



Safety Information Sheet

Asbestos

Prepared by LEIA Safety and Environment Committee

SAFETY INFORMATION SHEET

ASBESTOS

PREAMBLE

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.

INTRODUCTION

Asbestos dust causes harmful diseases that may prove to be fatal. Asbestos dust is too small to be seen by the naked eye and the diseases it causes take years to develop. At one time it was considered the more dust breathed in the greater the risk of lung cancer, however it is now thought that repeated low exposure may also be hazardous to health.

There is usually a long delay between first exposure to asbestos dust and the diagnosis of a disease. This can vary between 15-60 years. The vast majority of people now suffering from asbestos related diseases were exposed to asbestos during the 1960's and 1970's when the use of asbestos in the UK was at its peak. However maintenance workers are amongst an increasing group of workers who are suffering from asbestos related diseases through inadvertently being exposed to asbestos during their work.

It should be noted that smokers who have been exposed to asbestos are at much greater risk of developing lung cancer than non-smokers.

LEGAL REQUIREMENT TO MANAGE ASBESTOS

The Control of Asbestos Regulations 2012 imposes a legal duty on persons in control of non-domestic premises to manage the asbestos within their building. This means making an assessment of where any asbestos (or asbestos containing materials (ACM's)) are located (usually by means of a professional survey). Then producing a written plan for managing it in such a way as to minimise risk and prevent exposure to persons in the building. This would include warning any contractors who come into the building and who could possibly disturb any asbestos.

Typically clients may instruct visiting contractors to review their asbestos register (a list of where Asbestos is located in the building and usually contained are in the survey report) which will indicate where in the premises Asbestos has been identified.

The question arises what if the lift areas or our working area has not been included in the survey?

A sensible and safe approach is needed beyond an assessment of the risk involved. If operatives are trained in Asbestos Awareness this will allow them to raise suspicions they have, and in some cases stop work until the materials have been examined and positively determined either to not contain asbestos, or in some way be made safe, so work can continue. This is particularly important where suspect materials are damaged or disturbed in some way.

The person in control of the building (the duty holder) could be the owner, the occupier or possibly a Managing Agent.

The lift company would probably be the duty holder within their own premises (in cases of doubt this should be clarified between any other parties involved).

TRAINING REQUIREMENTS

Three different levels of training are required

1. Asbestos Awareness Training

Employers (including the lift company) have a duty to ensure their employees (who are or who may be liable to be exposed to asbestos) are provided at regular intervals with sufficient information, instruction and training to make them aware of the health effects of asbestos, where it is likely to be found, when it is likely to be disturbed, the procedure to deal with an emergency and the safe working practices to be adopted.

Such training is referred to as Asbestos Awareness Training and should be given to persons liable to disturb asbestos while carrying out their everyday work and those supervising the work. It is recommended that Asbestos Awareness Training is provided for lift maintenance and repair engineers and their supervisors. LEIA has produced an Asbestos Awareness training package which is intended to make those in the industry aware of asbestos.

Asbestos Awareness Training is of particular value to workers in domestic premises where no assessment or management plan may be available and where the householder may be unaware themselves of the presence of ACM's.

2. Training for non-licensable asbestos work

Persons requiring this training would include those whose work will knowingly disturb asbestos containing materials such as lift repair engineers changing brake linings and similar work. This is over and above the basic awareness training described in 1. The content of this training includes

- Operations which could result in exposure
- Importance of controls to minimise exposure
- Safe work practice
 - Correct use of control measures
 - PPE
 - Work methods
 - Maintenance of control measures including where relevant the maintenance of enclosures
 - Recording reporting and correcting defects
 - RPE
 - Importance of good seal between mask and face
 - Hygiene requirements
 - Cleaning up
 - Waste handling and disposal
 - Emergency procedures
 - Other hazards

This training is described in detail within HSE Publication '*Work with materials containing asbestos Control of Asbestos Regulations 2006 Approved Code of Practice and Guidance*' L143 Para 128

3. Training for licensable asbestos work

It seems unlikely any lift company would undertake licensable work however should this be required refer to '*Work with materials containing asbestos Control of Asbestos Regulations 2006 Approved Code of Practice and Guidance*' L143 Para 132 onwards.

Note: There is further guidance on which work with asbestos requires a licensed contractor later in this document supported by a decision chart in *Appendix B*

ASBESTOS IN THE LIFT & ESCALATOR INDUSTRY

The type of precautions used to be dictated by the type of asbestos involved, but it is now considered essential to take the same precautions regardless of the type. The three major types are Blue (Crocidolite), Brown (Amosite), and White (Chrysotile). Although they are commonly referred to by their 'colour' name, the actual colour of the material is no guide to which type of asbestos it is. Blue and Brown used to require more stringent precautions with regard to protection and handling, and are found particularly in sprayed coatings, lagging and insulating board. However the HSE now considers all types of asbestos to be hazardous.

Typical locations/ uses in the lift/escalators industry include:

- Blow out coils / arc shields
- Older limit switches
- Older brake linings
- Older lift installation trunking (fire breaks)
- Older lift installation landing doors (for fire & sound proofing)
- Insulating panels in controllers
- Lift machine room and escalator machine room (cladding)
- Lift well and escalator well (cladding)
- Cladding on escalators
- Insulating string used in trunking
- Insulation lagging in buildings & factories, pipework, boilers, ducts,
- Insulating board such as asbestolux, marixlite,
- Fire doors, ceiling tiles
- Roof tiles and wall sheeting
- Cold water tanks, guttering, and decorative plaster finishes

Appendix A of this document contains illustrated examples of some of the above

In general terms, the tighter the asbestos is bound into the material e.g. textured coatings, vinyl floor tiles, lower the risk is because fibres are more difficult to release.

Exposure to asbestos fibres may arise due to damaged asbestos-containing materials being encountered or becoming damaged during work, for example in motor rooms or lift shafts. Care must be taken not to disturb these materials when working in these areas.

Where asbestos is suspected or where sales personnel are surveying for installation/modernisation/service and repair work, an assessment must be made to ascertain if asbestos is or is likely to be present. The client's Asbestos Management Plan should be consulted. On jobs subject to the Construction [Design and Management] Regulations, information about asbestos should be detailed in the Pre-construction Information issued by the Client. Where analysis of materials needs to be conducted the client should be advised to use the services of a specialist asbestos contractor or environmental hygienist to take and analyse samples. Such contractors should be UKAS accredited. It is normal for the client to supply the lift company with copies of any reports after such survey or work.

When a situation arises where it is considered that the presence of asbestos, which may be hazardous, might be encountered, e.g. contamination by asbestos dust on a client's premises or in the structure of a building or lift shaft then the following procedures are strongly recommended :-

Action upon suspicion: -

- Cease work and withdraw from the area.
- Do not disturb the material.
- Company employees **must not take** samples.
- Immediately inform your Manager
- The Manager should contact the client and request identification of the material, i.e. details of samples taken and analysed by specialists and a copy of their report forwarded to the Manager.
- The report should contain site address, results of analysis and full details, including the exact location of the suspect material, and the action being taken by the client.
- If asbestos is removed then evidence that the area is clear of asbestos dust should be sought from the client in the form of air test or clearance certificate. This must indicate the concentration of asbestos fibres present after final cleaning is less than 0.01 fibres per cubic centimeter (0.01 f/cm³) sometimes written as 0.01 f/ml.

As stated earlier apart from asbestos in the fabric of the building e.g. lift shafts, motor rooms etc, asbestos may be contained in various lift components. It is important that precautions are taken when work is to be carried out on brake shoes and other components, etc.

LICENSED v NON LICENSED WORK

Some work with asbestos is considered so hazardous that contractors carrying out this work must be licensed by the HSE. This would include work with asbestos insulation board, lagging, sprayed asbestos, and loose asbestos insulation. Work with asbestos cement sheets, articles containing asbestos or textured coatings do not require a license but must still be strictly controlled and carried out safely. In general, and in cases of doubt advice must be sought, removal of asbestos containing lift components would be non-licensed but work on the fabric of the building e.g. removal of asbestos insulation board would require a licensed contractor.

From April 2012, some non-licensed work, where the risk of fibre release is greater, is subject to three additional requirements – notification of work, medical examinations and record keeping (the requirement for medical examinations does not come into force until April 2015). This work is known as notifiable non-licensed work (NNLW).

To decide if the work is NNLW, you will need to consider the type of work you are going to carry out, the type of material you are going to work on and its condition. Most work with firmly bonded materials in good condition such as asbestos cement, bitumen, plastic, resin, rubber, roofing felt, paper linings, cardboard, textiles, gaskets, washers and rope etc will not need to be notified. Short duration ‘maintenance’ work involving AIB which is in good condition will also not normally need to be notified,

NNLW will normally include short duration maintenance and removal work with asbestos insulation, removal of textured decorative coatings where the material is destroyed eg by scraping it off, and short duration removal of AIB as part of refurbishment.

Non licensed work

Brake shoes

Modern lift brake shoes do not contain asbestos. However, if any doubt exists because of their age as to whether or not the shoes contain asbestos an analysis of the dust can help identification. Clients may have views that asbestos containing brakes should be replaced so that their premises are totally asbestos free.

A detailed Plan of work must be compiled and precautions taken to prevent any exposure to asbestos fibres to those carrying out the work. The plan of work needs to address:

- what the work is, and how long it is likely to last;
- the address and description of the job;
- when the work will be done; the procedures to follow to reduce exposure and prevent the spread of asbestos;
- the equipment needed, including PPE
- decontamination and waste disposal arrangements; and emergency procedures

Attention is drawn to Asbestos Essentials (see references) which contains details of equipment and methods to be used for non-licensed asbestos work and also example jobs including the replacement of friction linings. This is absolutely essential reading when planning a job involving asbestos containing lift components.

These controls apply equally to handling any lift or escalator component that contains or is suspected of containing asbestos. It is important that if any doubt exists about whether the component contains asbestos or not, then it must be assumed that it contains asbestos and dealt with accordingly.

Some lift companies forbid their personnel from handling asbestos, others impose strict controls that prescribe the action to be taken to avoid exposure to the fibres.

Protective precautions to be taken to avoid exposure include:

- The use of respiratory protection e.g. masks and other PPE.
- Protective clothing
- Gently spraying the component to lay the dust e.g. with a water and detergent solution.
- Wiping with a wet rag, rather than brushing up the dust.

If the use of a vacuum cleaner is required ensure it is a H type, also check for the correct disposal of contaminated rags etc.

Controller Components etc.

Control equipment such as some blow out coils, arc shields and older limit switches may contain asbestos. The same precautions should be taken when working on this equipment as detailed for brake shoes, including disposal [see below]. In all cases the release of any fibres must be avoided

Disposal of Asbestos Containing Materials

Any work with items suspected of containing asbestos e.g. control equipment, brake shoes etc. requires a formal risk assessment must be undertaken. Even if asbestos fibres are unlikely to be disturbed then the component should immediately be double wrapped in polythene bags to reduce release of fibres during handling, and the bag marked accordingly with suitable "Warning Contains Asbestos". Labels must be attached to the bag and the bags either disposed of immediately or stored in a secure location. Disposal must be through a licensed disposal contractor as Hazardous Waste

Note: Labelled red polythene bags for disposal of parts, overalls and suitable dust respiratory protection etc can be obtained from most health and safety equipment suppliers.

A documented assessment and plan of work should be kept readily available at the work site and be followed or if the assessment indicates that the substance is creating an unacceptable amount of fibres into the area of work then specialist licensed contractors must be used. Many lift companies choose this action in all suspect areas.

It must not be forgotten that the responsibility for the site lies in most cases with the client who has clear duties under legislation.

References:

LEIA – Safety Notice on Asbestos - Appendix C

The Control of Asbestos Regulations 2012

HSE Publications:

Work with materials containing asbestos Control of Asbestos Regulations 2006. Approved Code of Practice and guidance L143.

The Management of Asbestos in Non-domestic Premises. Regulation 4 of the Control of Asbestos Regulations 2006. Approved Code of Practice and Guidance L127

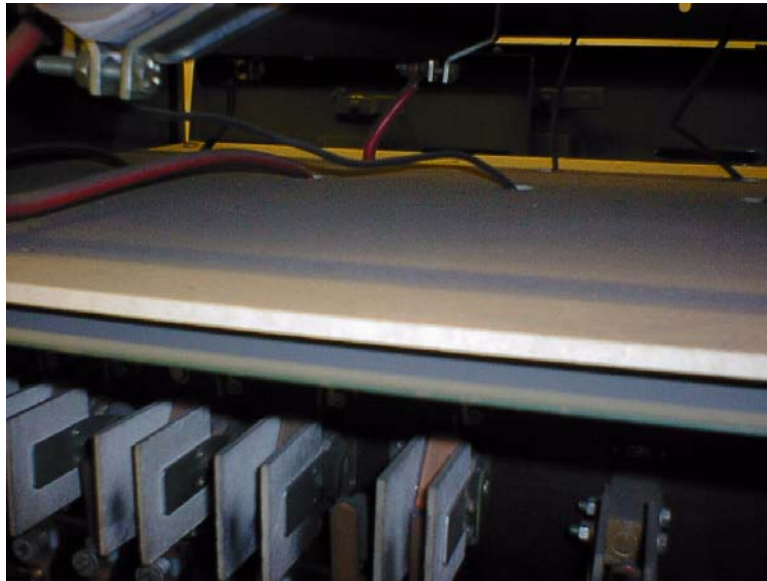
Asbestos Essentials: A task manual for building, maintenance and allied trades on non-licensed asbestos work. HSG210.

Appendix A**Examples of asbestos containing lift and escalator components.**

Side Panel on Escalator



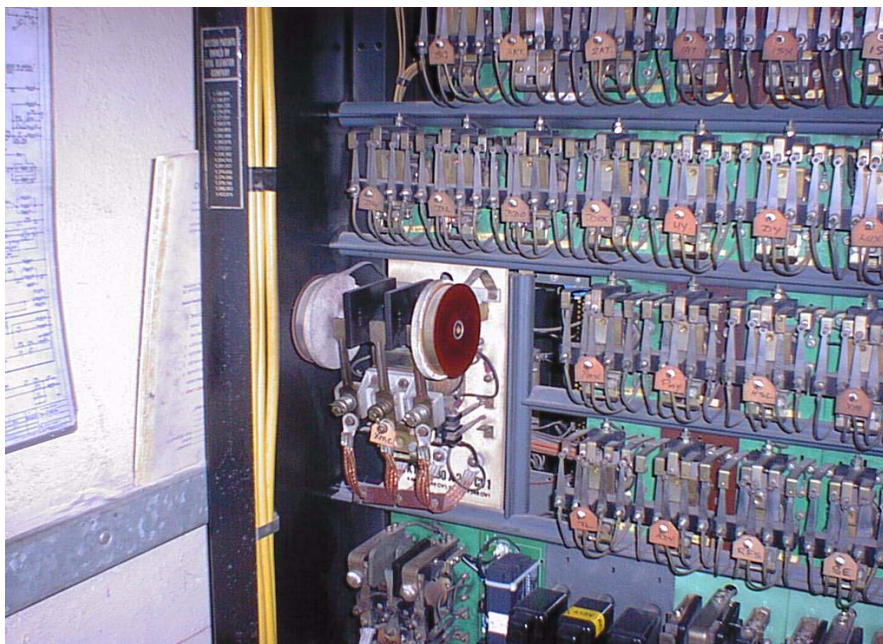
Landing Door Panels - both single and double skinned



Arc Shields & Resistor Board Protection



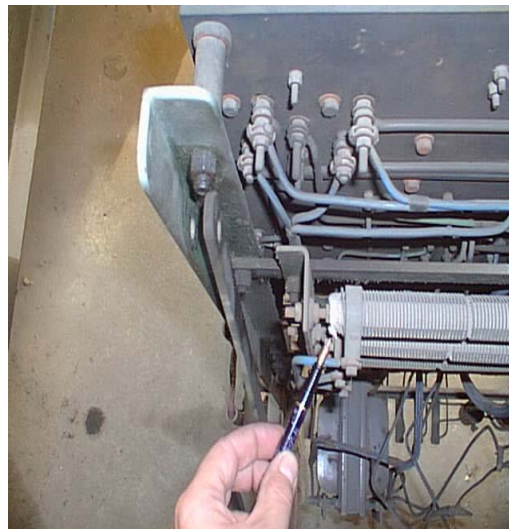
Cladding within lift machine rooms and shafts



Blow out coils



Brake linings



Resistors

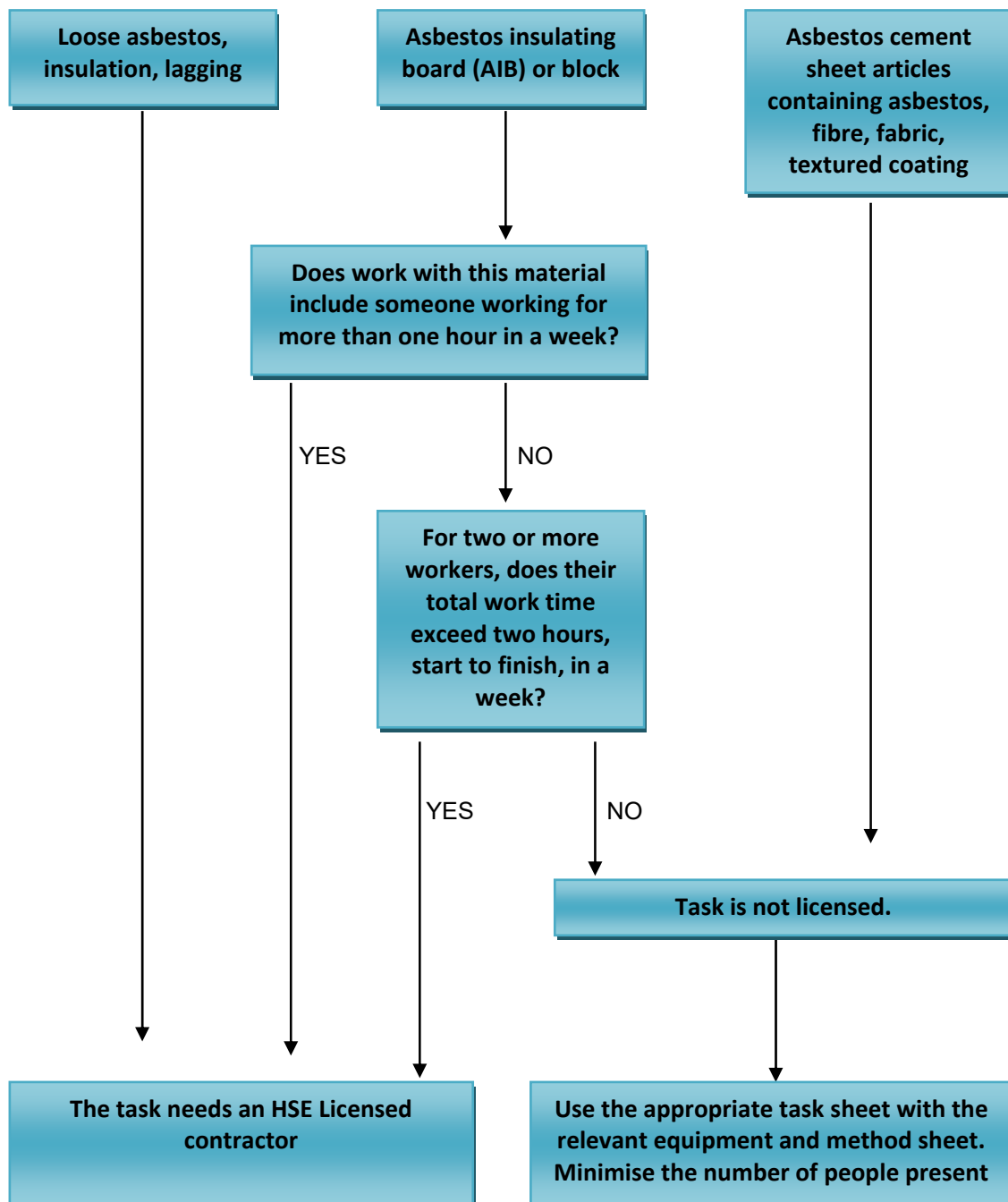


Asbestos String

Appendix B

Decision flow chart

Use this simple flow chart to help you decide who need to do the work.



Source: HSE Asbestos Essentials

LEIA – Safety Notice on Asbestos



Lift & Escalator Industry Association

Safety notice Asbestos

- ▶ ALL FORMS OF ASBESTOS CAN CAUSE ASBESTOSIS, LUNG CANCER OR MESOTHELIOMA.
- ▶ THE LARGEST GROUP OF WORKERS AT RISK ARE BUILDING WORKERS, PARTICULARLY . . . MAINTENANCE AND REPAIR.
- ▶ ACCORDING TO THE BRITISH JOURNAL OF CANCER THERE WILL BE 500,000 ASBESTOS RELATED DEATHS IN WESTERN EUROPE OVER THE NEXT 35 YEARS.

"Asbestos is the most serious occupational health problem in terms of fatal diseases that this country faces."

Nick Brown, HM Government's Minister responsible for Health and Safety.





Safety notice



LEIA Safety Notice – Asbestos a new duty to manage

This Safety Notice has been compiled by the Lift and Escalator Industry Association, to make lift, escalator and building owners and occupiers aware of the legal requirement to prevent exposure to asbestos.

Because of its high tensile strength and its chemical, electrical and heat resistance qualities, asbestos was used extensively as a building material – particularly from the 1950s through to the mid 1980s. Although some of this material has been removed over the years, there are many thousands of tonnes of asbestos still present in buildings.

Asbestos was used by the lift and escalator industry up to the early 1990's. It was particularly used as a fire insulator in lift doors and surrounds and also as a brake material on machines and as an insulator around electrical components.

However, experience shows that the main source of exposure to lift engineers comes from the asbestos contained in the building structure. The lagging around pipework and damaged fire insulating walls in lift shafts and machine rooms are seen as some of the principal sources of such exposure.

In order to control exposure to asbestos fibres, the Control of Asbestos Regulations 2006 places responsibility to manage the risk of exposure to asbestos on "duty holders" namely:-

- ▶ Those who have, because of a contract or tenancy, responsibilities for the maintenance of the premises or
- ▶ Where there is no contract or tenancy, the person in control of the premises.

In order to prevent exposure to asbestos to maintenance personnel attending premises it is imperative that the above action is taken as early as possible and the information conveyed to all contractors including your lift or escalator maintenance company.

The use of material published by the Health and Safety Executive is acknowledged in the preparation of the above Safety Notice.

The duty to manage asbestos is contained in Regulation 4 of the Control of Asbestos Regulations 2006 and requires the duty holder to:-

- ▶ Take reasonable steps to find if there is asbestos in the premises, its amount and what condition it is in;
- ▶ Presume materials contain asbestos, unless there is strong evidence to suppose they do not;
- ▶ Make a written record of the location and the condition of Asbestos Containing Materials [ACM's] and presumed ACMs and keep it up to date;
- ▶ Assess the risk of the likelihood of being exposed to asbestos from these materials;
- ▶ Prepare a plan that sets out in detail how the risk from the material is going to be managed;
- ▶ Take the steps needed to put the plan into action – this may include the repair or removal of any material that contains or is presumed to contain asbestos, because of its location, condition or likelihood of disturbance;
- ▶ Review and monitor the plan and the arrangements made to put it in place;
- ▶ Provide information on the location and condition of the material to anyone who is liable to work on or disturb it.



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