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Asbestos was used in over 3000 building materials and products, most widely from the 1950s until 1999. Because of its wide use in construction, it is still present in a large proportion of UK residential and commercial stock built before the year 2000.



### 1. WHO IS THIS GUIDE FOR?

This guide is designed to give a concise overview of the key facts, legislation and guidance on asbestos for property professionals including and not limited to:

- Architects
- ✓ Surveyors
- Design Consultants
- ✓ Facilities Managers

- Commercial Property Agents
- Block and Property
   Management
- Property Lawyers



### 2. ASBESTOS LEGISLATION OVERVIEW

The principal legislation that governs safe working practices on **Asbestos Containing Materials (ACMs)** is the **Control of Asbestos Regulations 2012 (CAR 2012)**. The Regulations place specific duties on building owners and all those who are responsible for maintenance and management of non-domestic premises. These people are known as '**Duty Holders**'.

CAR 2012 also places legal duties on both employers and their employees who carry out works within properties, which may directly or indirectly disturb ACMs. Many people think that the legislation is only applicable to commercial property. Although this is correct with regard to management of ACMs by the Duty Holder(s), employers also have a legal duty to protect their staff, clients and the public from exposure to asbestos when working on residential property.

### The key Regulations of relevance to property professionals are:

### Regulation 4. Duty to Manage Asbestos in Non-Domestic Premises.

Duty Holders are required to identify the location and condition of ACMs in non-domestic (and common parts of domestic) premises. They must manage the risk to prevent exposure to anyone who works on the building, or to the building occupants.

This means instructing an asbestos survey to be carried out by a qualified and experienced surveyor. The survey report and Asbestos Register are then used as the basis of the Asbestos Management Plan for the building. The Asbestos Register will have a Material Risk Assessment which will highlight the risk level of each ACM identified. As part of the management plan the duty holder must then carry out a Priority Risk Assessment, which looks at a few variables which will help to identify the likelihood that each ACM may be disturbed during day to day occupation and works within the building. The two combined assessments will give the overall risk for each ACM and allow for recommended remedial works to be prioritised with highest risk materials first.

### The Management Plan should typically include:

- Details of the person(s) responsible for managing the risk from ACMs.
- A copy of the up to date Asbestos Register, either paper or electronic copies. This should be made available to all staff and contractors to make everyone aware of the location of ACMs.

- A written method instructing that any works on the building must not be started before the Asbestos Register is checked and understood and that the correct methods and controls will be put in place to prevent any ACMs from being disturbed by the proposed works. Any removal of ACMs must be carried out by competent asbestos-trained contractors with the correct level of training.
- Plans for any recommended remedial works identified within the survey report, prioritised in order of highest to lowest risk.
- The schedule of monitoring the condition of ACMs by regular Re-Inspection Surveys.
- Details on how the content of the Management Plan will be communicated with all relevant parties.
- Records of any asbestos removal or remedial works.

Once there is an Asbestos Register in place, **Re-Inspection Surveys** should be carried out regularly to monitor the condition of the ACMs and ensure they have not been damaged or inadvertently exposed or removed, which may increase their risk level and warrant remedial works. The industry standard frequency for Re-Inspection Surveys is annually, or every 6 months for higher risk materials such as thermal insulation in an area where accidental damage may be possible.

### Regulation 5. Identification of the Presence of Asbestos.

This regulation stipulates the requirement to identify all ACMs within the fabric of a building, or relevant part of the building, before any major refurbishment or demolition works are carried out.

### Regulation 10. Information, Instruction and Training.

Regulation 10 requires employers to ensure that all staff who may disturb asbestos materials during their works, or those who supervise such works, receive the correct level of information, instruction and training to allow them to carry out the work safely and in accordance with the correct Approved Code of Practice (ACOP).

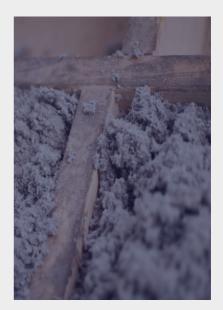
For more detailed information on the CAR 2012 regulations you can download a free PDF copy of 'Managing and Working with Asbestos. Control of Asbestos Regulations 2012, Approved Code of Practice and Guidance' from the HSE website at: http://www.hse.gov.uk/pubns/books/1143.htm



### 3. YOUR RESPONSIBILITIES

As a property professional you may not have a direct duty to manage asbestos materials within any particular building. You are however well positioned to help guide your clients in the right direction, helping them to ensure that they comply with the regulations and stay within the law, and doing so in an efficient way that will not risk works schedules, or risk the health of themselves, their staff, other contractors, their clients or the general public.

By learning about the key parts of the CAR 2012 legislation, surveys, works management and training, and by working with a specialist asbestos consultant you will be able to help your clients reduce their risk, both financially and legally, while also saving them time and money.



### 4. ASBESTOS SURVEYS

### There are two main types of asbestos survey:

Asbestos Management Surveys are generally carried out in occupied buildings. Management Surveys are designed to locate ACMs within a property without causing damage to the building fabric, fixtures, fittings or decor. A detailed survey is carried out of every room, basement, loft, accessible cupboards and risers and to the external fabric of the building, along with any outbuildings. Small samples are taken of any suspect materials which are known to have contained asbestos in the past, and these are analysed in a UKAS accredited laboratory for asbestos content. A survey report and Asbestos Register is then provided to form the basis of the Asbestos Management Plan and to allow for general ongoing management of ACMs within the building.

Asbestos Refurbishment and Demolition (R&D) Surveys are carried out prior to major refurbishment works or demolition of all or part of a building. This is a destructive survey, the fabric of the building within floor, wall and ceiling voids, boxings and cavities and all areas of the building need to be accessed prior to works.

### R&D Surveys are further split down into 2 sub-categories:

Refurbishment Asbestos Surveys. These are carried out prior to refurbishment and will often need to be tailored to the scope of works to ensure that the correct areas and building fabric are inspected to the correct level. This is done in a way to not cause damage to building fabric that will not be included within the proposed refurbishment works.

**Demolition Asbestos Survey.** This is a fully intrusive survey that must access all building fabric and voids in order to identify all ACMS within the building, allowing for tender and removal prior to demolition works.

R&D surveys generally need to be carried out on vacant properties due to the destructive nature of the survey and the level of access that is required to all areas of the building fabric. It is sometimes possible to carry out a tailored survey with occupants in situ if the proposed works are fairly light and specific to a particular area of the building or a set route, for example a fire alarm installation.

It is important to discuss and agree the full scope of the R&D Asbestos Survey with the building owner and all interested parties to ensure that everyone understands the level of damage that will be caused to the building fabric. Because the survey is usually carried out prior to major refurbishment or demolition works it is not usually practical or cost effective to make good damaged fabric prior to works. Survey scopes do not therefore usually include for making good, but should it be required then this needs to be agreed at tender stage.

Another factor to consider is high level access and possible requirements for scaffolding or MEWP (Mobile Elevated Works Platform).

**Re-Inspection Asbestos Survey.** Once the survey has been carried out, ACMs have been identified and an Asbestos Register and Management Plan has been put in place, any ACMs that are to remain in situ must be inspected annually (or every 6 months if high risk) by carrying out a Re-Inspection survey. This will ensure that the register is kept correct and up to date and fully compliant with CAR 2012.



### 5. TRAINING

Regulation 10 of CAR 2012 stipulates that training must be carried out that is suitable to the work activities of each individual.

### There are three levels of training:

- 1. Asbestos Awareness Training. This is basic level training that should be given to all employees who could potentially disturb ACMs during their day to day work activities, or anyone who oversee these works, including those who are self employed. These include, but are not limited to:
- Surveyors, Architects and other building professionals
- Plumbers
- Flectricians
- Carpenters
- Painters and Decorators
- Shop Fitters
- Plasterers

- Roofers
- Heating and Ventilation Engineers
- Telecom Engineers
- Computer and Data Installers
- Fire and Burglar Alarm Installers
- Demolition workers
- General maintenance staff

This level of training does not prepare employees to work with, disturb or remove ACMs. The training can be carried out either as a classroom based course, typically 3-4 hours, or alternatively as an accredited online training course.



Contact us on: **01329 800650** or email: **enquiries@artisanenvironmental.co.uk** to enquire about our classroom based courses.

You can carry out our online 'Asbestos Awareness' or 'Asbestos Awareness for Architects and Designers' training courses here:

https://www.artisanenvironmental.co.uk/services/training/asbestos-awareness-training/

2. Non-Licensed Works Training, including NNLW. Employees whose work will involve disturbance or removal of non-licensed ACMs, and all works that come under this category, should carry out both Asbestos Awareness Training and Non-Licensed Works (NLW) Training. Asbestos Awareness Training must have been completed within 6 months of carrying out NLW Training.

This level of training is conducted as a 1 day course and is of particular value to trades who can offer both removal of lower risk ACMs and then reinstatement.

For example a flooring fitter could remove asbestos containing vinyl floor tiles from the communal areas of a block of flats and then refit with carpet tiles. This could be carried out a stairwell and landing at a time, keeping access to the flats open to residents. This solves a huge problem for the block management company who would otherwise have to arrange both an asbestos removal contractor and also a floor fitter and then tie both together consecutively, running the risk of one running over or the other being delayed and leaving the stairwell unfit for re-occupation by the tenants.

Further information and options to book courses can be found at: https://www.artisanenvironmental.co.uk/services/training/non-licensed-works-training/

**3. Licensable Works Training.** In addition to Asbestos Awareness Training, employees who will be carrying out 'licensable work' must receive additional task specific training that is appropriate to the specific works.

**Refresher Training.** Annual refresher training should be carried out for Asbestos Awareness. Refresher training for both Licensable and Non-Licensed Works should be appropriate to the works being carried out by each individual or company and based on a Training Needs Assessment.

If you need help with refresher training then please contact us on **01329 800650** or **enguiries@artisanenvironmental.co.uk** 

Training providers should be audited by either IATP, RSPH or UKATA to show that their course complies with the legislative requirements.







### 6. ASBESTOS MATERIALS OVERVIEW

### **Typical Asbestos Containing Materials:**

**Asbestos Insulation Board (AIB).** This is a higher risk licensable material and was used predominantly as a fire proofing material, but also as a general building board in walls, ceilings and external soffit panels. It was used until the mid 1980s.



**Sprayed Asbestos.** Known as 'flock' or 'limpet', sprayed insulation is a licensable, very high risk material that easily releases asbestos fibres. It has a very high asbestos content. Typical applications include the ceilings and bulkheads of underground and multi storey car parks to act as fire and acoustic insulation and as an anti-condensate. Sprayed asbestos was typically phased out in the late 1970s.



**Thermal and Loose Insulation.** Typically applied to hot water pipework, water tanks and calorifiers as a thermal insulator. Also occasionally found as a loose fill insulation in lofts, wall or floor voids. Insulation is a licensable, high risk material which was used up until the mid 1980s.



**Asbestos Cement.** Generally used externally as a material in roofing sheets, wall boards, soffits and rain water goods, asbestos cement is very durable and waterproof. Also used internally as wall and ceiling boards, water tanks, flues and bath panels. A lower risk material, cement was used until 1999 when all ACMs were completely prohibited for import and use within the UK.



**Textured Coating.** Known widely by one of its main trade names 'Artex' is a decorative plaster coating with a small amount of white asbestos used as a binding agent. Asbestos containing textured coating is lower risk and was used until 1986.



Rope, Woven materials and Gaskets. Containing up to 100% white asbestos, ropes, yarns, blankets, flash guards and gaskets were used widely as thermal and fire protection. These materials were used until 1999.



**Bitumen and Felts.** A range of low risk bitumen based materials which typically contained a small amount of white asbestos to help bind and increase strength and durability. Materials include roofing and sarking felts, damp proof course, dampener pads and bitumen adhesives. Bitumen and felt materials were used until 1999.



cladding

Composite Materials. Various low risk composite materials such as vinyl floor tiles, stair nosings, window boards, cisterns were used until 1999.

### Some typical locations of ACMs:

## Accoustic dampener pad beneath metal sinks Roofing felt Bitumen flooring adhesive Damp proof course

# Cement roof tiles and corrugated roof sheets Cement soffit panels Cement guttering, downpipes and flues Cement fascia panels Cement riser boxing panels External cement walt

### AlB window infill panels AlB window infill panels

AIB riser boxing

AIB ceiling panels

Asbestos Insulation Board (AIB) Products

AIB understairs

fire protection



### 7. ASBESTOS REMOVAL WORKS

Works with or removal of ACMs fall into one of two categories; Licensable Works, and Non-Licensed Works

Licensable Works include works on, but are not limited to:

- Asbestos Insulation Board (AIB)
- Sprayed insulation
- Loose asbestos insulation.
- Thermal insulation

For detailed information on **Licensable Works** the HSE guidance book 'HSG247, The Licensed Contractors Guide' can be downloaded or purchased at: http://www.hse.gov.uk/pubns/books/hsg247.htm

**Non-Licensed Works** include materials that can be worked on or removed after completing NLW Training include:



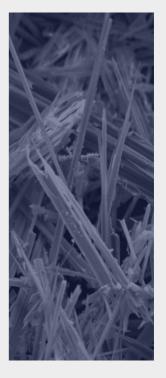
- Textured coatings
- Asbestos cement
- Vinyl floor tiles
- Composite materials e.g. WC cisterns, window boards and stair nosings
- Bitumen products, e.g. roofing felts, damp proof course, sink dampener pads and adhesives
- Woven materials, e.g. gaskets and ropes

The full range of ACOPs for **Non-Licensed Works** are specified under HSE Task Sheets 'Asbestos Essentials'. These task sheets can be downloaded or purchased from the HSE website at http://www.hse.gov.uk/asbestos/essentials/

### 8. WHAT IS ASBESTOS AND WHY IS IT DANGEROUS?

Asbestos is a mined silicate mineral, the mined ore is broken down to release the raw asbestos fibres. These fibres were (and in some countries still are) added to building materials because asbestos has several great properties that made it a fantastic product, including high strength, fire and heat resistance, chemical and electrical resistance, and it was also a great thermal insulator.

You have likely heard that there are three main types of asbestos, these are brown (Amosite), blue (Crocidolite) and white (Chrysotile). Blue and brown asbestos tend to be found in the higher risk materials, such as sprayed asbestos, insulation and insulation board. This is because these types of asbestos have a higher fire and heat resistance than white asbestos. They are also generally present in larger quantities within the material and are released from the material into the air more easily when the material is damaged or disturbed. White asbestos was generally used in smaller quantities as a binding agent and is found predominantly in lower risk materials, as the fibres are not released into the air as easily when the materials are disturbed



Asbestos is dangerous when it becomes airborne. The microscopic fibres are small enough to get past your body's defences that filter out most general dust, and pass down deep into the lungs. Normally, any dust and other fibres can be removed from the lungs by macrophage cells, which engulf the dust and remove it from the body in mucus or the lymphatic system. Asbestos fibres however are too long for these macrophage cells to completely engulf and so the body cannot remove them from the lung. They build up and the lungs try desperately to break them down and remove them, this results in scarring and damage to the lung tissue. This damage causes asbestos related diseases such as asbestosis and mesothelioma

**Asbestosis** is a reduction in the lungs ability to work effectively due to the scarring to the lung tissue, so they are less efficient at absorbing oxygen into the blood. This in turn leads to fatigue and shortness of breath and ultimately to cardiovascular problems and a higher risk of heart attack.

**Mesothelioma** is an aggressive asbestos specific cancer of the lung lining. It has no current cure and once diagnosed, patients usually have a prognosis of only weeks or months.

### 9. USEFUL INFORMATION AND CONTACTS

For further help or advice please contact the **Artisan Environmental** team:



01329 800650



enquiries@artisanenvironmental.co.uk



www.artisanenvironmental.co.uk















### References:

- 1. Health and Safety at Work etc Act 1974 (c.37) The Stationery Office 1974 ISBN: 978 0 10 5437741. http://www.legislation.gov.uk/ukpga/1974/37
- 2. Managing and Working with Asbestos. Control of Asbestos Regulations 2012. Approved Code of Practice and guidance. (2013) L143. ISBN: 9780717666188. HSE Books http://www.hse.gov.uk/pubns/books/l143.htm
- 3. 'Asbestos: The analysts' guide for sampling, analysis and clearance procedures HSG248 HSF Books 2005 ISBN: 9780717628759 http://www.hse.gov.uk/pubns/books/hsg248.htm
- 4. 'Asbestos essentials: A task manual for building, maintenance and allied trades on non-licensed asbestos work HSG210 (Third edition)' HSE Books 2012 ISBN 97807176 65037. http://www.hse.gov.uk/pubns/books/hsg210.htm Online versions of the Asbestos essentials sheets are available at: http://www.hse.gov.uk/asbestos/essentials/Index.htm
- 5. Managing health and safety in construction. Construction (Design and Management) Regulations 2015. Approved Code of Practice L153 HSE Books. ISBN: 9780717666263 http://www.hse.gov.uk/pubns/books/l153.htm
- 6. Asbestos: The licensed contractors' guide HSG247 HSE Books 2006 ISBN 97807176 2874 2. http://www.hse.gov.uk/pubns/books/hsg247.htm
- 7. The Hazardous Waste (England and Wales) Regulations 2005 SI 2005/894 The Stationery Office 2005. ISBN: 9780110726854

### **GLOSSARY**

Industry acronyms:

**ACM** Asbestos-containing material

**ACOP** Approved Code of Practice

AIB Asbestos insulating board

APF Assigned protection factor

ASLIC The Asbestos (Licensing) Regulations 1983

**BOHS** British Occupational Hygiene Society

**CAR** Control of Asbestos Regulations 2012

FF(P3) Filtering facepiece (respirator)

**HEPA** High efficiency particulate arrestor

**HSC** Health and Safety Commission

**HSE** Health and Safety Executive

IATP Independent Asbestos Training Providers

**PCM** Phase contrast microscopy

PLM Polarised light microscopy

**PPE** Personal protective equipment

**QA** Quality assurance

RPE Respiratory protective equipment

**RSPH** Royal Society for Public Health

**SLH** Supervisory licence holder

**UKAS** United Kingdom Accreditation Service

**UKATA** UK Asbestos Training Association



