Introduction to Asbestos essentials

Non-licensed tasks

Workers are at risk of developing asbestos-related diseases.

Disturbing asbestos-containing material (ACM) can release invisible fibres. Once in the air, fibres can be breathed in and cause lung diseases including:

- mesothelioma – a cancer of the linings to the lungs and stomach;
- lung cancer;
- other serious diseases such as asbestosis – a scarring of lung tissue.

There are no sudden changes in health after breathing in fibres – these diseases can take from 15 to 60 years to develop. They are incurable and often fatal. You need to protect yourself now to prevent contracting an asbestos-related disease in the future.

Some trades likely to disturb asbestos

- Electricians, joiners, plumbers, gas fitters, shop fitters, heating and ventilation engineers
- Labourers, roofers, plasterers, demolition workers and other workers in construction
- Phone and data engineers, alarm installers
- Surveyors, general maintenance engineers, painters and decorators

Asbestos essentials task sheets tell employers, managers and sole traders what to do when they need to work on or near ACMs. They will help you to decide what category of asbestos work it is and how to plan the work safely.

Higher-risk work with ACMs, including sprayed coatings, loose asbestos, lagging, insulation and jobs involving asbestos insulating board (AIB) – apart from some very limited-duration works to AIB – will require an HSE-licensed contractor.

The task sheets cover work that does not need a licence if carried out as the sheets describe. Each sheet describes what equipment is required for a particular task and covers the action needed to reduce exposure to an adequate level.

Why is asbestos a problem?

Large amounts of asbestos were used in new and refurbished buildings before 2000. Blue (crocidolite) and brown (amosite) asbestos were banned by law in 1985. Manufacture and supply of all asbestos was banned by the end of 1999. Existing asbestos articles can continue in use until they reach the end of their service life.

A large number of premises and older plant and equipment still contain some asbestos. Much of the asbestos will be hidden in the fabric of the building so is not immediately obvious. It is also unlikely to be recorded in the building plans but should be in the duty-to-manage plan. Workers most likely to come into contact with ACMs are those in the construction, maintenance, refurbishment and related trades. When ACMs are damaged or disturbed they can release dangerous fibres which, if breathed in, can cause serious diseases. Around 5000 people in Great Britain die every year from asbestos-related diseases as a result of past exposure, making asbestos the single greatest cause of work-related deaths.

Information, instruction and training

Any worker (including the self-employed) who is liable to disturb asbestos during their work must receive the correct level of information, instruction and training so they can work safely and without risk to others – see sheet em2.
Health and Safety Executive

Introduction to Asbestos essentials

Asbestos essentials task sheets will help small businesses, subcontractors and the self-employed to comply with the Control of Asbestos Regulations 2012. They will also help dutyholders, clients, trade union and employee safety representatives to understand how work should be done.

The task sheets provide the information you need to help you recognise asbestos and protect yourself and others. They include:

- equipment and method sheets (em0–em10). These provide guidance and advice on the right tools for the job and how to use them;
- a series of task sheets (a0–a38) with full colour images, illustrations and step-by-step guidance. It is important to follow all the actions in a task sheet, or use equally effective measures. Each task sheet shows a list of em sheets you should read before you start that task;
- the Decision flow chart in this sheet will help you decide if you can carry out the work or if you need to use an HSE-licensed contractor, or whether the work is notifiable non-licensed work (NNLW);
- the two detailed illustrations in this sheet showing where asbestos can be found in a typical industrial and residential property;
- a safety checklist to help you make sure you haven’t forgotten anything.

Following the sheets will help reduce the risk of ill health and the spread of asbestos. The task sheets can be used to form part of your risk assessment.

What to do first

Before starting work you should check what asbestos is present as part of your planning. In non-domestic premises, including industrial and commercial buildings, there should be a location plan/register – ask to see it. (This will not usually be available in domestic premises.) Check that the plan covers the area of the building that you will be working in and, if you are doing refurbishment work, that it includes a survey listing the types of asbestos present and their condition.

If there is no register or survey – or the report is not clear – do not start work.

You could arrange for a sample to be taken by a competent person and analysed or, alternatively, you can presume that any material you need to disturb contains the most hazardous types of asbestos (crocidolite or amosite) and apply the appropriate controls, using a licensed contractor if required (see Decision flow chart ). The client also needs to agree your plan of work to understand what work you are going to do, and how.

Safety checklist

- Can you avoid disturbing asbestos by doing the job in some other way?
- Have you determined what the asbestos-containing material is?
- Do you need a licence for the work?
- Always follow all legal requirements.
- Follow the task guidance sheet.
- Use an asbestos waste container.
- Dispose of at a licensed disposal site.

Caution:

- Do not sweep dust or debris – use a Class H vacuum cleaner or damp rags.
- Don’t take used overalls home.
- Don’t reuse disposable PPE.
- Don’t smoke.
- Don’t eat or drink in the work area.
Examples of licensed work – Don’t touch this!

- Broken asbestos insulating board
- Asbestos lagging
- Sprayed asbestos (limpet)

Examples of non-licensed work – You can work on these materials if you are trained

- Damaged textured coating
- Asbestos cement roofing
- Asbestos-containing gasket

If you have any doubts, your risk assessment should help you determine the type of work (see em0) or ask the client to employ an HSE-licensed asbestos contractor.

Main points

- Work with, or disturbance of, any type of ACM can be dangerous.
- If you work on ACMs and you smoke, you are at much greater risk of lung cancer.
- You need information, instruction and training to work safely with ACMs. See sheet em2.
- Consider those around you. Don’t put your workmates in danger or take fibres home on your clothes and put your family at risk.
- Second-hand equipment may not be asbestos-free.
- Dispose of contaminated materials safely.

The Asbestos essentials task sheets do not apply to licensed work. You should only go ahead if you are sure the work does not require a licence.
**Does the work need a licence?**

Most higher-risk work with asbestos must be carried out by a licensed contractor. This includes:

- work on asbestos sprayed coating, loose fill insulation and asbestos lagging;
- work on AIB or other types of asbestos insulation where the risk assessment demonstrates that the fibre release will be high, eg the material is damaged, or the work is not short duration work.

‘Short duration’ means any one person doing this type of work for less than one hour – or more than one person doing the work for no more than two hours – in any seven consecutive days. The total time spent by all workers must not exceed two person hours. This includes time spent setting up, building enclosures, cleaning and clearing up.

Non-licensed work includes most work on asbestos-containing textured coatings, also known as Artex, and asbestos cement.

**Is it notifiable non-licensed work?**

Some non-licensed work, where the risk of fibre release is greater, is subject to three additional requirements:

- notification of work;
- marking work areas with warning notices;
- medical examinations and record keeping.

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.

**Decide what type of work you are doing**

- **Maintenance** – eg drilling holes to attach fittings or pass cables through, painting, cleaning etc. Maintenance includes some removal where it is incidental to the main task, eg removing an asbestos ceiling tile to allow inspection.
  
  Or

- **Removal** – eg as part of a refurbishment or redesign project.
  
  Or

- **Encapsulation** – eg work to enclose or seal asbestos materials in good condition.
  
  Or

- **Air monitoring and control**, and the collection and analysis of samples.
Consider the asbestos type

- Is it **friable** (high fibre release when disturbed)? The more friable a material is, the more likely it will release asbestos fibres when worked on and the greater the risk of exposure. Materials such as asbestos insulation are more friable than materials such as asbestos cement.
- How firmly is the asbestos bound in a matrix (for removal work only)? ACMs where the asbestos is coated, covered or contained within another material, such as cement, paint or plastic, are considered to be firmly bound in a matrix.

Consider the material's condition

- Has the material been damaged or is it in poor condition, eg badly flood- or fire-damaged?
- Will the material's matrix be destroyed when worked on, eg deteriorating textured coatings (Artex) with gel or steam?

Once you've considered these three elements, the Decision flow chart will help you to decide which category your work with asbestos is, or check the HSE website for more help before you start.

In summary, most work with firmly bound 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, and removal of small areas of textured coatings to support installation/replacement of smoke alarms and light fittings, will not normally need to be notified.

NNLW will normally include removal of textured coatings where the material is deteriorated, eg using steaming and gelling methods, and short duration removal of AIB as part of refurbishment.

Each *Asbestos essentials* task sheet will give advice on whether the work is notifiable.

**Decision flow chart**

The following flow chart will help you to decide who should do the work, and to determine if it is licensed work or non-licensed work.

If you determine the work is non-licensed you will then need to decide if it is notifiable non-licensed work (NNLW).
Decision flow chart

Loose asbestos, asbestos coating, lagging, badly damaged asbestos insulating board (AIB) or insulation

- Does work with this material involve someone working for more than one hour in a week?
  - YES: The task needs an HSE-licensed contractor
  - NO: For two or more workers, does their total work time exceed two hours, start to finish, in a week?
    - YES: The task is not licensed
    - NO: Is the work notifiable non-licensed work?
      - YES: The task is not licensed
      - NO: Is the work 'removal'?
        - YES: The task is not licensed
        - NO: Is the work 'maintenance'?
          - YES: The task is not licensed
          - NO: Is the material highly friable (high fibre release when disturbed) and/or poorly bonded in matrix, eg asbestos insulation, or is it in poor condition/likely to deteriorate when worked on?
            - YES: The task is not licensed
            - NO: Is the material non-friable (low fibre release when disturbed) and in good condition, eg asbestos cement, floor tiles, bitumen felt?
              - YES: Non-licensed work
              - NO: Notifiable non-licensed work Notify the work to the enforcing authority, keep a record of the job and ensure all workers have had a medical examination (from April 2015)

Asbestos cement sheet, textured decorative coatings, articles containing asbestos, eg gaskets, textiles, floor tiles etc

- Is the material non-friable (low fibre release when disturbed) and in good condition, eg asbestos cement, floor tiles, bitumen felt?
  - YES: Use the appropriate task sheet with the relevant equipment and method sheet(s). Minimise the number of people present
  - NO: Is the material highly friable (high fibre release when disturbed) and/or poorly bonded in matrix, eg asbestos insulation, or is it in poor condition/likely to deteriorate when worked on?
    - YES: The task is not licensed
    - NO: Is the work 'encapsulation' or related to air monitoring/control or taking/analysing samples?
      - YES: The task is not licensed
      - NO: Is the work 'maintenance'?
        - YES: The task is not licensed
        - NO: Is the work notifiable non-licensed work?
          - YES: The task is not licensed
          - NO: Is the work 'removal'?
            - YES: The task is not licensed
            - NO: Is the material highly friable (high fibre release when disturbed) and/or poorly bonded in matrix, eg asbestos insulation, or is it in poor condition/likely to deteriorate when worked on?
Where asbestos materials can be found in a residential property

Usually licensed
1. Pipe lagging
2. Loose fill insulation
3. AIB airing cupboard and/or sprayed insulation coating on boiler and hot water tank
4. AIB soffits

Normally non-licensed
(If work that causes significant break up may require notification)
5. Asbestos cement water tank
6. Toilet seat and cistern
7. Vinyl floor tiles
8. Textured decorative coating on walls and ceilings eg Artex
9. Roofing felt
10. Asbestos cement panels
11. Asbestos cement soffits
12. Asbestos cement roof
13. Asbestos cement gutters and downpipes
14. AIB ceiling tiles
15. AIB bath panel
16. AIB behind fuse box
17. AIB partition wall
18. AIB interior window panel
19. AIB exterior window panel
20. AIB behind fire
21. AIB around boilers, storage heaters and warm air heating systems

Note: This diagram does not show all possible uses and locations of asbestos materials. A detailed survey will be required to identify all asbestos materials in a building.

AIB = Asbestos insulating board
Where asbestos materials can be found in an industrial property

**Usually licensed**
1. Sprayed coatings on ceilings, walls, beams and columns
2. Loose fill insulation
3. Lagging on boilers and pipes
4. AIB soffits

**Normally non-licensed** *(If work that causes significant break up may require notification)*
5. Asbestos cement water tank
6. Toilet seat and cistern
7. Asbestos rope seals, gaskets and paper
8. Vinyl floor tiles
9. Textiles eg fire blankets
10. Textured decorative coating on walls and ceilings eg Artex
11. Asbestos cement roof
12. Asbestos cement panels
13. Asbestos cement gutters and downpipes
14. Asbestos cement soffits
15. Asbestos cement flue

**If short duration non-licensed – otherwise licensed**
16. AIB ceiling tiles
17. AIB partition walls
18. AIB panels in fire doors
19. AIB around boilers, storage heaters and warm air heating systems

Note: This diagram does not show all possible uses and locations of asbestos materials. A detailed survey will be required to identify all asbestos materials in a building.

AIB = Asbestos insulating board
The following information will help in identifying the appropriate enforcing authority to notify the work to:

<table>
<thead>
<tr>
<th>Type of premises/activity</th>
<th>Enforcing authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shops, offices, separate catering services, launderettes, sport, entertainment and recreational activities, exhibitions, church or religious meetings, hotels, camping and caravan sites, wholesale and retail storage</td>
<td>Local authority (LA)</td>
</tr>
<tr>
<td>Factories and factory offices, civil engineering, construction and demolition sites, hospitals, research and development establishments, local government services and educational establishments, fairgrounds, radio, television and film broadcasting, seagoing ships, docks, transport undertakings, domestic premises, quarries, farms (and associated activities), horticultural premises and forestrics, mines/quarries, offshore installations, operating licensed nuclear sites</td>
<td>Health and Safety Executive (HSE)</td>
</tr>
<tr>
<td>Railways, railway lines, signal boxes</td>
<td>Office of Rail Regulation (ORR)</td>
</tr>
</tbody>
</table>

**How to notify NNLW**

For NNLW you will need to fill in the online notification ASB NNLW1 at: https://extranet.hse.gov.uk/fserver/external/asbnnlw1 and submit it electronically from your computer or device.

Work can start as soon as the electronic notification has been submitted. You do not need to wait for permission from the notified authority.

**Planning checklist**

Remember, before carrying out any work:

- Ask the premises owners for their records of asbestos; what was checked, what was found, and what was not checked.
- If there is no record and you have reason to suspect asbestos, ask for an asbestos survey to be done before accepting the contract (you will have to arrange this yourself in domestic properties, or alternatively, assume that it does contain asbestos and take appropriate control measures).
- Check if the work could require a licence.
- When the work does not need a licence, check if it is notifiable and, if so, submit form NNLW1 then follow the task sheets or other HSE guidance.
- If there is no task sheet for the work it may be possible to safely adapt a similar task sheet. If required, get help from a competent health and safety advisor.
- If ACM needs replacement, the replacement must be asbestos-free.

**Risk assessment and plan of work**

Before starting any work that is likely to disturb asbestos, a suitable and sufficient risk assessment and a plan of work must be prepared. See em0.

**Further reading**

*Asbestos: The licensed contractors’ guide* HSG247 HSE 2006
www.hse.gov.uk/pubns/books/hsg247.htm

*Respiratory protective equipment at work: A practical guide* HSG53 (Fourth edition) HSE 2013
www.hse.gov.uk/pubns/books/hsg53.htm

*Fit testing of respiratory protective equipment facepieces*
HSE Information Operational Circular OC 282/28

*Health and safety in roof work* HSG33 (Fourth edition) HSE 2012
www.hse.gov.uk/pubns/books/hsg33.htm

*The Hazardous Waste (England and Wales) Regulations 2005*
www.legislation.gov.uk

Carriage of dangerous goods www.hse.gov.uk/cdg/

Environment Agency
www.gov.uk/government/organisations/environment-agency

Natural Resources Wales

Scottish Environment Protection Agency www.sepa.org.uk/