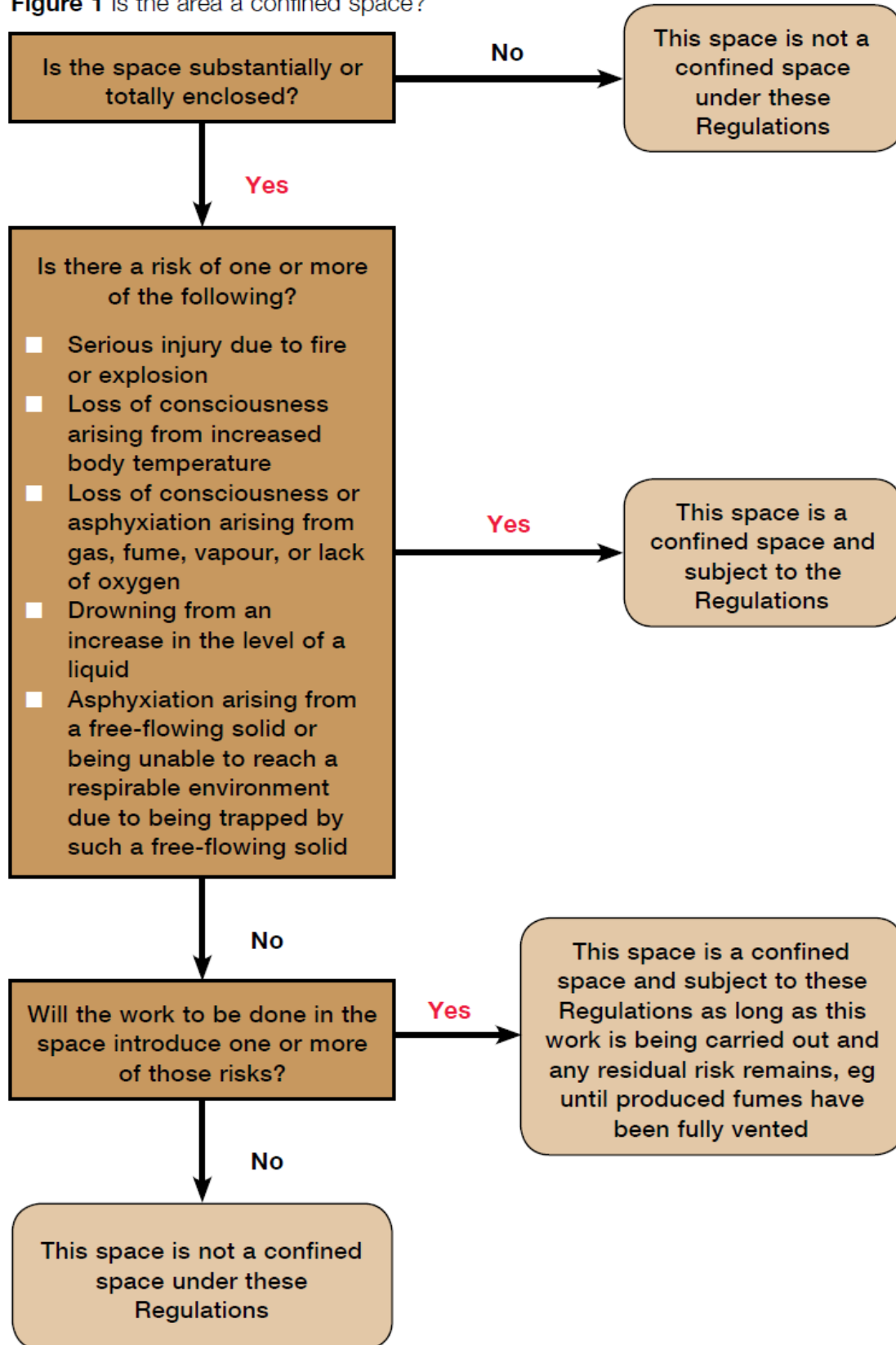
References:

Safe work in confined spaces. Confined Spaces Regulations 1997. Approved Code of Practice and guidance. L101.

<http://www.hse.gov.uk/pubns/books/l101.htm>

Appendix 1

**Figure 1** Is the area a confined space?



Source HSE L101 (Third Edition 2014)