



Asbestos in homes

N.B. The information below has been copied from a range of web-sites with relevant sources acknowledged and permissions given wherever possible. Guidance should be sought from official relevant government sites or organisations (see publication section at end), for verification and endorsement of the information below.

“Large amounts of asbestos-containing materials (ACMs) were used for a wide range of construction purposes in new and refurbished buildings until 1999 when all use of asbestos was banned. This extensive use means that there are still many buildings in Great Britain which contain asbestos. Where asbestos materials are in good condition and unlikely to be disturbed they do not present a risk. However, where the materials are in poor condition or are disturbed or damaged, asbestos fibres are released into the air, which, if breathed in, can cause serious lung diseases, including cancers.” Health & Safety Executive (2012)

What is asbestos?

Asbestos is a naturally occurring silicate mineral composed of long, thin, fibrous crystals, each fibre being composed of many microscopic "fibrils" that can be released into the atmosphere by abrasion and other processes.

There are three main types of asbestos that can be found in premises, commonly called 'blue asbestos' (crocidolite), 'brown asbestos' (amosite) and 'white asbestos' (chrysotile). All of them are dangerous carcinogens, but blue and brown asbestos are more hazardous than white. Despite their names, it can't be identified just by their colour. Chrysotile was the predominant form of asbestos widely used both in small powder particle form as a filler and in longer fibrous form as a strength reinforcement in both asphalt and vinyl floor tiles.

Use of asbestos

Prior to the realisation of its harmful potential, asbestos was hailed for its miraculous properties; it was strong, malleable, thermal resistant, a great insulator and waterproof (<http://www.nasag.org.uk/asbestos-use-in-the-uk/>). It was manufactured and used extensively in Great Britain in a wide range of products, but particularly in insulation and building materials following World War II. Exposures during the 1950s, 1960s and 1970s led to a large increase in asbestos-related disease in Great Britain. Some manufacturers were slow to acknowledge the problem. E.g. Marley, a leading UK tile producer has been very reluctant to admit that they used to use asbestos in their tiles, but court cases indicate otherwise. E.g. (<https://www.fieldfisher.com/en/injury-claims/case-studies/teamwork-uncovers-vital-information-in-marley-tiles-asbestos-case>)

Asbestos related diseases

In general, the health risk from short-term asbestos exposure is very low. Most people do not develop serious or life-threatening lung disease as a result of exposure to asbestos. (<https://www.blf.org.uk/support-for-you/asbestos-related-conditions/ive-been-exposed>).

There is usually a long delay between first exposure to asbestos and the onset of disease. This can vary from 15 to 60 years. Past exposure to asbestos currently kills around 4500 people a year in Great Britain. Although it is now illegal to use asbestos in the construction or refurbishment of any premises, workers involved in building maintenance and repair continue to be at risk when working on asbestos-containing buildings. Only by preventing or minimising these exposures now can asbestos-related disease eventually be reduced.

Asbestos-related conditions

There are four main lung conditions associated with breathing in asbestos fibres:

1. Non-malignant pleural disease: conditions that affect the tissue covering the outside of the lungs and the inside of the chest cavity.
2. Asbestosis - serious (non-malignant) scarring of the lungs
3. Asbestos-related lung cancer
4. Mesothelioma - tumour that forms in the lining of the lungs, abdomen or heart.

Safety of asbestos

Asbestos is safe and legal to remain in homes or public buildings as long as the asbestos materials are in good condition and the asbestos cannot be released into the air. Asbestos-containing material such as asphalt or vinyl-asbestos flooring laid prior to the year 2000 and present in your building does not necessarily mean that you must or even should remove it. Asbestos-containing materials in good condition are safe. It is when the material becomes broken or damaged and the fibres become airborne that they are dangerous as the fibres can be inhaled and can cause serious disease. **The least-risky course for flooring in good condition is to leave it alone, in place, covering it over with new material.**

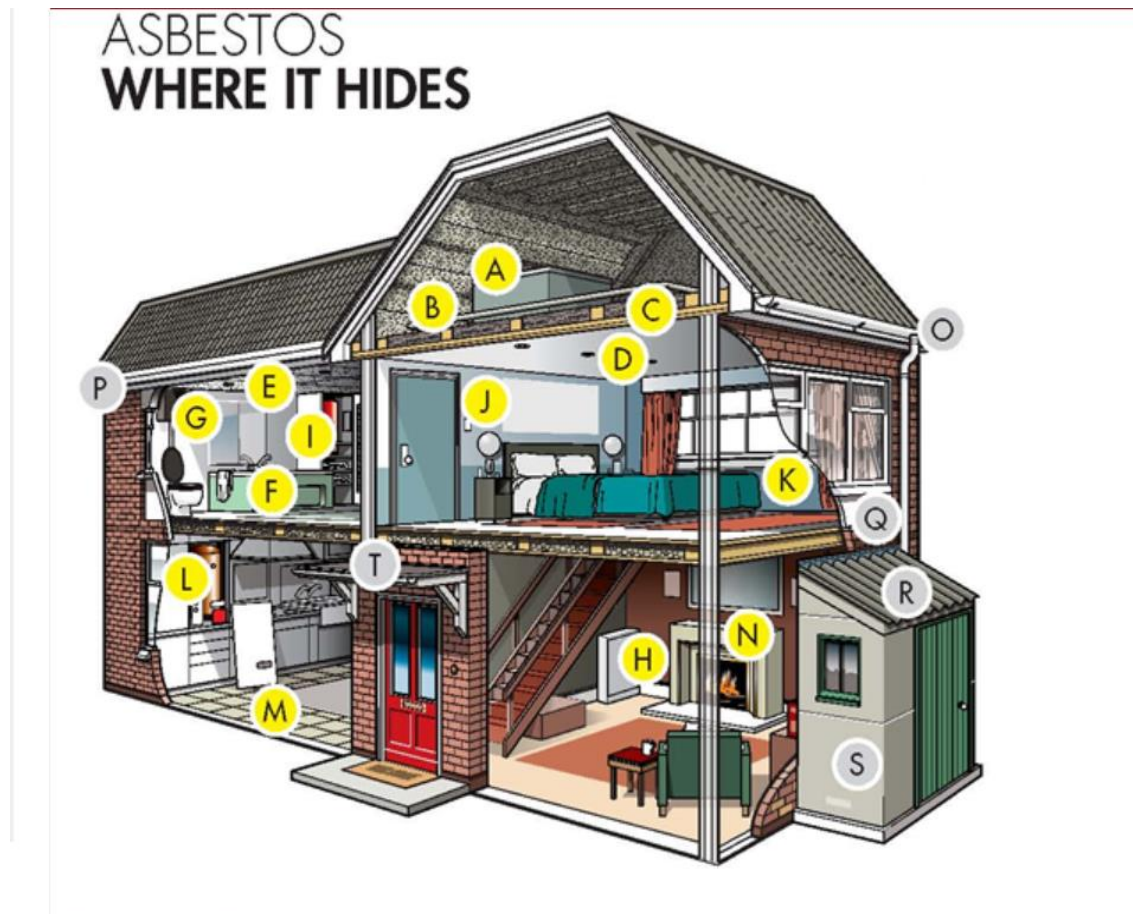
Encapsulating /covering undamaged asbestos provides a protective layer, so enclosing the fibres to protect it from future damage. (N.B. Asbestos that is not in good condition needs to be removed by a specialist). One of the products for encapsulating undamaged asbestos is sprayed cork. Companies certified to carry out asbestos encapsulation may state that a re-spraying is required after 15 years to provide continued protection.

Where is asbestos found?

The Health and Safety Executive provides a non-exhaustive list of products that may contain asbestos:- <https://www.hse.gov.uk/asbestos/managing/products.htm>

Asbestos can be found in any building built or refurbished before the year 2000. It is in many of the common materials, fixtures and fittings used in the building trade, as indicated below, (copied from <https://www.hse.gov.uk/asbestos/building.htm>)

Note: The 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.



Inside the home

(AIB = Asbestos Insulating Board)

- A. Asbestos cement water tank
- B. Pipe lagging
- C. Loose fill insulation
- D. Textured decorative coating eg artex
- E. AIB ceiling tiles

- F. AIB bath panel
- G. Toilet seat and cistern
- H. AIB behind fuse box
- I. AIB airing cupboard and/or sprayed insulation coating boiler
- J. AIB partition wall
- K. AIB interior window panel
- L. AIB around boiler
- M. Vinyl floor tiles
- N. AIB behind fire

Outside the Home

- O. Gutters and Asbestos cement downpipes
- P. Soffits – AIB or asbestos cement
- Q. AIB exterior window panel
- R. Asbestos cement roof
- S. Asbestos cement panels
- T. Roofing felt

The government web-site also provides an asbestos image gallery of photos that represent some of the common places where asbestos can be found:

<https://www.hse.gov.uk/asbestos/gallery.htm>

Asbestos cement

Please see <https://www.hse.gov.uk/asbestos/essentials/cement.htm>, which includes some photographic examples of what asbestos cement products may look like now.

Asbestos cement is just ordinary cement mixed with asbestos, in some cases asbestos can make up over a third of the cement. It is a hard, grey material, mainly a mixture of chrysotile (white asbestos) and cement, which was moulded and compressed to produce some of the materials listed above. You can find asbestos cement in many places inside and outside buildings such as:

Asbestos cement roofs

These are mainly made up of large sheets of corrugated asbestos cement; they are often found on industrial or farmyard buildings, but can also be found as roofs on garages and sheds. They are often covered in moss and other growths as they've been there for many years.

Asbestos cement wall cladding

This has a shape and structure similar to roof sheeting, and is often found on walls/as walls of buildings with asbestos cement roofs.

Asbestos cement downpipes and gutters

These are often attached at the end of cement roofs in warehouse type buildings.

Asbestos cement flues

These may be found in boiler systems (including domestic) air conditioning and ventilation systems.

Asbestos cement and pitch fibre water and sewer pipes

Drainage pipes, such as water and sewage pipes, were often made of pitch fibre. This is a lightweight and easy to handle material, made of wood cellulose impregnated with inert coal tar pitch. Asbestos cement was added to strengthen the material.

What is the law relating to asbestos in domestic properties?

Copied from: <https://www.asbestosawarenesscertificate.co.uk/asbestos-awareness-domestic>

Owner-occupiers of a domestic property are not legally responsible for risks to builders from asbestos. Instead, their only task is to make sure they hire competent trades people with the required know-how to carry out improvements, repairs or maintenance to their house.

Homeowners should tell them, before they start, if there is asbestos present.

The general duties in Section 3 (1) of the Health and Safety at Work Act 1974 apply to protect residents from danger to their health and safety while work is done.

Where that activity involves asbestos-containing materials (ACMs), then the Control of Asbestos Regulations 2012 also applies, and the obligation to follow them is on the contractor.

Guidelines related to managing asbestos in your home

- The general rule is to always leave asbestos alone if it is in good condition - it is usually safe unless it is damaged or disturbed. If you have damaged asbestos materials in your home you should seek advice on appropriate action to take
- Asbestos materials that are badly damaged or deteriorating can release asbestos fibres and should be removed. Asbestos-containing materials (sprayed asbestos, lagging or insulating boards) must always be removed by contractors who are specially licensed to do this work
- If you are planning home improvements or maintenance and have asbestos in your home, you must always inform builders, maintenance workers or contractors before they start work.
- Never sand, drill or saw asbestos materials.
- Always seek advice before thinking of removing asbestos and follow the basic rules below if carrying out asbestos cement removal work. The [Asbestos Removal Contractors Association \(ARCA\) website \(external link\)](#) contains more information.

Asbestos Surveys

Workers who disturb the fabric of buildings during maintenance, refurbishment, repair, installation and related activities may be exposed to asbestos every time they unknowingly work on Asbestos-containing materials (ACMs) or carry out work without taking the correct precautions. The purpose of managing asbestos in buildings is to prevent or, where this is not reasonably practicable, minimise exposure for these groups of workers and other people in the premises. To prevent this exposure, information is needed on whether asbestos is, or is likely to be, present in the buildings, so that an assessment can be made about the risk it presents and appropriate measures put in place to manage those risks.

The purpose of an asbestos survey

- To help manage asbestos in your premises.
- To provide accurate information on the location, amount and condition of asbestos-containing materials (ACMs).
- To assess the level of damage or deterioration in the ACMs and whether remedial action is required.
- To use the survey information to prepare a record of the location of any asbestos, commonly called an asbestos register,* and an asbestos plan of the building(s).
- To help identify all the ACMs to be removed before refurbishment work or demolition.

*Note: the information in the register should be used to inform the risk assessment (eg consider who could disturb asbestos on your premises), and to establish the management plan to prevent such a disturbance.

The guidance sets out how to survey premises for ACMs. In particular, it specifies the methodology to use in carrying out surveys and how to report and present the results. It also gives advice on how to recognise and sample suspected ACMs.

Removal and treatment of Asbestos-containing-materials

British health and safety regulations stipulate that asbestos material has to be removed in specially adapted vehicles and taken to a landfill site with an appropriate permit to accept asbestos. Asbestos can be destroyed by an ultra-high temperature incineration and plasma melting process. A process of thermal decomposition at 1,000–1,250 °C (1,800–2,300 °F) produces a mixture of non-hazardous silicon-based wastes, and at temperatures above 1,250 °C (2,300 °F) it produces silicate glass. Microwave thermal treatment can be used in an industrial manufacturing process to transform asbestos and asbestos-containing waste into porcelain stoneware tiles, porous single-fired wall tiles, and ceramic bricks.

The combination of oxalic acid with ultrasound fully degrades chrysotile asbestos fibers in asbestos-polluted water.

Publications & web-sites

Generally, the government's Health & Safety Executive (HSE) provides comprehensive information about managing and disposing of asbestos. See below for some of their relevant publications. These are updated periodically so it is important to check for the most recent information. Individual councils may also provide some.

Shropshire County Council has scant information about managing and disposing of asbestos in the home:

<https://shropshire.gov.uk/environmental-health/health-and-safety/health-and-safety-for-the-public/managing-asbestos-in-the-home/>

<https://shropshire.gov.uk/recycling-and-rubbish/household-recycling-centres/hazardous-waste>

Some other councils provide more detailed information e.g. :-

<https://www.haringey.gov.uk/business/licensing-and-regulations/environment-and-waste/pollution-control/asbestos>

[Asbestos In The Home Booklet \(north-herts.gov.uk\)](http://north-herts.gov.uk)

A selection of Asbestos-related HSE (Health and Safety Executive) publications & web-sites

- **Managing my asbestos:** A step by step guide to the duty to manage asbestos.

<https://www.hse.gov.uk/asbestos/managing/>

- **Asbestos: Frequently asked questions**
<https://www.hse.gov.uk/asbestos/faq.htm>
- **(2012) Managing Asbestos in Buildings: A brief guide.**
www.hse.gov.uk/pubns/indg223.pdf.
- **A comprehensive guide to Managing Asbestos in premises.**
<https://www.hse.gov.uk/pubns/priced/hsg227.pdf>
- **Asbestos-related disease statistics, Great Britain 2022**
<https://www.hse.gov.uk/STATISTICS/causdis/asbestos-related-disease.pdf>
- **Asbestos essentials:** A task manual for building, maintenance and allied trades on non-licensed asbestos work HSG210 (Third edition) HSE Books 2012 ISBN 978 0 7176 6503 7 www.hse.gov.uk/pubns/books/HSG210.htm
- **HSE (2012) Asbestos: The survey guide** HSG264 (Second edition)
www.hse.gov.uk/pubns/books/HSG264.htm Aimed at people carrying out asbestos surveys and people with specific responsibilities for managing asbestos in non-domestic premises under the Control of Asbestos Regulations 2012. The book covers competence and quality assurance and surveys, including: survey planning, carrying out surveys, the survey report and the duty holder's use of the survey information. It includes extensive appendices and references.
- **Managing and working with asbestos:** Control of Asbestos Regulations 2012. Approved Code of Practice and guidance.
<https://www.hse.gov.uk/pubns/books/L143.htm> This publication contains the Control of Asbestos Regulations 2012, the Approved Code of Practice (ACOP) and guidance text for employers about work which disturbs, or is likely to disturb, asbestos, asbestos sampling and laboratory analysis. The Regulations set out legal duties and the ACOP and guidance give practical advice on how to comply with those requirements. The Regulations give minimum standards for protecting employees from risks associated with exposure to asbestos.
- The Stationery Office 2005: The Hazardous Waste (England and Wales) Regulations 2005 SI 2005/894 ISBN 978 0 11 072685 4
- The Special Waste Amendment (Scotland) Regulations 2004 Scottish SI 2004/112 The Stationery Office 2004 ISBN 978 0 11 069030 8

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