

Managing asbestos in workplace buildings : the hidden killer! Are you putting others at risk?



Managing asbestos materials in workplace buildings

If you own, manage or have responsibilities for a workplace building which may contain asbestos, you need to think about the risk of exposure to workers and others who may use the building. It is your job to manage that risk. A sound management strategy will help to ensure that you do not put others at risk. This guidance will help you decide how you should identify, assess and manage any asbestos materials on your premises.

ASBESTOS - THE DANGERS



Breathing in air containing asbestos dust can lead to asbestos-related diseases. These are mainly cancers of the chest and lungs.

Asbestos-related diseases are currently killing an estimated 3000 people a year in Great Britain. This number is expected to go on rising into the next century. **There is no cure for asbestos-related diseases.**

There is usually a long delay between first exposure to asbestos and the onset of disease. This can vary between 15-60 years. The vast majority of people now dying were exposed to asbestos during the 1950s and 1960s when the use of asbestos was widespread. But exposure is still occurring. Only by preventing these exposures now, will asbestos-related disease eventually be eradicated.

There are three main types of asbestos commonly called 'blue' (crocidolite), 'brown' (amosite) and 'white' (chrysotile). All are dangerous, but blue and brown asbestos are known to be more hazardous than white. They cannot be identified by their colour alone.

WHO IS AT RISK?

A quarter of the people now dying from asbestos-related diseases worked in the building trade. They were carpenters, joiners, electricians, shopfitters, plumbers etc. They may have breathed in asbestos dust during their day-to-day work with asbestos materials or because work with asbestos was carried out near them. Until recently it was thought that those now dying from asbestos-related diseases were exposed to large amounts of asbestos either regularly or during a single spell of work lasting from a few weeks to a few years. It is now thought possible that repeated low level exposures, such as could occur during routine repair work may also lead to asbestos-induced cancers. The scientific evidence on exactly what levels of exposure cause disease is unclear. **But we do know the more asbestos dust inhaled the greater the risk to health.** That is why it is important that everyone who works with asbestos should take the strictest precautions.

Many buildings still contain asbestos. So electricians, plumbers, building maintenance workers, shopfitters and carpenters may *still* be at risk when they carry out refurbishment, repairs, or maintenance work on buildings which contain asbestos. Other workers, not normally associated with the building trade may also routinely disturb asbestos. For instance computer installers, particularly cabling installers, fire alarm installers, window blind fitters, or telecommunication engineers could also be at risk.

Asbestos will only pose a risk to health if asbestos fibres are released into the air. They form a very fine dust which is often invisible to the naked eye.

Remember - the more asbestos dust inhaled the greater the risk to health.

WHERE IS ASBESTOS FOUND IN BUILDINGS?

Thousands of tonnes of asbestos were used in buildings in the past and much of it is still in place.

You are most likely to come across asbestos in these materials:

- ? sprayed asbestos and asbestos loose packing - generally used as fire breaks in ceiling voids;
- ? moulded or preformed sprayed coatings and lagging - generally used in thermal insulation of pipes, boilers;
- ? sprayed asbestos mixed with hydrated asbestos cement - ;generally used as fire protection in ducts, firebreaks, panels, partitions, soffit boards, ceiling panels and around structural steel work;
- ? insulating boards used for fire protection, thermal insulation, partitioning and ducts;
- ? some ceiling tiles;
- ? millboard, paper and paper products used for insulation of electrical equipment, asbestos paper has been used as a fire proof facing on wood fibre board;

- ? asbestos cement products, which can be compressed into flat or corrugated sheets. Corrugated sheets are largely used as roofing and wall cladding. Other asbestos cement products include gutters, rainwater pipes and water tanks;
- ? certain textured coatings.

Some of these materials are more vulnerable to damage and more likely to give off dust. In general the materials which contain a high percentage of asbestos are more easily damaged. The list on page 5 is roughly in the order of ease of fibre release. Sprayed coatings, lagging and insulating board are more likely to contain blue or brown asbestos. Asbestos insulation and lagging can contain up to 85% asbestos and is the material most likely to give off dust, though careless work with asbestos insulating board can result in equally high fibre release. On the other hand asbestos cement contains only 10%-15% asbestos. The asbestos is tightly bound into the cement and the material will only give off dust if it is damaged or broken.

MANAGING ASBESTOS

Finding out if you have a problem - is there asbestos in the building?

Asbestos is likely to be present if:

- ? the building was constructed or refurbished between 1950-1980; and particularly if it also
- ? has a steel frame; and/or
- ? has boilers with thermal insulation.

What you need to know

- ? the location of the asbestos;
- ? the form of the asbestos (lagging, ceiling tiles, partition board etc);
- ? the condition of the asbestos;
- ? and preferably the type of asbestos (blue, brown, or white).

Look at the original building plans, they might tell you if and where asbestos was used. Ask the leaseholder, or the architects if you can track them down.

You might need to arrange to analyse samples of materials that you suspect contain asbestos. Do not break or damage material which may contain asbestos in an attempt to identify it. Samples should only be taken by suitably trained people. They are likely to be suitably trained if the firm they work for is accredited by the UK Accreditation Service (UKAS), which was formerly known as the National Measurement Accreditation Service (NAMAS). They are generally listed in the Yellow Pages and other business directories under 'laboratories' or 'analytical research chemists'.

Assessing the condition of asbestos materials

There may be a risk of asbestos fibres being released into the air if:

- ? the material is being disturbed (for example if it is in a prominent position and prone to accidental damage);
- ? the surface of the material is damaged, frayed or scratched;
- ? surface sealants are peeling or breaking off;
- ? the material is becoming detached from its base (this is a particular problem with pipe and boiler lagging and sprayed coatings);
- ? protective coverings designed to protect the asbestos are missing or damaged;
- ? there is asbestos dust or debris in the immediate surrounding area.

If any of these apply to asbestos materials in your building you will have to take action to either have it sealed, enclosed or removed.

Deciding what to do

Asbestos in good condition

If the asbestos is:

- ? in good condition; and
- ? is not likely to be damaged; and
- ? is not likely to be worked on;

It is safest to leave it in place and introduce a management system.

Asbestos in poor condition

If the asbestos is in poor condition or is likely to be damaged or disturbed you will need to decide whether it should be repaired, sealed, enclosed or removed. If you are unsure of the condition of the asbestos and cannot decide what action to take, seek specialist advice.

Taking action

Managing asbestos left in place

If you decide to leave asbestos that is in good condition in place, make a note of where it is, for example on your building plans or other records and keep this information up to date. Setting up a register of the location of asbestos materials in buildings is a good idea. But be aware that some hidden asbestos may still be present.

Label asbestos materials clearly with the asbestos warning sign, or use some other warning system (for example colour coding) so that those who need to know about the asbestos are effectively alerted to its presence. If you decide not to label the asbestos, you need to make sure that those who might work on the material know that it contains asbestos.

It can save time and confusion if you make a note of the location of non-asbestos material which could be mistaken for asbestos materials.

Repair and Removal

Some damaged asbestos can be made safe by repairing it and either sealing or enclosing it to prevent further damage. If you can do this safely, mark the area after you've repaired it and make sure it is on your list of asbestos locations.

If asbestos is likely to release dust and cannot be easily repaired and protected, or is likely to be disturbed during routine maintenance work *remove it*. **Remember work on asbestos insulation and lagging, including sealing and removal, must normally be done only by a contractor licensed by HSE.**

Checking what you've done

Make sure that you have an effective plan for inspecting asbestos materials left in place, including those you have sealed or enclosed, to ensure that the condition of the material has not changed. The period between inspections will depend on the type of material, its location and condition.

DISPOSAL OF ASBESTOS



Asbestos waste, whether it includes small amounts of waste or large scale removal by contractors, is subject to waste management controls set out in the Control of Pollution (Special Waste) Regulations 1980. From 1 September, these Regulations will be replaced by the 1996 Special Waste Regulations. Asbestos waste should be double-bagged in heavy duty polythene bags and clearly labelled with the label prescribed for asbestos before it is transported to the disposal site. The waste can only be disposed of at a site licensed to receive it.

WHAT THE LAW SAYS

The Control of Asbestos at Work Regulations 1987 require employers to prevent the exposure of employees to asbestos. If this is not reasonably practicable the law says their exposure should be controlled to the lowest possible level. Before any work with asbestos is carried out, the Regulations require employers to make an assessment of the likely exposure of employees to asbestos dust. The assessment should include a description of the precautions which are to be taken to control dust release and to protect workers and others who may be affected by that work. If you are employing a contractor to work in your building make sure that either the work will not lead to asbestos exposures or that they have carried out this assessment and identified work practices to reduce exposures.

The Asbestos (Licensing) Regulations 1983 require that a contractor doing more than two hours work with asbestos lagging or asbestos coating must be licensed. But in view of the high risk associated with these materials HSE recommends that you use a licensed contractor regardless of the length of time the job is likely to take. You will

able to get a list of HSE licensed contractors from your local HSE area office. (HSE offices are listed in the phone book.)

The Construction (Design and Management) Regulations 1994 require the client to provide the planning supervisor with information about the project which is relevant to health and safety. This information might, for instance, include previous surveys of the building for asbestos. Not all projects come within the scope of these Regulations. For more information see the CDM Regulations leaflet.

WHAT YOU SHOULD TELL YOUR WORKERS/CONTRACTORS

Make sure that employees involved in building maintenance work and any contractors working on the premises know that the building contains or may contain asbestos, its type and location, and make sure they know the risks to their health if they disturb it. Make them aware of the asbestos register if you have one and the possibility of coming across hidden asbestos materials which might not be recorded on the register.

If workers/contractors do have to work on materials containing asbestos you must make sure that they know they are working with asbestos and what precautions they should take.

Make sure that they **do**:

- ? keep all unnecessary personnel out of the work area;
- ? take care not to create dust;
- ? keep the material wet, whenever possible;
- ? wear a suitable respirator and protective clothing;
- ? clean up with a vacuum cleaner which complies with BS 5415 (Type 'H').

Make sure they **don't**:

- ? break up large pieces of asbestos materials;
- ? use power tools - they create more dust;
- ? expose other workers who are not protected;
- ? take protective clothing home to wash.

Make sure workers and contractors know when they need to call in a specialist contractor licensed by HSE.

SAFETY REPRESENTATIVES



It is your duty to ensure the health and safety at work of your employees. They will often be able and willing to help you develop measures to do this. So it makes sense

to consult them and find ways in which you and they can co-operate on health and safety.

If safety representatives have been appointed under the Safety Representatives and Safety Committee Regulations 1977, you must consult them on health and safety matters. The Regulations also require you to give them access to information relevant to the health and safety of the workers they represent, including any relating to potentially hazardous conditions.

OTHER USEFUL INFORMATION

HSE publications

Asbestos Alert - A Workers Information Card for building, maintenance, repair and refurbishment workers IND(G)188(P) 1995

Asbestos Dust - The Hidden Killer: Essential advice for building maintenance, repair and refurbishment workers IND(G)187(L) 1995

CDM Regulations: How the Regulations affect you! PML 54 1995

Construction Information Sheet No 39 Construction (Design and Management) Regulations 1994: The role of the client

The Control of Asbestos at Work: Control of Asbestos at Work Regulations 1987
Approved Code of Practice L27 1993 ISBN 0 11 882037 0

Work with Asbestos Insulation, Asbestos Coating and Asbestos Insulating Board: Control of Asbestos at Work Regulations 1987 Approved Code of Practice L28 1993
ISBN 0 11 882038 9

Guidance on work with asbestos cement and asbestos insulating board is in preparation.

Department of Environment publications

Asbestos Materials in Buildings 1991 ISBN 0 11 752370 4

Special Waste Regulations 1996: How they affect you WP147 (available in England and Wales from Local Environment Agency offices and in Scotland from local Scottish Environmental Protection Agency offices)

HSE priced and free publications are available by mail order from:
HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS
Tel: 01787 881165 Fax: 01787 313995

HSE priced publications are also available from good booksellers.

For other enquiries ring HSE's InfoLine Tel: 0541 545500
or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ

This leaflet is available in priced in packs of 10 from HSE Books, ISBN 0 7176 1179
5. Single free copies are also available from HSE Books.

**This leaflet contains notes on good practice which are not compulsory but which
you may find helpful in considering what you need to do.**

This publication may be freely reproduced, except for advertising, endorsement or
commercial purposes. The information is current at 4/96. Please acknowledge the
source as HSE.

IND(G)223(L) 8/96 C500

