

ASBESTOS

MANAGEMENT

POLICY/PLAN

Client

Williamsburgh Housing Association Limited Ralston House Cyril Street Paisley PA1 1RW

Reviewed by

SOCOTEC Asbestos Ltd 2-8 Langlands Place Kelvin South Business Park East Kilbride Glasgow G75 0YP Copy No. 1 Issue No. 1

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Policy on the Management of

Asbestos and Asbestos Containing Materials

Williamsburgh Housing Association have previously arranged for asbestos surveys to be undertaken in the common areas of buildings and sites under their responsibility. The findings of the surveys are available via hardcopy asbestos reports and registers.

The Association recognises that exposure to respirable asbestos fibres has the potential to cause serious and irreversible disease. It will, however, be necessary to periodically remove or maintain asbestos containing materials (ACM's). It is the policy of Williamsburgh Housing Association to prevent the exposure of our employees, contractors and any other persons to asbestos fibres. Where this is not possible, for example, during removal of asbestos containing materials, then it is our policy to reduce that exposure to the lowest level that is reasonably practicable.

This Asbestos Management Plan is intended to put this policy into effect.

It is the responsibility of all relevant personnel to be familiar with the procedures contained within the Asbestos Management Plan, to comply with these procedures, current legislation, official guidance and good practice.

In this way, the Association will ensure that the health and safety of all our staff and other persons is not put at risk from exposure to asbestos fibres.

This management plan forms the basis of the Association's arrangements for satisfying the relevant legislation and is in keeping with the statements contained within the Association's Health & Safety Manual, section 4.9 Asbestos.

To achieve the purposes of this policy, Williamsburgh Housing Association shall ensure, as far as reasonably practicable, that the risk from exposure to asbestos is kept to a minimum by:

- Arranging for competent persons to undertake surveys of its premises in line with HSE guidance document HSG 264, using 'Management Surveys' unless refurbishment is being undertaken, in which case, a 'Refurbishment Survey' shall be conducted.
- Ensuring that all surveys are recorded and the findings readily available to those who may be at risk of exposure.
- Ensuring the asbestos register is kept up to date
- Arranging for competent persons to deal with any damaged or friable ACMs by removal and replacement with a non ACM based product, or encapsulation; whichever method presents the least risk of asbestos fibre release. Conducting planned audits on these activities to ensure compliance.

- Defining and communicating work with ACM's which are 'Notifiable' to the HSE and those which are 'licensable' and 'non licensable' throughout the business to ensure compliance.
- Ensuring that where ACMs are found to be in sound condition and not subject to damage, they are left undisturbed until they are removed as part of a refurbishment or other planned removal project. In all cases their condition shall be periodically monitored.
- Ensuring warning labels are used to identify ACMs found within buildings, particularly on pipe lagging and in Plant/Boiler rooms.
- Ensuring, where work with ACMs must be undertaken, that safe working practices are adopted.
- Periodically reviewing its asbestos management plan to ensure that it is adequate and continues to meet both legal requirements and the needs of the business.

Signed:	
Designation:	
Date:	

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The Asbestos Management Plan

The Asbestos Management Plan consists of the following elements and Appendices:

- The details of how the location and condition of known or presumed asbestos containing materials are recorded (see Appendix 8)
- Priority assessments, including priority assessment scores if algorithms have been used (see Appendix 9)
- Decisions about management options (see Appendixes 10 & 11)
- Monitoring arrangements (see Section 5 and Appendix 13)
- Personnel and their responsibilities (see Appendices 1 and 2)
- Training arrangements for employees and contractors (see Appendix 12)
- Who will oversee the quality of entries made on the management plan (see Appendices 1 & 2)
- Procedure for review of plan, including timetable (see Section 3 and Appendix 15)
- The asbestos Action Plan –a practical and achievable timetable of prioritising management/remedial actions (see Section 2 and Appendix 15)

The Asbestos Management plan and Asbestos Action Plan are reviewed annually.

Copies of the Asbestos Management Plan have been issued to the following persons and to the Contractors/Consultants listed in Appendix 16:

Director
Housing Manager
Maintenance Manager
Maintenance Officer
Health & Safety Administrator

The Asbestos Management Plan will be available on the company Internet site and on the company common share drive.

The Asbestos Action Plan

The priorities and the timetable for action have been formulated following careful risk assessment, taking into account the principals given in HSE publication INDG 103 "5 Steps to Risk Assessment" and HSG227 "A Comprehensive Guide to Managing Asbestos in Premises" and L143 "Managing and Working with Asbestos" (Control of Asbestos Regulations 2012).

Material, priority and total risk assessment scores are formulated during and as a result of the asbestos survey programme. The information is stored in hard copy report format and electronically in pdf format and is the responsibility of the Asbestos Co-ordinator.

The Asbestos Action Plan is reviewed yearly or as follows:

- 1. Whenever the use of an area changes
- 2. Whenever circumstances change
- 3. Should there be reasons to suspect the plan is no longer valid
- 4. In the event of an incident such as accidental damage

The Asbestos Action Plan is given at Appendix 15.

<u>Amendments to the Asbestos Register, Asbestos Management Plan and Asbestos Action</u> Plan

It is vital that the Asbestos Register, Asbestos Management Plan and Asbestos Action Plan are amended to reflect the existing situation and conditions. It is the responsibility of the Asbestos Coordinator to ensure that such amendments are completed and accurate.

The Asbestos Register and Asbestos Management Plan are only to be amended by or with the authority of the Asbestos Co-ordinator.

A review of the Management Plan is to be undertaken by the Asbestos Co-ordinator and external Asbestos Consultant every 12 months unless:

- There are changes in site conditions (e.g. changes in personnel or use of building)
- There are changes in the condition of asbestos containing materials

In such cases, the Plan will be amended and re-issued immediately.

Important areas for assessment review are:

- Confirmation that removal, repair and encapsulation works have been completed satisfactorily
- Checking that periodic monitoring of the condition of remaining asbestos containing materials is effective
- · Confirmation that records are being maintained and kept up to date
- Investigation of incidents/accidents, development of future preventative measures
- Checking that the plan is communicated to all concerned and included in tenders and contracts from external companies
- Confirmation that emergency procedures are in place and that the emergency services are aware of the presence of asbestos on the premises

Condition Inspections

It is imperative that asbestos containing materials that are not removed are maintained in a good and sound condition.

Retained asbestos containing materials are, therefore, to be re-inspected on a regular basis with any necessary repair undertaken promptly. The results of the re-inspections are to be recorded and the database updated accordingly.

The frequency of such condition inspections is based upon the original assessments carried out at the time of the Asbestos Management surveys and the foreseeable risk of deterioration addressing the following risk factors:

- Type of asbestos containing material
- Building use/frequency of use
- Impact/abrasion damage risk
- Vandalism risk
- Vermin damage risk
- Water ingress risk
- Fire damage

Condition inspections are to be co-ordinated by the Asbestos Co-ordinator in consultation with the independent Asbestos Consultant.

Frequencies of inspection are given at Appendix 13.

Procedure for Works on Asbestos Containing Materials

Only UKAS approved Contractors will be used for work on any asbestos materials

The list of Contractors is given in Appendix 16.

All work shall be undertaken strictly in accordance with the Control of Asbestos Regulations 2012, Health and Safety Commission Approved Codes of Practice and HSE Guidance. See sections 6, 7, 8, 9, 10 and Appendix 10.

Determining whether an asbestos license is required for works is attached at Appendix 11.

In all instances where work on a material of a known asbestos composition is to take place, the removal specification or method statement provided by the contractor is to be strictly adhered to.

An independent Asbestos Consultant, along with the Asbestos Co-ordinator(s), co-ordinates the safe system of work, method statement and controls.

Control of Contractors and In-house Maintenance Tasks

The following procedure is to be adopted before **any** work takes place on the premises:

- 1. The asbestos register is made available to all parties by the Asbestos Co-ordinator or his Deputy. The register is to be consulted prior to any work being carried out by all contractors.
- 2. In the event that ACM material is suspected or identified, work is to stop and the area isolated. The Asbestos Co-ordinator is to be notified immediately; the responsible person will then be notified as well as the Duty Holder.
- 3. Work shall only be undertaken by named nominated Contractors or a Contractor named on the list of licensed contractors who has access to the asbestos register and is fully acquainted with the procedures contained in the Asbestos Management Plan.
- 4. A formal written safe system of work has been prepared and approved by the Asbestos Co-ordinator and verified by the independent Asbestos Consultant where necessary.
- 5. The Asbestos Co-ordinator will arrange for a specialist contractor to carry out the work or removal, repair and/or disposal of the ACM once instructed by the Duty Holder.
- 6. Reference should be made to the procedures contained within the Maintenance Manual.

Work On/Adjacent to Materials of Unknown Composition

Work on asbestos cement, miscellaneous materials and work of "short duration" on coatings, insulation and asbestos insulating board may be undertaken by non-HSE licensed contractors, subject to compliance with the Control of Asbestos Regulations 2012 and relevant HSE/HSC guidance. However, it is Williamsburgh Housing Association's policy that any work with all asbestos containing materials is undertaken by HSE Licensed Contractors, even when this is not a statutory requirement.

Where work is to take place on:

- 1. Materials of unknown composition that, in the opinion of the Asbestos Co-ordinator, have the potential to contain asbestos fibres.
- 2. Work adjacent to such materials that may involve disturbance or damage to such materials.

Procedure to be adopted:

- 1. In the first instance the Asbestos Co-ordinator is to check the Asbestos Register to confirm if the material to be worked on contains asbestos or not.
- 2. If the material can be confirmed as non-asbestos either by reviewing the Asbestos Register or by inspection & sampling be a competent person then the works can proceed.
- 3. If the Asbestos Register does not identify the material and the competent person cannot confirm the material is non-asbestos then all such materials will be sampled and analysed for the presence of asbestos fibres before work is allowed to commence. If asbestos is found to be present, all relevant provisions of the Control of Asbestos Regulations 2012 and relevant HSE/HSC guidance shall be complied with. See Appendices 10 & 11 for management options.

<u>Procedure for works with asbestos containing materials where an HSE Asbestos Licence</u> is not required

Work on asbestos cement, miscellaneous materials and work of "short duration" on coatings, insulation and asbestos insulating board may be undertaken by non-HSE licensed contractors, subject to compliance with the Control of Asbestos Regulations 2012 and relevant HSE/HSC guidance. However, it is Williamsburgh Housing Association's policy that any work with all asbestos containing materials is undertaken by HSE Licensed Contractors, even when this is not a statutory requirement.

If work is required to be carried out due to an emergency situation or for operational reasons then the following will apply:

Where work with asbestos containing materials is deemed to be sporadic low intensity and of short duration and as such a Licensed Asbestos Removal Contractor is not required, it is important to remember that the Control of Asbestos Regulations will continue to apply, as will waste disposal requirements. Exposure to any employee requires to be below the control limit of 0.1 f/ml (see Appendix 7).

Guidance on appropriate precautions and methods of work is given in HSE publication – "Asbestos Essentials, Task Manual HSG 210". (Note: this manual is available in an updated format electronically from the HSE website -http://www.hse.gov.uk/asbestos/essentials/index.htm.)

The requirements of this publication are to be regarded as the <u>minimum</u> standard acceptable to Williamsburgh Housing Association.

The publication gives guidance on the following Tasks:-

Work with Asbestos Cement (AC) (non-licensed)

- A9. Drilling holes in asbestos cement and other highly bonded materials
- A10. Cleaning debris from guttering on an asbestos cement roof
- A11. Removing asbestos cement debris
- A12. Cleaning weathered asbestos cement roofing and cladding
- A13 Repairing damaged asbestos cement
- A14. Removing asbestos cement sheets, gutters etc.
- A15. Removing asbestos cement or reinforced plastic product e.g. tank, duct, water cistern
- A16. Painting asbestos cement sheets
- A35. Replacing an asbestos cement flue pipe or duct
- A36. Removing an asbestos cement panel outside, beside or beneath

Working with textured coatings (TC) containing asbestos (non-licensed)

- A26. Drilling and boring through textured coatings
- A27. Inserting and removing screws through textured coatings
- A28. Removing textured coating from a small area, e.g. 1m2
- A29. Clearing up of debris following collapse of a ceiling or wall covered with textured coating

Strictly controlled minor work on Asbestos Insulating Board (AIB)

- A1. Drilling holes in asbestos insulating board
- A2. Removal of a single (screwed in) asbestos insulating board ceiling tile
- A3. Removal of a door with asbestos insulating board fire-proofing
- A4. Removal of a single screwed-in asbestos insulating board panel under 1m² in area, fixed in with nails or screws
- A5. Cleaning light fittings attached to asbestos insulating board
- A6. Repairing minor damage to asbestos insulating board
- A7. Painting undamaged asbestos insulating board

Safe work with undamaged asbestos materials

- A8. Enclosing undamaged asbestos materials to prevent impact damage
- A20. Laying cables in areas containing undamaged asbestos materials
- A34. Removing pins and nails from asbestos insulating board panel

Removal and replacement of other asbestos containing materials

- A17. Removing asbestos paper linings
- A18. Removing asbestos friction linings
- A19. Removing an asbestos fire blanket
- A21. Removing asbestos containing bituminous products
- A22. Removing metal cladding lined with asbestos containing bitumen
- A23. Removing asbestos containing floor tiles and mastic
- A24. Removing flexible asbestos textile duct connectors (gaiters)
- A25. Removing compressed asbestos fibre gaskets and asbestos rope seals
- A30. Removing an asbestos containing arc shield from electrical switchgear
- A31. Removing a single asbestos containing gas or electric heater
- A32. Replacing an asbestos containing part in a "period" domestic appliance
- A33. Replacing an asbestos containing fuse box or single fuse assembly
- A37. Removing asbestos containing mastic, sealant, beading, filler, putty or fixing

Fly-tipped waste

A38. Making safe and collecting fly-tipped waste

Equipment and method sheets

- EM1. What to do if you uncover or damage materials that contain asbestos
- EM2. Training
- EM3. Building and dismantling a mini-enclosures
- EM4 Using a class-H vacuum cleaner for asbestos
- EM5. Wetting asbestos materials
- EM6. Personal Protective Equipment (PPE)
- EM7. Using damp rags to clean surfaces of minor asbestos contamination
- EM8. Personal decontamination
- EM9. Disposal of asbestos waste
- EM10. Statement of cleanliness after textured coating removal

Procedure when asbestos is accidentally disturbed or damaged during work

Any accidental damage to, or disturbance of, asbestos containing materials or suspected, asbestos containing materials, **HOWEVER MINOR**, must be reported to the Asbestos Co-ordinator immediately.

In all circumstances the work must be immediately suspended and all persons removed from the vicinity of the damage.

The Asbestos Co-ordinator will then decide upon appropriate action, after consulting with Williamsburgh Housing Association's appointed asbestos consultants. Reference shall also be made to procedure EM1 given in "Asbestos Essentials, Task Manual".

Where persons have or may have been exposed to airborne asbestos fibre at or above the "control limit", they shall be informed of the event in writing and a record made of the incident upon their personnel record. Further guidance regarding advice to exposed employees, their supervisors and medical practitioners is given at Appendix 14.

Supervision of work on asbestos containing materials

Work on asbestos containing materials shall be adequately supervised.

Reference should be made to sections 5, 7, 8 and Appendix 11.

Where larger scale works are planned and undertaken, Williamsburgh Housing Association's independent Asbestos Consultants, will be employed to act in a quality assurance capacity for the project. In this context larger scale works are defined as works of significant size and/or complexity which are being removed under HSE licensed conditions.

For works that do not fall into the above category and are not carried out under HSE licensed conditions, supervision would be for asbestos removal by the Licensed contractor's supervisor and for all other aspects by normal arrangements (Main Contractor, Clerk of Works etc).

In all cases the Main and/or Licensed Asbestos Contractor shall submit the following documents to the Asbestos Co-ordinator and/or Williamsburgh Housing Association's independent Asbestos Consultant before works are approved and allowed to commence.

- Assessment of exposure
- Method Statement / risk assessment
- Current HSE licence (if applicable)
- Specification of plant and equipment to be used
- Details of waste disposal arrangements
- Training/medical records of operatives
- Current certificate of insurance

The HSE must be notified using ASB5 documentation of all works requiring a license for removal and supervision with 14 days notification.

Air quality monitoring will be undertaken throughout asbestos removal works in accordance with the Control of Asbestos Regulations 2006, the Analysts' Guide (HSG 248) and relevant HSE Guidance Notes and be carried out by an Asbestos Consultant independent of the Main Contractor or the Licensed Asbestos Contractor.

APPENDICES

Personnel and Responsibilities

1.1 Williamsburgh Housing Association's Health and Safety Policy, the Asbestos Policy and the persons named in the Health and Safety policy statement have overall responsibility for ensuring the health and safety of employees and others using the association's properties including the protection of those persons from asbestos.

1.2 The Asbestos Co-ordinator

Is to be given appropriate training, authority and resources to enable him to fulfil this role and reports to the Head of Service. He will be responsible for the development and implementation of the following:

- The Asbestos Policy Statement
- Organisation and arrangements to put the Asbestos Management Plan into effect
- Maintenance and amendment of the Asbestos Register
- Annual and periodic review of the operation of the Asbestos Management Plan
- Vetting or appointment of licensed and non-licensed asbestos contractors to undertake work on asbestos containing materials
- Ensuring supervision of asbestos removal works
- Maintenance of records associated with work with asbestos
- Training and staff liaison regarding asbestos containing materials

1.3 Deputy Asbestos Co-ordinator

The Deputy Asbestos Co-ordinator reports to the Asbestos Co-ordinator and adopts the role of the Asbestos Co-ordinator in his absence.

1.4 Independent Asbestos Consultants

The Independent Asbestos Consultants are (insert company name) who are available to provide technical and legal advice to the Asbestos Co-ordinator and his Deputy as and when required. The independent Consultant also supervises/monitors asbestos works as and when required to do so, including sampling, analysis and the issue of relevant certificates/documentation. The independent Consultant advises upon the competence of licensed and non-licensed Contractors during the selection of Contractors.

Personnel and Responsibilities

Duty Holder WILLIAMSBURGH HOUSING **ASSOCIATION** Responsible Person(s) WHA Health & Safety Committee (i.e. those with a management responsibility for Health & Safety, repair & maintenance and access) Consultant **Asbestos Co-ordinator**

SOCOTEC Asbestos Ltd 2-8 Langlands Place **Kelvin South Business Park East Kilbride** Glasgow **G75 0YP**

Maintenance Manager WILLIAMSBURGH HOUSING **ASSOCIATION Ralston House** Cyril Street **Paisley PA1 1RW**

Deputy Asbestos Co-ordinator

Maintenance Officer WILLIAMSBURGH HOUSING ASSOCIATION Ralston House Cyril Street Paisley PA1 1RW

Contact Telephone Numbers

2.1 <u>Asbestos Co-ordinator</u>

Name:

Designation: Maintenance Manager

Office address: Williamsburgh Housing Association, Ralston House, Cyril Street, Paisley

PA1 1RW

Telephone: 0141-887-8613

Fax: 0141-848-6624

e-mail:

2.2 <u>Deputy Asbestos Co-ordinator</u>

Name:

Designation: Maintenance Officer

Office address: Williamsburgh Housing Association, 1st Floor, Ralston House, Cyril Street,

Paisley PA1 1RW

Telephone: 0141-887-8613

Fax: 0141-848-6624

e-mail:

Asbestos Limited

Designation: Regional Manager

Office address: 2-8 Langlands Place

Telephone: 01355 248 661

Mobile:

e-mail:

What is Asbestos?

- 3.1 Asbestos is a term used for the fibrous forms of several naturally occurring silicate minerals. The three main types of asbestos which have been commercially used are:
 - Crocidolite (often referred to as 'blue asbestos');
 - Amosite (often referred to as 'brown asbestos');
 - Chrysotile (often referred to as 'white asbestos').
- 3.2 Other forms of asbestos are also found, but are much less common fibrous Actinolite, fibrous Anthophyllite and fibrous Tremolite. Analysis may detect the presence of these materials, but usually in combination with the more common types.
- 3.3 Chrysotile is referred to as a serpentine mineral and the other five of the fibre types are referred to as amphibole minerals. It is important to remember that the colours are not a reliable indictor of the type of asbestos and laboratory analysis is always required to both confirm the presence of and type of asbestos within a material.
- 3.4 From antiquity through time asbestos minerals have been incorporated into various products because of the technical properties of these minerals, namely: rot proof, good insulator, good acid resistance, good fire resistance, good electrical insulator. Some of the minerals can also be woven and at certain points in time asbestos was a very cheap commodity and so was used to bulk-out products.
- 3.5 In all it is reckoned that there are over 3000 products that contain asbestos minerals. Appendix 6 gives details of the most common asbestos containing products.

4.1 Asbestos Related Diseases

- **Asbestos Warts** caused when the sharp fibres lodge in the skin and are overgrown, causing callous-like growth which are benign;
- Pleural Plaques discrete fibrous or partially calcified thickened areas when can be seen
 on X-rays of individuals exposed to asbestos. They do not become malignant nor normally
 cause any lung impairment;
- **Diffuse Pleural Thickening** similar to above and can sometimes be associated with asbestosis. Usually no symptoms shown, but if extensive can cause lung impairment;
- **Asbestosis** irreversible fibrosis or scarring of the lungs in which the tissue becomes less elastic, making breathing progressively more difficult. This is an industrial disease arising from high levels of exposure to asbestos fibres, including blue, brown and white. There is no risk of asbestosis from normal levels of environmental exposure to asbestos;
- Lung Cancer an increased incidence of lung cancer has been found in people who work
 with asbestos and research suggests that both lung cancer and asbestosis do exhibit a dose
 response relationship. The three main types of asbestos can all cause lung cancer, but blue
 and brown are more dangerous than white. It is also important to remember that people
 who are exposed to asbestos fibres and who smoke are at an even greater risk of
 developing lung cancer than those who do not smoke;
- **Mesothelioma** a cancer of the inner lining of the chest or the abdominal wall. This cancer is generally shown to be due to exposure to asbestos in the workplace or to living in the same house as someone who works/worked with asbestos. The risk of Mesothelioma is not influenced by smoking. Although a threshold has not been established, evidence shows that low/short exposures to asbestos fibres, primarily from blue and brown asbestos, have resulted in this disease.

Statutory Requirements

5.1 What does the law require?

- 5.11 There are many health and safety regulations that directly or indirectly place duties on employers in relation to asbestos. The key facts of these regulations are listed below. It is important that you are familiar with these. If you have followed the steps detailed in this guidance in managing asbestos containing materials on your premises, we will have taken major steps towards preventing or minimising exposure to asbestos. We will also have taken major steps towards complying with our duties under these Regulations.
 - The Health and Safety at Work etc Act 1974 (HSWA) requires an employer to conduct their work in such a way that their employees will not be exposed to health and safety risks, and to provide information to other persons about their workplace which might affect their health and safety. Section 3 of HSWA contains general duties on employers and the self-employed in respect of people other than their own employees. Section 4 contains general duties for anyone who has control, to any extent, over a workplace.
 - The Control of Asbestos Regulations (CAR) 2012 requires an employer to prevent the exposure of his employees to asbestos, or where this is not practicable, to reduce the exposure to the lowest possible level. The CAR includes a regulation placing a duty on employers in occupation of premises to manage the risk from asbestos in those premises. There is a duty on anyone else that has maintenance and repair responsibilities for the premises, because of a contract or tenancy, to manage those risks. The duty is supported by:-
 - One Approved Code of Practice (L143)
 - HSE Guidance Note HSG 227 A Comprehensive Guide to Managing Asbestos in Premises
 - HSE publication MDHS 264 The Survey Guide
 - HSE Guidance Note HSG248 The Analysts Guide
 - The Management of Health and Safety at Work Regulations 1999 require employers and self-employed people to make an assessment of the risks to the health and safety of themselves, employees and persons not in their employment arising out of or in connection with the conduct of their business and to make appropriate arrangements for protecting those people's health and safety.
 - There are duties to maintain workplace buildings/premises to protect occupants and workers under the Workplace (Health, Safety and Welfare) Regulations 1992.

 The Construction (Design and Management) Regulations 2015 require the client to pass on information about the state or condition of any premises (including the presence of hazardous materials, such as asbestos) to the CDM co-ordinator before any work commences and to ensure that the health and safety file is available for inspection by any person who needs the information.

Specific legal duties under Regulation 4 of the CAR 2012

- 5.12 The broad requirements on employers and others are to:
 - Take reasonable steps to find materials likely to contain asbestos;
 - Presume materials to contain asbestos, unless there is strong evidence to suppose they do not;
 - Make a written record of the location and the condition of the asbestos containing materials and presumed asbestos containing materials and keep it up to date;
 - Provide information on location and condition of asbestos containing materials to people who
 may disturb them and those who occupy the premises;
 - Monitor the condition of asbestos containing materials and presumed asbestos containing materials;
 - Assess the risk of the likelihood of anyone being exposed to asbestos fibres from these materials; and
 - Prepare a plan to manage that risk and put into effect to ensure that
 - 1. Information on location and condition of asbestos containing materials is given to people who may disturb them during work activities;
 - 2. Any material known or presumed to contain asbestos is kept in a good state of repair; and
 - 3. Any material that contains or is presumed to contain asbestos is, if necessary, because of the likelihood of disturbance and its location or condition, repaired or removed.

5.2 The Control of Asbestos Regulations 2012

What has changed?

- From 6 April 2012, some non-licensed work needs to be <u>notified</u> to the relevant enforcing authority.
- From 6 April 2012, brief written records should be kept of non-licensed work, which has to be
 notified e.g. copy of the notification with a list of workers on the job, plus the level of likely
 exposure of those workers to asbestos. This does not require air monitoring on every job, if
 an estimate of degree of exposure can be made based on experience of similar past tasks or
 published guidance.

- By April 2015, all workers/self-employed doing notifiable non-licensed work with asbestos
 must be under health surveillance by a Doctor. Workers who are already under health
 surveillance for licensed work need not have another medical examination for non-licensed
 work. BUT medicals for notifiable non-licensed work are not acceptable for those doing
 licensed work.
- Some modernisation of language and changes to reflect other legislation, eg the prohibition section has been removed, as the prohibition of supply and use of asbestos is now covered by REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations 2006).

References

Health and Safety at Work etc. Act 1974 The Stationery Office 1974 ISBN 0 10 543774 3.

HSG264 - Asbestos: The Survey Guide 2nd Ed. 2012

L143 ACoP - Managing and Working with Asbestos (Control of Asbestos Regulations 2012) 2nd Edition 2013

Asbestos: The analysts' guide for sampling, analysis and clearance procedures, HSG248 HSE Books 2006

Asbestos: The licensed contractors' guide, HSG247 HSE Books 2006 ISBN 0 7176 2874 4.

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

HSE Books 2008 ISBN 978 071 766 2630.

A Comprehensive Guide to Managing Asbestos in Premises HSG 227. HSE books ISB 07176 23815.

Construction (Design and Management) Regulations 2015 SI 2015/51 The Stationery Office ISBN 978 0110757896.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) INDG453 (rev1) HSE Publications

Special Waste Regulations 1996 (and their amendments) SI1996/972

Health and Safety (Consultation with Employees) Regulations 1996 SI 1996/1513 The Stationery Office 1996 ISBN 0 11 054839 6.

Workplace (Health, Safety and Welfare) Regulations 1992 SI 1992/3004 The Stationery Office 1992 ISBN 0 11 025804 5.

5.3 Organisations Providing Advice

HSE Info Line

Tel: 08701 545500

Web Site: www.hse.gov.uk/asbestos

E-mail: asbestos.campaign@hse.gsi.gov.uk

Asbestos Removal Contractors Association (ARCA)

ARCA House 237 Branston Road Burton upon Trent Staffordshire DE14 3BT

Tel: 01283 531126

Asbestos Testing and Consultancy (ATAC)

ARCA House 237 Branston Road Burton upon Trent Staffordshire DE14 3BT

Tel: 01283 531126

Asbestos Control and Abatement Division (ACAD)

Tica House Allington Way Yarm Road Business Park Darlington Co Durham DL1 4QB

Tel: 01325 466704

British Occupational Hygiene Society (BOHS)

5/6 Melbourne Business Court Millennium Way Pride Park Derby DE24 8LZ

Tel: 01332 298101

United Kingdom Accreditation Service (UKAS)

UKAS 2 Pine Trees Chertsey Lane Staines-upon-Thames TW18 3HR

Appendix 6 Asbestos Products Table

Asbestos product	Location/use	Asbestos and type/date	Ease of fibre release and product names
		last used	product names
Loose insulation			
Bulk loose fill, bulk fibre-filled mattresses, quilts and blankets. Also 'jiffy bag' type products used for sound insulation.	Bulk loose fill insulation is now rarely found but may be encountered unexpectedly, eg DIY loft insulation and fire-stop packing around cables between floors. Mattresses and quilts used for thermal insulation of industrial boilers were filled with loose asbestos. Paper bags/sacks were also loose-filled and used for sound insulation under floors and in walls.	Usually pure asbestos except for lining/bag. Mattresses and quilts usually contain crocidolite or chrysotile. Acoustic insulation may contain crocidolite or chrysotile.	Loose asbestos may readily become airborne if disturbed. If dry, these materials can give rise to high exposures. Covers may deteriorate or be easily damaged by repair work or accidental contact.
Sprayed coatings			
Dry applied, wet applied and trowelled finish.	Thermal and anti-condensation insulation on underside of roofs and sometimes sides of industrial buildings and warehouses. Acoustic insulation in theatres, halls etc. Fire protection on steel and reinforced concrete beams/columns and on underside of floors. Overspray of target areas is common.	Sprayed coatings usually contain 55%–85% asbestos with a Portland cement binder. Crocidolite was the major type until 1962. Mixture of types including crocidolite until mid–1971. Asbestos spray applications were used up to 1974.	The surface hardness, texture and ease of fibre release will vary significantly depending on a number of factors. Sprays have a high potential for fibre release if unsealed, particularly if knocked or the surface is abraded or delaminates from the underlying surface. Dust released may then accumulate on false ceilings, wiring and ventilation systems.
			'Limpet' (also used for non-
			asbestos sprays).
Thermal insulation			
Hand-applied thermal lagging, pipe and boiler lagging, pre- formed pipe sections, slabs, blocks. Also tape, rope, corrugated paper, quilts, felts, and blankets.	Thermal insulation of pipes, boilers, pressure vessels, calorifiers etc.	All types of asbestos have been used. Crocidolite used in lagging until 1970. Amosite was phased out by the manufacturers during the 1970s. Content varies 6-85%. Various ad hoc mixtures were hand-applied on joints and bends and pipe runs. Preformed sections were widely	The ease of fibre release often depends on the type of lagging used and the surface treatment. Often it will be encapsulated with calico and painted (eg PVA, EVA, latex, bitumen or proprietary polymer emulsions or PVC, neoprene solutions), eg 'Decadex' finish is a proprietary polymer
		used, eg '85% magnesia' contained 15% ▶	

Asbestos product	Location/use	Asbestos and type/date	Ease of fibre release and	
		last used	product names	
Thermal insulation (continued)			
		amosite, 'Caposil' calcium silicate slabs and blocks contained 8–30% amosite while 'Caposite' sections contained ~ 85% amosite. Blankets, felts, papers, tapes and ropes were usually ~100% chrysotile.	emulsion. A harder chemical-/ weatherresistant finish is known as 'Bulldog'.	
Asbestos boards				
'Millboard'.	'Millboard' was used for general heat insulation and fire protection. Also used for insulation of electrical equipment and plant.	Crocidolite was used in some millboard manufacture between 1896 and 1965; usually chrysotile. Millboards may contain 37–97% asbestos, with a matrix of clay and starch.	Asbestos 'Millboard' has a high asbestos content and low density so is quite easy to break and the surface is subject to abrasion and wear.	
Insulating board.	Used for fire protection, thermal and acoustic insulation, resistance to moisture movement and general building board. Found in service ducts, firebreaks, infill panels, partitions and ceilings (including ceiling tiles), roof underlay, wall linings, soffits, external canopies and porch linings.	Crocidolite used for some boards up to 1965, amosite up to 1980, when manufacture ceased. Usually 15–25% amosite or a mixture of amosite and chrysotile in calcium silicate. Older boards and some marine boards contain up to 40% asbestos.	AIB can be readily broken, giving significant fibre release. Also significant surface release is possible by abrasion, but surface is usually painted or plastered. Sawing and drilling will also give significant releases. 'Asbestolux', 'Turnasbestos', 'LDR', 'asbestos wallboard', 'insulation board'. Marine boards known as 'Marinite' or 'Shipboard'.	
Insulating board in cores and linings of composite products.	Found in fire doors, cladding infill panels, domestic boiler casings, partition and ceiling panels, oven linings and suspended floor systems. Used as thermal insulation and sometimes as acoustic attenuators.	Crocidolite used for some boards up to 1965, amosite up to 1980, when manufacture ceased. 16–40% amosite or a mixture of amosite and chrysotile.	Can be broken by impact; significant surface release possible by abrasion, but usually painted or plastered. Sawing and drilling will also give significant releases. 'Asbestolux'. Caposil.	
Paper, felt and cards	Paper, felt and cardboard			
	Used for electrical/heat insulation of electrical equipment. Also used in some air-conditioning systems as insulation and acoustic lining. Asbestos paper has also been used to reinforce bitumen and other products and as a facing/lining to flooring products,	Asbestos paper can contain ~100% chrysotile asbestos but may be incorporated as a lining, facing or reinforcement for other products, eg roofing felt and damp-proof courses, steel composite wall cladding and roofing (see asbestos	Paper materials, if not encapsulated/combined within vinyl, bitumen, or bonded in some way, can easily be damaged and release fibres when subject to abrasion or wear (eg worn flooring surface with paper backing). Asbestos paper, asbestos felt, 'Novilon'	

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Asbestos product	Location/use	Asbestos and type/date last used	Ease of fibre release and product names
Paper, felt and card	board (continued)		
	combustible boards, flame-resistant laminate. Corrugated cardboard has been used for duct and pipe insulation.	bitumen products below), vinyl flooring. Asbestos paper is also sometimes found under MMMF insulation on steam pipes.	flooring, Durasteel laminates, vinyl asbestos tile, roofing felt and damp- proof course etc. Pax felt'. 'Viceroy' (foil-coated paper). 'Serval'.
Textiles			
Ropes and yarns.	Used as lagging on pipes (see above), jointing and packing materials and as heat/fire-resistant boiler, oven and flue sealing. Caulking in brickwork. Plaited asbestos tubing in electric cable.	Crocidolite and chrysotile were widely used due to length and flexibility of fibres. Other types of asbestos have occasionally been used in the past. Chrysotile alone since at least 1970. Asbestos content approaching 100% unless combined with other fibres.	Weaving reduces fibre release from products, but abrading or cutting the materials will release fibres, likely to degrade if exposed, becoming more friable with age. If used with caulking, fibres will be encapsulated and less likely to be released.
Cloth.	Thermal insulation and lagging (see above), including fire-resisting blankets, mattresses, protective curtains, gloves aprons and overalls. Curtains, gloves etc were sometimes aluminised to reflect heat.	All types of asbestos were used. Since the mid-1960s the vast majority have been chrysotile. Asbestos content approaching 100%.	Fibres may be released if material is abraded.
Gaskets and washers.	Used widely in domestic and industrial plant and pipe systems ranging from hot water boilers to industrial power and chemical plant.	Variable but usually around 90% asbestos, crocidolite used for acid resistance and chrysotile for chlor-alkali. Some gasket materials continued to be used after asbestos prohibition in 1999 (through exemption).	May be dry and damage easily when removed. Mainly a problem for maintenance workers. 'Klingerit', 'Lion jointing', 'Permanite', 'CAF' – compressed asbestos fibre or 'It' in German gaskets.
Strings.	Used for sealing hot water radiators.	Strings have asbestos content approaching 100%.	
Friction products			
Resin-based materials.	Transport, machinery and lifts, used for brakes and clutch plates.	30-70% chrysotile asbestos bound in phenolic resins. Used up to November 1999.	Normal handling will produce low emissions. Minor emissions when braking. Dust may build up with friction debris. Grinding brake and clutch components to fit and brushing or blowing clean can produce significant peak airborne levels.
Drive belts/conveyor belts.	Engines, conveyors.	Chrysotile textiles encapsulated in rubber.	Low friability, except when worn to expose textile.

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Asbestos product	Location/use	Asbestos and type/date last used	Ease of fibre release and product names			
Cement products	Cement products					
Profiled sheets.	Roofing, wall cladding. Permanent shuttering, cooling tower elements.	10–15% asbestos (some flexible sheets contain a proportion of cellulose). Crocidolite (1950–1969) and amosite (1945–1980) have been used in the manufacture of asbestos cement, although chrysotile (used until November 1999) is by far the most common type found.	Likely to release increasing levels of fibres if abraded, hand sawn or worked on with power tools. Exposed surfaces and acid conditions will remove cement matrix and concentrate unbound fibres on surface and sheet laps. Cleaning asbestos-containing roofs may also release fibres.			
			Asbestos cement, Trafford tile, 'Bigsix', 'Doublesix', 'Supersix', 'Twin twelve', 'Combined sheet', 'Glen six', '3' and 6' corrugated', 'Fort', 'Monad', 'Troughsec', 'Major tile and Canada tile', 'Panel sheet', 'Cavity decking'.			
Semi-compressed flat sheet and partition board.	Partitioning in farm buildings and infill panels for housing, shuttering in industrial buildings, decorative panels for facings, bath panels, soffits, linings to walls and ceilings, portable buildings, propagation beds in horticulture, domestic structural uses, fire surrounds, composite panels for fire protection, weather boarding.	As for profiled sheets. Also 10–25% chrysotile and some amosite for asbestos wood used for fire doors etc. Composite panels contained ~ 4% chrysotile or crocidolite.	Release as for profiled sheets. Flat building sheets, partition board, 'Poilite'.			
Fully compressed flat sheet used for tiles, slates, board.	As above, but where stronger materials are required, and as slates, board cladding, decking and roof slates (eg roller-skating rinks, laboratory worktops). Higher asbestos content sheets produced for industrial applications as a high grade arc and heat-resistant material.	As for profiled sheets. Up to 50% chrysotile.	Release as for profiled sheets. Asbestos-containing roofing slate (eg 'Eternit', 'Turners', 'Speakers'), Everite', 'Turnall', 'Diamond AC', 'JM slate', 'Glasal AC', 'Emalie, Eflex', 'Colourglaze', 'Thrutone', 'Weatherall', 'Sindanyo'.			
Pre-formed moulded products and extruded products.	Cable troughs and conduits. Cisterns and tanks. Drains and sewer pressure pipes. Fencing. Flue pipes. Rainwater goods. Roofing components (fascias, soffits etc). Ventilators and ducts. Weather boarding. Window sills and boxes, bath panels, draining boards, extraction hoods, copings, promenade tiles etc.	As for profiled sheets.	Release as for profiled sheets. 'Everite', 'Turnall', 'Promenade tiles'.			
Other encapsulated	Other encapsulated materials					
Textured coatings.	Decorative/flexible coatings on walls and ceilings.	3-5% chrysotile asbestos. Chrysotile added up to 1984 but old stock may have been used for several more years.	Generally fibres are well contained in the matrix but may be released when old coating is sanded down or scraped off. 'Artex', Wondertex',			

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Asbestos product	Location/use	Asbestos and type/date	Ease of fibre release and		
Aspestos product	Location/use	last used	product names		
Other encapsulated	Other encapsulated materials (continued)				
		Non-asbestos versions were available from the mid-1970s.	'Suretex', "Newtex', 'Pebblecoat', 'Marblecoat'.		
Bitumen products.	Roofing felts and shingles, semi-rigid asbestos bitumen roofing. Gutter linings and flashings. Bitumen damp-proof courses (DPC). Asbestos/bitumen coatings on metals (eg car body underseals).	Chrysotile fibre or asbestos paper (approximately 100% asbestos) in bitumen matrix, usually 8% chrysotile. Used up to 1992.	Fibre release unlikely during normal use. Roofing felts, DPC and bitumen-based sealants must not be burnt after removal. See felts and papers.		
	Bitumen mastics and adhesives (used for floor tiles and wall coverings).	Adhesives may contain up to a few per cent chrysotile asbestos. Used up to 1992.			
Flooring.	Thermoplastic floor tiles.	Up to 25% asbestos.	Fibre release is unlikely to be a hazard under normal services		
	PVC vinyl floor tiles and unbacked PVC flooring.	Normally 7% chrysotile.	conditions. Fibre may be released when material is cut, and there may		
	Asbestos paper-backed PVC floors.	Paper backing approximately 100% chrysotile asbestos.	be substantial release where flooring residue,		
	Magnesium oxychloride flooring used in WCs, staircases and industrial flooring.	Used up to 1992. About 2% asbestos.	particularly paper backing, is power- sanded. 'Novilon', 'Serval asbestos'.		
			Very hard, fibre release unlikely.		
Reinforced PVC.	Panels and cladding.	1–10% chrysotile asbestos.	Fibre release is unlikely.		
Reinforced plastic and resin composites.	Used for toilet cisterns, seats, banisters, window seals, lab bench tops.	Plastics usually contain 1-10% chrysotile asbestos. Some amphiboles were used to give improved acid resistance, eg car batteries. Resins were reinforced with woven chrysotile cloth usually contain 20–50% asbestos.	Fibres unlikely to be released, limited emissions during cutting. 'Siluminite', 'Feroasbestos'.		

Control Limits

- 7.1 The Control of Asbestos Regulations 2012 introduce a single "Control Limit" of 0.1 fibres per cm³ of air for work with all types of asbestos measured over a 4 hour period and 0.6 fibres per cm³ over a 10 minute period
- 7.2 Control limits for all asbestos are as follows:

Asbestos type	4 hr control limit fibres per cm³ (or f/ml)	10 min control limit fibres per cm³ (or f/ml)
All Types	0.1	0.6

f/ml = fibres per millilitre of air

7.3 For comparison, the following fibre concentrations for work with asbestos containing materials have been measured. They illustrate the levels, which can be obtained if precautions are not taken – inclusion certainly does not indicate that a practice listed here is acceptable.

Activity	Typical exposures (f/ml)
Asbestos cement	
Machine cutting with:	
- jig saw	2-10
- circular saw	10-20
- abrasive disc	15-25
Hand sawing	Up to 1
Machine drilling	Up to 1
Removal of asbestos cement sheeting	Up to 0.5
Asbestos lagging, coating and AIB	
Drilling AIB overhead	5-10
Drilling vertical columns	2-5
Using jig saw on AIB	5-20
Hand sawing AIB	5-10
Repair/replace ceiling tiles	0.45

Survey types

The type of survey will vary during the lifespan of the premises and several may be needed over time.

A management survey will be required during the normal occupation and use of the building to ensure continued management of the ACMs in situ.

A refurbishment or demolition survey will be necessary when the building (or part of it) is to be upgraded, refurbished or demolished.

It is probable that at larger premises a mixture of survey types will be appropriate, e.g. a boiler house due for demolition will require a refurbishment/demolition survey, while offices at the same site would have a management survey.

In later years refurbishment surveys may be required in rooms or floors which are being upgraded. In sectors where there are large numbers of properties (e.g. domestic houses) or internal units (e.g. hotels), only particular rooms may be specified for upgrading, e.g. kitchens, bathrooms and bedrooms. Refurbishment surveys would only be necessary in these locations.

It is important that the client and the surveyor know exactly what type of survey is to be carried out and where, and what the specification will be. So, there should be a clear statement and record of the type of survey that is to be carried out, including the reasons for selecting that type of survey, and where it is to be carried out.

8.1 Management survey

A management survey is the standard survey. Its purpose is to locate, as far as reasonably practicable, the presence and extent of any suspect ACMs in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.

Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties, i.e. it will depend on factors such as the type of building, the nature of construction, accessibility etc. A management survey should include an assessment of the condition of the various ACMs and their ability to release fibres into the air if they are disturbed in some way. This 'material assessment' will give a good initial guide to the priority for managing ACMs as it will identify the materials which will most readily release airborne fibres if they are disturbed.

The survey will usually involve sampling and analysis to confirm the presence or absence of ACMs. However, a management survey can also involve presuming the presence or absence of asbestos. A management survey can be completed using a combination of sampling ACMs and presuming ACMs or, indeed, just presuming. Any materials presumed to contain asbestos must also have their condition assessed (i.e. a material assessment).

Management surveys can involve a combination of sampling to confirm asbestos is present or presuming asbestos to be present.

By presuming the presence of asbestos, the need for sampling and analysis can be deferred until a later time (e.g. before any work is carried out). However, this approach has implications for the management arrangements. The dutyholder bears potential additional costs of management for some non-ACMs.

Any work carried out on 'presumed' materials would need to involve appropriate contractors and work methods in compliance with CAR 2012 irrespective of whether the material was actually an ACM or not.

Alternatively, before any work starts, sampling and analysis can be undertaken to confirm or refute the presence of asbestos.

The results will determine the work methods and contractors to be used. The 'presumption' approach has several disadvantages: it is less rigorous, it can lead to constant obstructions and delays before work can start, and it is more difficult to control. 'Default' presumptions may also lead to unnecessary removal of non-ACMs and their disposal as asbestos waste. Default presumptions may be suitable in some instances, eg 'small' or simple premises, as part of a client's management arrangements.

Surveyors should always endeavour to positively identify ACMs. A sufficient number of samples should be taken to confirm the location and extent of ACMs. It is legitimate to reduce sample numbers where materials can be strongly presumed to be ACMs. However, the default presumption option should be avoided where possible, as it can make managing asbestos more difficult for the dutyholder.

Default presumption should only be used in circumstances where it is requested by the client and/or where access genuinely cannot be obtained.

When sampling is carried out as part of a management survey, samples from each type of suspect ACM should be collected and analysed. If the material sampled is found to contain asbestos, other similar materials used in the same way in the building can be strongly presumed to contain asbestos. Less homogeneous materials (eg different surfaces/coating, evidence of repair etc) will require a greater number of samples. The sample number should be sufficient to establish whether asbestos is present or not in the particular material. Sampling may take place simultaneously with the survey, or as in the case of some larger surveys, can be carried out later as a separate exercise.

All areas should be accessed and inspected as far as is reasonably practicable.

Areas should include underfloor coverings, above false ceilings, and inside risers, service ducts, lift shafts etc (see Box 4). Surveying may also involve some minor intrusive work, such as accessing behind fascia and panels and other surfaces or superficial materials. The extent of intrusion will depend on the degree

of disturbance that is or will be necessary for foreseeable maintenance and related activities, including the installation of new equipment/cabling. Surveyors should come prepared to access such areas (ie with the correct equipment etc).

Management surveys are only likely to involve the use of simple tools such as screwdrivers and chisels. Any areas not accessed must be presumed to contain asbestos. The areas not accessed and presumed to contain asbestos must be clearly stated in the survey report and will have to be managed on this basis ie maintenance or other disturbance work should not be carried out in these areas until further checks are made.

All ACMs should be identified as far as is reasonably practicable. The areas inspected should include: underfloor coverings, above false ceilings (ceiling voids), lofts, inside risers, service ducts and lift shafts, basements, cellars, underground rooms, undercrofts (this list is not exhaustive).

Management surveys should cover routine and simple maintenance work. However, it has to be recognised that where 'more extensive' maintenance or repair work is involved, there may not be sufficient information in the management survey and a localised refurbishment survey will be needed. A refurbishment survey will be required for all work which disturbs the fabric of the building in areas where the management survey has not been intrusive. The decision on the needfor a refurbishment survey should be made by the dutyholder (probably with help from others).

Refurbishment surveys will be required for all work which disturbs the fabric of the building in areas where the management survey has not been intrusive. The dutyholder will need to make the decision but probably with help from others.

8.2 Refurbishment and demolition surveys

A refurbishment or demolition survey is needed before any works of the associated type is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place or in the whole building if demolition is planned. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment or demolition survey may also be required in other circumstances, e.g. when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling. The survey report scope should clearly identify the purposes of the checks and clarify if it is for refurbishment **or** demolition works.

There is a specific requirement in CAR 2012 (regulation 7) for all ACMs to be removed as far as reasonably practicable before major refurbishment or final demolition. Removing ACMs is also appropriate in other smaller refurbishment situations which involve structural or layout changes to buildings (e.g. removal of partitions, walls, units etc). Under CDM, the survey information should be used to help in the tendering process for removal of ACMs from the building before work starts. The survey report should be supplied by the client to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In this type of survey, where the asbestos is identified so that it can be removed (rather than to 'manage' it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed

Refurbishment and demolition surveys are intended to locate all the asbestos in the building (or the relevant part), as far as reasonably practicable. It is a disruptive and fully intrusive survey which may need to penetrate all parts of the building structure. Aggressive inspection techniques will be needed to lift carpets and tiles, break through walls, ceilings, cladding and partitions, and open up floors. In these situations, controls should be put in place to prevent the spread of debris, which may include asbestos. Refurbishment and demolition surveys should only be conducted in unoccupied areas to minimise risks to the public or employees on the premises. Ideally, the building should not be in service and all furnishings removed.

For minor refurbishment, this would only apply to the room involved or even part of the room where the work is small and the room large. In these situations, there should be effective isolation of the survey area (eg full floor to ceiling partition), and furnishings should be removed as far as possible or protected using sheeting. The 'surveyed' area must be shown to be fit for reoccupation before people move back in. This will require a thorough visual inspection and, if appropriate (eg where there has been significant destruction), reassurance air sampling with disturbance. Under no circumstances should staff remain in rooms or areas of buildings when intrusive sampling is performed.

There may be some circumstances where the building is still 'occupied' (ie in use) at the time a 'demolition' survey is carried out. For example, in the educational sector, refurbishment/demolition surveys may be conducted in schools or colleges during one closure period (eg holidays) and the work not undertaken until the next holiday period. Also, a demolition survey maybe conducted to establish the economic future or viability of a building(s). The survey results would determine the outcome. In such situations, the 'survey' will need extremely careful managing with personnel and equipment/furnishings being decanted and protected (as necessary), while the survey progresses through the building. Again, there should be effective isolation of the survey areas and the 'surveyed' area must be shown to be fit for reoccupation before personnel.

Asbestos Risk Assessment

9.1 The risk assessment of asbestos containing materials is a two-stage process. Individual risk assessments are contained within the electronic and paper based asbestos materials registers.

The risk assessment is a two stage process each worked out to established numerical algorithms to give scores which are then summed to give a total risk assessment. Details are given below:

The Material Assessment

The report prepared by the surveyor should include this assessment. The assessment addresses the condition of the materials and the likelihood of releasing fibres on disturbance. The material assessment will give a good initial guide to the priority for management, as it will identify the materials, which will most readily release airborne fibres if disturbed. However, this may not always indicate high priority for remedial action e.g. where the asbestos containing materials are in an inaccessible area and the asbestos fibres cannot be inhaled by people. The following criteria are assessed:

HSG264 The Survey Guide - Materials Assessment Score:

The Material Assessment Score comprises four separate elements, as follows:

(i) the type of the asbestos material, (ii) its condition, (iii) its surface treatment and (iv) the type of asbestos identified

Material Type

Belts	1	Mattress Material	3	Soil	2
Bituminous Product	1	Mill Board	2	Strings	2
Cement product	1	Packing	3	Thermal Insulation	3
Coating (Non-Sprayed)	1	Plastic	1	Thermoplastic Floor Tiles	1
Corrugated paper	2	Reinforced PVC	1	Vinyl product	1
Dust and debris	3	Quilt	3	Wallpaper	1
Felt	2	Resin	1	Decorative Tiles	1
Gaskets	2	Rope	2	Woven Insulation	2
Insulation Board (IB)	2	Roofing Felt	1		
Lose Insulation	3	Semi Rigid Paint	1		
Low Density Board (Not IB)	2	Sprayed Coatings	3		
Mastics	1				

Extent of Damage

This takes into consideration any damage to the actual ACM (not damage to any surface treatment).

Good Condition – No Visible Damage	0
Low Damage – Scratches/Broken Edges	1
Medium Damage – Significant Breakage/Exposed Fibres	2

3

Surface Treatment

This takes into consideration any treatment or covering to the ACM.

Composite Materials: reinforced plastics, resins, vinyl tiles		
etc		
Enclosed sprays and laggings, AIB with exposed face	1	
painted or encapsulated, asbestos cement		
Unsealed AIB, encapsulated laggings & sprays	2	
Unsealed laggings & sprays	3	

Asbestos Type

Analysed samples are given a score according to the type of asbestos identified to be present in each sample:

Chrysotile	1
Amphiboles Excluding Crocidolite	2
Crocidolite	3

In accordance with MDHS100 these scores are then added together which result in each material being scored between 2 and 12 and these can be then further categorised as follows:

Category A (10 or >) - regarded as having a High potential to release fibres if disturbed.

Category B (7 – 9) - regarded as having Medium potential to release fibres if disturbed.

Category C (5 & 6) - regarded as having Low potential to release fibres if disturbed.

Category D (4 or <) - regarded as having Very Low potential to release fibres if disturbed

Note: Asbestos debris may automatically be assessed as Category A.

The Priority Assessment

The Priority Assessment addresses the human health effects and the likelihood of the asbestos containing material being disturbed. Remember even an asbestos containing material in the poorest condition only presents a risk to health if the fibres are disturbed into the air we breathe. This priority assessment takes into account factors such as:

- Maintenance activities (including cleaning if appropriate)
- Likelihood of disturbance
- Human exposure potential (numbers of people and duration of exposure)
- Occupant activity

The 4 general categories are sub divided so that one or more factors may be taken into account. The score for each main category is the averaged score for that category rounding up where necessary. The scoring system used is as given in HSE publication HSG227.

Occupant Activity

When carrying out a risk assessment the main type of use of an area and the activities taking place within it should be considered.

Normal Occupant Activity - Non-Maintenance

Rare Disturbance – Little used store	0
Low Disturbance – Office type	1
Periodic Disturbance – Industrial or vehicular activity	
High Disturbance – e.g. Fire door in constant use	3

Other Occupant Activity - Non-Maintenance

Rare Disturbance – Little used store	0	
Low Disturbance – Office type	1	
Periodic Disturbance – Industrial or vehicular activity		
High Disturbance – e.g. Fire door in constant use	3	

Likelihood of Disturbance

The 3 factors that will determine the likelihood of disturbance are the location, accessibility and its extent or amount of asbestos.

Location

Outdoors	0
Large Rooms> 100m ²	1
Rooms up to 100m ²	2
Confined spaces - e.g. Plant rooms, ducts and lofts	3

Accessibility

Usually Inaccessible	0
Occasionally Visited	1
Easily Visited	2
Routinely Visited	3

Extent/Amount

Small Amounts (fuse boxes, single items etc)	0	
$< 10 \text{m}^2 \text{ or } < 10 \text{Lm}$	1	
> 10m ² but < 50 m ² or > 10 Lm but < 50 Lm	2	
$> 50 \text{m}^2 \text{ or} > 50 \text{Lm}$	3	

Human Exposure Potential

The human exposure potential will depend on the number of people exposed, the frequency of use of the area and the time period the area is occupied.

No of occupants

None	0
1 to 4	1
4 to 10	2
> 10	3

Frequency of Use

Infrequently	0
Monthly	1
Weekly	2
Daily	3

Average Time of Use

< 1 hour per day	0
> 1hour and < 3 hours per day	1
> 3 hours and < 6 hours per day	2
> 6 hours per day	3

Maintenance Activities

There are 2 types of maintenance that should be considered, planned and un-planned, along with the frequency of any maintenance.

Maintenance Activity

Minor Disturbance Possible	0
Low Disturbance Possible	1
Medium Disturbance Possible	2
High Disturbance Possible	3

Maintenance Frequency

Material Unlikely to be Disturbed	0
< 1 Activity per year	1
> 1 Activity per year	2
> 1 Activity per month	3

Adding the averaged scores from the above four factors, results in a score for the Duty Holder's Priority Assessment. However, the Duty Holder has the ultimate responsibility to check any assessments made by 3rd parties and to make sure that the estimate of the Duty Holder's Priority Score is correct, as he has a detailed knowledge of the site rather than a surveyor (i.e. he should check each calculation, and review the scores if corrections are necessary, or when changes occur).

Total Risk Assessment

Adding the Materials Assessment score and the Priority Risk score for each asbestos containing material at each location gives a series of Total Risk Assessments. These total scores can then be used within the Management Plan to prioritise the risk and plan any actions, as follows:

Risk Priority Code 1, risk scores 18 or higher = HIGH RISK

Recommended Action: Manage ACM's and carry out planned remedial action to reduce the risk score within a short time scale (typically within 12 months or less) to below risk score 18 in accordance with your Asbestos Policy and Management Plan.

Risk Priority Code 2, risk scores 12 to 17 = MEDIUM RISK

Recommended Action: Manage as Priority 1's, but remedial action may be deferred to action in the medium term or until next maintenance period, or demolition or major refurbishment is planned.

Risk Priority Code 3, risk scores 11 or less = LOW RISK

Recommended Action: Manage and consider removal if the item falls within a demolition or major refurbishment area and works is likely to disturb the material.

Any change in property usage, including maintenance activities should prompt a formal re- assessment and update of the "Asbestos Register" (including "Risk Priority Scores" and recommended actions). It is recommended that a review/audit should be carried out at least every 12 months to update the system. A written record must be made of each review and any information about ACM's given to anyone who may be at risk from disturbing them (e.g. maintenance workers).

The total risk scores (material assessment and priority assessment) are entered into the asbestos management database and will form the basis for the Asbestos Action Plan.

Decisions regarding Management Options

10.1 <u>Explanatory notes Figure 1 – Materials suspected of containing asbestos</u>

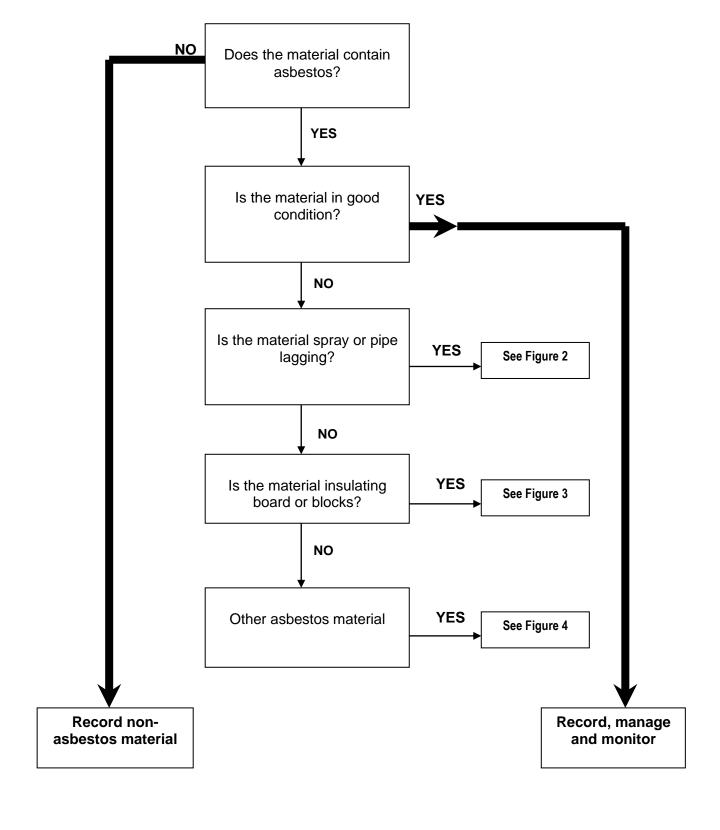
- 10.1.1 The Control of Asbestos Regulations 2012 (Regulation 6) require that employers shall not carry out any work which exposes or is liable to expose any of their employees to asbestos, unless they have made an adequate assessment of that exposure. Furthermore, employers are obliged (Regulation 5) to identify the type of asbestos involved in the work, or assume that it is not chrysotile alone and for the purposes of the Regulations, treat it accordingly.
- 10.1.2 The purpose of an assessment (Regulation 6) is to enable a correct decision to be made about the measures necessary to control exposure to asbestos. If the assessment concludes that exposure is liable to exceed the control limit and will not be sporadic, low intensity and of short duration (Regulation 8), then other provisions of the Regulations will apply. The assessment also enables employers to satisfy themselves and to demonstrate to others that all the factors pertinent to the work have been considered and that an informed and correct judgement has been reached about the risks and the steps that need to be taken to achieve and maintain adequate control.
- 10.1.3 Where material is in good condition but is, or will become, highly vulnerable to damage, management alone may not be sufficient to prevent a hazard. Treat the material as not in good condition.
- 10.1.4 Insulating board was frequently used as a general building board and visually may be confused with plasterboard, non-asbestos insulating board, e.g., Supalux, or flat asbestos cement sheet. Bulk samples will distinguish insulating board from plasterboard. Asbestos cement was normally made with chrysotile and insulating board with amosite, but all types of asbestos have been used in varying proportions in both products. Insulating board was frequently nailed in position while asbestos cement was often fixed with screws or bolts.

Some types of 'Caposil' insulation blocks, found in some storage and warm air heaters manufactured prior to 1976, contain asbestos. For the purposes of these assessment charts, these blocks should be treated like insulating board.

- 10.1.6 If it is necessary to disturb asbestos frequently, the cost of precautions may make it more cost-effective to remove the material. In housing, occupants, especially those in public sector rented accommodation, should be made aware of the location of any asbestos materials and advised of appropriate precautions.
- 10.1.7 Options for management of the condition of asbestos containing materials include the following: labelling or colour coding of the ACM, protecting or enclosing the ACM, sealing or encapsulating the ACM, repairing the ACM and removing the ACM. The following flow charts and explanatory notes outline procedures for the selection of appropriate actions.

FIGURE 1

Materials suspected of containing asbestos



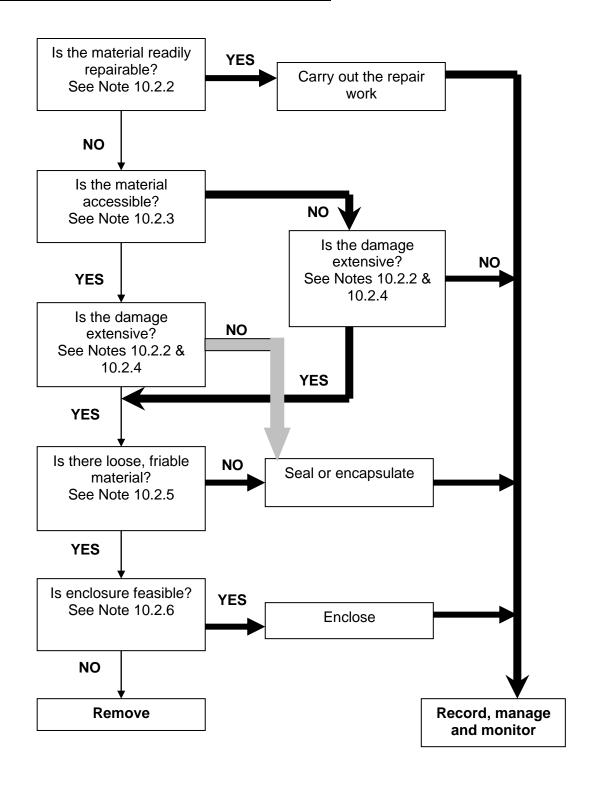
10.2 Explanatory notes Figure 2 – Sprayed asbestos and lagging

- 10.2.1 This flow chart deals with materials which are considered not to be in good condition. All, except work of a sporadic, low intensity and short duration must be carried out in accordance with the Approved Code of Practice, Managing and Work with asbestos (L143) 2012 and be carried out by a licensed contractor.
- 10.2.2 To be readily repairable, damage to the installed material must be slight. Repair work should be restricted to:-
- Patching of small areas of the asbestos material;
- Applying small areas of sealant;
- Making good slight damage to boxing

Repairs should be carried out taking the appropriate precautions and observing the Control of Asbestos Regulations, the Approved Code of Practice (L143) 2012 and HSE guidance.

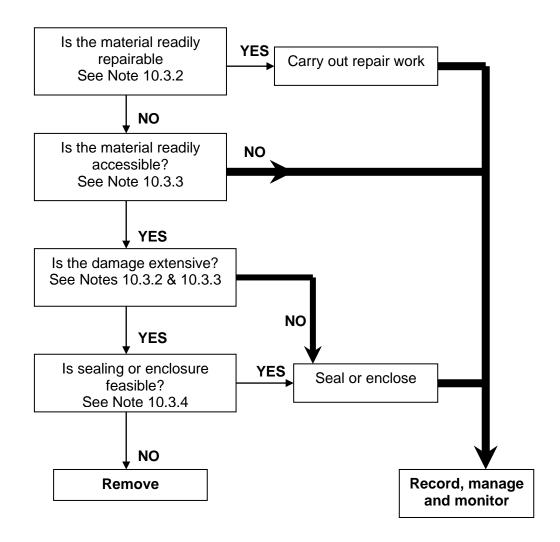
- 10.2.3 Material that is readily accessible may be vulnerable to further accidental or deliberate damage, due to adjacent repair or maintenance, impact by people, vehicles or objects, or vandalism. Damage by water or vermin (rodents and birds) is also possible. The assessment should take account of the current and planned building use and occupancy.
- 10.2.4 Accessible material that is not extensively damaged will probably need protection against further damage and sealing or enclosure may be necessary.
- 10.2.5 Dust, loose debris and quantities of material detached from the main body may indicate that the asbestos is breaking up and highly friable. If there is no evidence of this and the asbestos is firmly bonded to the substrate, it can be sealed or enclosed. Sprayed coatings and lagging can be sealed with sprayed or bituminous coating or with a hard-setting cement-type coating. If necessary, cement coatings can be supported by metal mesh. Sealed sprayed coatings may be vulnerable to water damage, particularly when they are located on the underside of flat roofs.
- 10.2.6 Enclosure may not be feasible if the area involved is very large, for example, in long roofing structures or where access to asbestos material is restricted. If the enclosure would be vulnerable to damage, if access is needed for maintenance and repair, or enclosure is not feasible, then the asbestos must be removed.
- 10.2.7 When sprayed coatings or laggings are removed, it will be necessary to empty and enclose or seal off the working area. The whole area should be thoroughly cleaned afterwards. As it is not usually possible to remove all traces of asbestos, a sealing coat should be applied to the substrate after removal. After removal work, the airborne fibre concentration should be measured before the area is reoccupied, using procedures specified for site clearance in the "Analysts Guide" HSG248 and other HSE Guidance.

FIGURE 2
Sprayed asbestos coatings and pipe and vessel insulation



- 10.3 Explanatory notes Figure 3 Asbestos insulating board and insulating blocks
 - 10.3.1 The chart deals with material that is considered not to be in good condition. All work with asbestos is controlled by the control of Asbestos Regulations. Any work on insulating board should follow HSE guidance in the Approved Code of Practice (L143) 2012, and asbestos Essentials (HSG 210)
 - 10.3.2 To be readily repairable, damage to board must be slight. Surface scratches may be sealed or painted, breaks taped and small punctures patched with filler. If the board is not covered it may be painted or otherwise sealed as a precaution against light abrasion.
 - 10.3.3 Material that is readily accessible may be vulnerable to accidental or deliberate damage, due to adjacent repair or maintenance, impact by people, vehicles or objects or vandalism. Damage by water or vermin (rodents and birds) is also possible. The assessment should take account of the building use and occupancy.
 - 10.3.4 The material can be sealed by spraying with an initial coat of diluted PVA emulsion, followed by one or more full strength coats. The surface should be prepared. Damaged material should be repaired where possible (see Note 10.3.2), but the material should not be sanded or wire brushed. Dusty surfaces can be cleaned with a suitable industrial vacuum cleaner that conforms to BS 8520-3:2009 (Type H) and contain a filter conforming to BS EN 1822 or wiped with a damp cloth, which should be sealed in a plastic bag afterwards while still damp. A domestic vacuum cleaner must not be used. Sealing does not protect the material from more violent impact. Covering the board with hardboard, plasterboard or a similar material may be preferred; materials chosen must take into consideration any fire protection issues and the prevention of the spread of fire through cavities.
 - 10.3.5 If the material is very badly damaged, is very extensive in area, or is subject to frequent violent impact, then sealing or enclosure may not be feasible and removal should be considered.
 - 10.3.6 Removal of large areas of asbestos insulating board must be carried out by a licensed contractor. The HSE's Approved Code of Practice Work with asbestos containing materials, 2012 (L143) provides advice on work with asbestos insulation board and guidance is also available on controlled stripping. Although it may not be necessary to empty a building, the working area should be segregated and people not engaged in the work should be kept away. Asbestos insulating board should be wetted to suppress dust during removal and sheets should be removed whole, not broken up. Replacement board must have equivalent fire performance where this is required.

FIGURE 3
Asbestos insulating board and insulating blocks



10.4 **Explanatory notes Figure 4 – Other asbestos materials**

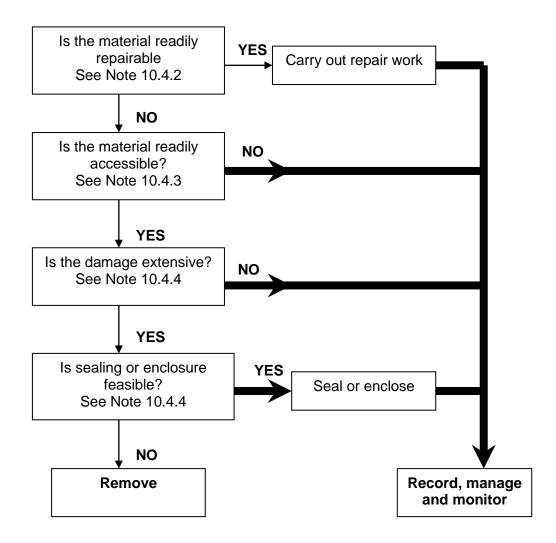
- 10.4.1 The chart deals with material that is considered not to be in good condition. Work on asbestos cement should follow HSE guidance in the Approved Code of Practice L143 and Asbestos Essentials (HSG 210 & 213 and HSE website: http://www.hse.gov.uk/asbestos/essentials/index.htm).
- 10.4.2 To be readily repairable, damage to the material must be slight. Surface scratches may be sealed or painted, breaks taped and small punctures patched with filler.
- 10.4.3 Material that is readily accessible may be vulnerable to accidental or deliberate damage, due to adjacent repair or maintenance, impact by people, vehicles or objects, or vandalism. Damage by water or vermin (rodents and birds) is also possible. The assessment should take account of the building use and occupancy. Old sheet material used outside (e.g. for roofs) may have extensive moss and lichen growth on it, which will accelerate degradation and weathering of the cement matrix and thus lead to greater release of fibres.

Asbestos cement is a very common material. It is unlikely to be sealed where it is used outside and where it is used inside buildings, sealing is likely to be confined to painting – although some products have factory-applied coatings. Water damage and vermin are unlikely to be a problem, although the material becomes porous with age and may then allow water to leak through.

- 10.4.4 Accessible asbestos cement which is not readily repairable but which has only suffered slight damage, can be sealed with a suitable coating. The surface should be prepared. Damaged material should be repaired where possible (see Note 2), but the material should not be sanded or wire-brushed. Dusty surfaces can be cleaned with a suitable industrial vacuum cleaner that conforms to BS 8520-3:2009 (Type H) and contain a filter conforming to BS EN 1822or wiped with a damp cloth, which should be sealed in a plastic bag afterwards, while still damp. A domestic vacuum cleaner must not be used. Asbestos cement used outside may need treatment with a biocide before painting. Moss and lichen may be removed by low pressure water jetting. Asbestos cement is alkaline and should be primed with an alkali-resistant primer or a chlorinated rubber of oleo resinous paint, followed by one or more top-coats. Where possible, both sides of flat sheets should be painted. Installations, which are badly deteriorated and will not allow a surface to adhere, should be removed.
- 10.4.5 Warning notes should be attached where material is readily accessible. In the case of asbestos cement roofs, the notes should indicate the material is fragile and the risk of falling through it. Asbestos cement roofing sheets or tiles may have fibre washed off which can collect in gutters and this should be borne in mind during maintenance of buildings.
- 10.4.6 Removal of large amounts of asbestos cement should be carried out by a specialist contractor or trained staff. Small quantities can be safely removed by householders, provided that safety precautions are followed. Although it may not be necessary to empty a building, or seal off the working area during removal, people not engaged in the work should be kept away. Sheets should be wetted to suppress dust during removal and removed whole, not broken up. The material removed and any dust and debris should be carefully collected, small pieces dampened and sealed in strong plastic bags marked 'Asbestos'. The whole area should be thoroughly cleaned (see Note 4) using a dustless method. After large-scale work, especially where there has been breakage of asbestos cement sheets, a visual inspection should be undertaken and airborne fibre concentrations should be measured before the area is reoccupied.

FIGURE 4

Other asbestos materials (read notes below first)

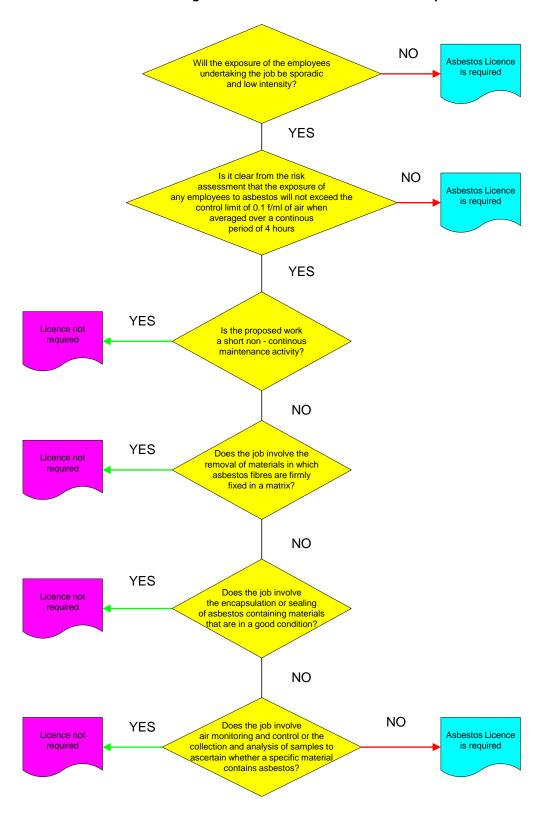


Notes

- 1. This chart includes products not included in Figures 2 and 3 such as asbestos cement, textiles, gaskets, ropes and encapsulated products such as vinyl and thermoplastic floor tiles, roofing felt etc. Materials which are encapsulated in a resilient matrix will have limited ability to release fibres therefore asbestos in reinforced plastics, vinyls, resins, rubber, mastics, bitumen, paints, flexible plasters and cements will have little opportunity to release fibres unless the matrix is removed (degraded, dissolved or burnt) or subject to high levels of abrasion (e.g. use of power tools).
- 2. Management of these types of materials should be by the prevention of maintenance workers using abrasive methods or power tools and in so doing minimise airborne asbestos fibre release.
- Sealing may be considered if there is evidence of routine wear and abrasion.
- 4. Unless damage is significant or material is in a vulnerable position urgent remedial action is unlikely to be necessary.
- 5. Products should be removed when they come to the end of their useful life or before refurbishment or demolition.
- 6. Products such as asbestos textiles and gaskets which are not so well encapsulated will release fibres more readily and the use of controlled work methods and enclosures, encapsulation, sealing to prevent damage may be necessary.

Appendix 11 (FIGURE 5)

Determining Whether An Asbestos Licence Is Required



Training

12.1 <u>Asbestos Co-ordinator</u>

The Asbestos Co-ordinator and his Deputy shall receive adequate information, instruction and training so as to enable him to completely fulfil their roles.

This training shall include as a minimum Asbestos Awareness training in accordance with CAR 2012 Regulation 10. Attendance on the BOHS P402 (Surveying and Sampling) and/or P405 (Management of Asbestos) courses is recommended. Refresher training should be undertaken annually or as circumstances dictate.

12.2 <u>Professional Personnel</u>

All professional personnel who influence any works or potential works with asbestos shall receive Asbestos Awareness training in accordance with CAR 2012 Regulation 10 provided by an independent Asbestos Consultant or in-house through the Corporate Health & Safety Unit by a person competent to do so. Refresher training should be at least every 2 years or earlier if any significant changes in legislation.

12.3 Tradesmen/Maintenance Personnel

Tradesmen/maintenance personnel shall receive Asbestos Awareness training in accordance with CAR 2012 Regulation 10 provided by an independent Asbestos Consultant or in-house through the Corporate Health & Safety Unit by a person competent to do so. Refresher training should be at least every 2 years or earlier if any significant changes in legislation.

12.4 Non-Licensed Contractors

Non-licensed contractors employed by the Association will not undertake work on asbestos materials. However, they will have to demonstrate that they are competent for the work and have received appropriate Asbestos Awareness training by submitting the relevant training certification.

12.5 <u>Licensed Asbestos Contractors</u>

Operatives and supervisors employed by Licensed Asbestos Removal Contractors shall demonstrate training and refresher training in compliance with published HSE guidance (see Contractors' Guide – Appendix 16).

12.6 Asbestos Consultants

Analysts, surveyors and project managers shall demonstrate training and refresher training in compliance with CAR 2012 and HSE Guidance (BOHS P401, P402, P403, P404, P405, P406 or CoCA CCP) proficiency modules as appropriate). The company shall hold UKAS accreditation to ISO 17020 and 17025 for asbestos surveying, bulk analysis, air monitoring, 4 stage clearance and sampling.

<u>Asbestos Containing Materials (ACM) Re-inspection Frequencies</u>

No asbestos containing materials have been identified in the common areas surveyed.

The following types of asbestos materials have been identified to be present within housing stocks:

Textured Coatings Woven flash-guards

The following types of asbestos materials may be present within housing stocks:

Bitumen Products Cement Products Insulating Board Plastic Products Vinyl Products Insulation materials

The re-inspection frequencies will be as follows:

Not to exceed every 2 Years

Bitumen Products
External Cement Products
Vinyl Products
Textured Coatings
Woven Materials
Plastic Products
Composite Flooring

Annually

Insulation Board Internal Cement Products

More Frequently

Materials likely to be damaged

14.1 Guidance as to the health effects of inadvertent exposure to asbestos fibres

- 14.1.1 From time to time, circumstances arise in which people are inadvertently exposed to asbestos fibres, usually in small quantities, in a variety of situations; examples have included: office workers exposed to asbestos dust during renovation work which disturbed asbestos ceiling tiles, workers possibly exposed to asbestos dust whilst performing routine maintenance on air ducted central heating systems in residential flats and staff and pupils of secondary schools potentially exposed to asbestos, again from damaged ceiling tiles.
- 14.1.2 Those exposed receive little or no prior warning of the possible risk to health. In many cases those responsible for the exposure claim to have been unaware of the presence of asbestos prior to the work being carried out.
- 14.1.3 People who may have been exposed to asbestos are understandably anxious and concerned about the possible effects on their health. Moreover, where incidents involve members of the public or vulnerable sections of the population, widespread publicity may result. Departmental managers may receive requests from employers, employees, trade unions, other interested parties and members of the public for advice on how to manage the health aspects of such exposure. This section gives managers and employees advice on how to deal with such requests consistently. There is at present no effective post-exposure prophylaxis for the effects of inhaled asbestos fibres, although in smokers the risk of asbestos-induced lung cancer (but not Mesothelioma) can be reduced by stopping smoking. There are also no generally available techniques for determining individual lung burdens of asbestos fibres, other than post mortem.
- 14.1.4 In many cases, exposure will have been minimal, with little likelihood of any long-term ill-effects. However, although the type of asbestos may be known, there will often be little if any, reliable quantitative information concerning the level and duration of exposure. Work with asbestos cement is unlikely to pose the same risks as work with asbestos insulation and coating and asbestos insulating board.
- 14.1.5 Asbestos incidents arouse concern and anxiety and often unrealistic expectations of medical tests or even treatment. This should be addressed by offering prompt and reasoned advice, without contributing to unnecessary alarm. The information in this circular and the referenced HSE guidance should be sufficient in many cases and is intended to assist those responsible for managing such situations.

14.2 <u>Inadvertent exposure to asbestos – Advice for employers</u>

- 14.2.1 This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action, but if you do follow the guidance, you will normally be doing enough to comply with the law. Health and Safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.
- 14.2.2 Breathing in asbestos fibres can eventually lead to a number of diseases, including:
 - 1. asbestosis or fibrosis (scarring) of the lungs
 - 2. lung cancer, and
 - 3. mesothelioma, a cancer of the inner lining of the chest wall or abdominal cavity.

It is possible that repeated low-level exposures may lead to asbestos-related diseases, although high exposure for long periods is linked more clearly to these diseases. There is usually a long delay between first exposure to asbestos and the first symptoms of disease; this can vary between 15 and 60 years.

- 14.2.3 It is unfortunately, not uncommon for people to be inadvertently exposed to asbestos fibres, usually in small quantities, during building operations, maintenance work or following damage to asbestos containing materials (many of those suffering today from asbestos-related diseases worked in the building trades and were exposed to asbestos in their day-to-day work with asbestos materials, or because work with asbestos was carried out near them).
- 14.2.4 Such incidents understandably cause anxiety about the possible effects, both short and long term, of the exposure. In many circumstances, exposure will have been minimal, with little likelihood of any long-term effects. Unfortunately, although the type of asbestos involved may be known, there is often little, if any, reliable information concerning the amount of asbestos, which may have been inhaled.
- 14.2.5 It is important to ascertain as far as possible, the type of asbestos, the duration of exposure and the likely exposure levels. You may need to seek advice from occupational hygienists or occupational health specialists. The local office of the HSE may be able to give general advice and provide information on the availability of local specialist services.
- 14.2.6 You shall keep accurate and detailed records concerning the incident and those persons involved. CAR 2012 requires records to be kept for **40 years**. Although these Regulations may not apply, you may wish to follow their requirements.
- 14.2.7 If exposure is unlikely to have exceeded the action level, it will usually have been insufficient to pose a significant long-term risk to health. Where you are able to estimate the extent of exposure, the advice that those who have been exposed can be given should reflect the risk as far as possible.
- 14.2.8 Exposed individuals should be informed that if they wish to consult their GP, they should ask for a note to be made in their personal medical record of the possible exposure, including date(s), duration, type of fibre and likely exposure levels (if known). (Their GP may refer them to a specialist in respiratory medicine, but this is not normally considered necessary by the HSE). Each case should be considered on its merits, but the HSE does not normally advocate routine X-rays for persons exposed to asbestos in these circumstances.
- 14.2.9 Alternatively, or in addition, you may choose to refer employees for counselling. You may wish to select an occupational health service for this purpose. The local office of the HSE's Employment Medical Advisory Service may be able to provide information on services in the area.
- 14.2.10 You should, in addition, consider carefully what went wrong in causing your employees to be exposed to asbestos on this occasion, and how you will prevent this happening again in future.

14.3 Inadvertent exposure to asbestos – Advice for employees

- 14.3.1 This document contains advice following inadvertent exposure or possible inadvertent exposure to asbestos. People who may have been exposed to asbestos are understandably anxious and concerned about possible effects on their health.
- 14.3.2 Breathing in asbestos fibres can eventually lead to a number of diseases, including:
- 1. asbestosis or fibrosis (scarring) of the lungs
- 2. lung cancer, and
- 3. mesothelioma, a cancer of the inner lining of the chest wall or abdominal cavity.

It is possible that repeated low-level exposures may lead to asbestos-related diseases, although high exposure for long periods is linked more clearly to these diseases. There is usually a long delay between first exposure to asbestos and the first symptoms of disease; this can vary between 15 and 60 years.

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- 14.3.4 Asbestos exposure incidents understandably cause anxiety about the possible effects, both short and long-term, of the exposure. In many cases, exposure will have been low, with little likelihood of any long-term side effects. Unfortunately, although the type of asbestos involved may be known, there is often little, if any, reliable information concerning the amount of asbestos which may have been inhaled, so it is often difficult to be certain exactly how much long-term risk to health may have been caused.
- 14.3.5 Your employer should try to find out as much as possible about the type of asbestos, the duration of exposure and the likely exposure levels and should keep accurate and detailed records concerning the incident and those people involved. You may wish to request a copy of your record, or to ask your employer to send a copy to your GP.
- 14.3.6 Your employer may arrange for you to have an opportunity to see an occupational health doctor for further advice, or may suggest that you consult your GP. Your GP should be given details about the possible exposure, including date(s), duration, type of asbestos and likely exposure levels (if known), and you should ask for a note of these details to be made in your personal medical record. Your GP will decide whether you should be referred to a chest specialist (although this is not usually necessary) or whether you should undergo any tests, such as a chest X-ray. Again, this is not usually necessary or helpful, particularly because in the short-term, a chest X-ray would not show anything wrong, even after heavy exposure to asbestos. In particular, a chest X-ray cannot show whether or not asbestos fibres have been inhaled.
- 14.3.7 Your employer should also consider carefully what went wrong to cause you to be exposed to asbestos on this occasion, and how this can be prevented from happening again.

14.4 <u>Action to be taken when there is Risk that Asbestos Dust has been Released into the Atmosphere</u>

Where asbestos dust has been released into a contained area the action is to be as specified in Section 9.

Where it is suspected that asbestos dust has been released into open atmosphere or there has been a significant fire involving ACM's, the Asbestos Co-ordinator and the external Asbestos Consultant are to be informed.

There are circumstances when a possible release of dust into the atmosphere need not be monitored. The following list specifies why air monitoring may not be required:

- where exposures are known to be very low (i.e. well below the recommended control limit)
- where the work is intermittent or of short duration and adequate information is available to enable the appropriate protective equipment to be provided
- where such a high standard of personal protective equipment is provided for the predicted exposure that no foreseeable measurement result could indicate a need for a higher level of protection.

The Asbestos Action Plan

The overall aim is to ensure that all asbestos containing materials, through re-inspections, training, remedial or removal works are effectively managed and risk is reduced to its lowest practical level.

With any management plan it is important to schedule actions required, owners and a timeline for these actions by the owners. As these actions are numerous the action plan timetable is detailed below:

Action	Completed by	Status	Notes
Management (formerly Type 2) survey of Housing common areas	Zurich	Completed July 2005	1 per area surveyed
Management survey of some Housing stocks	Update Company Name	On-going since 2007	
Management (formerly Type 2) survey of Housing stocks for Investment programme	Update Company Name	On-going since 2007	
Management (formerly Type 2) survey of Office	Zurich	Completed July 2005	
Re-Inspections – Housing common areas	Update Company Name	ТВА	1 per area to be surveyed on rolling yearly programme
Refurbishment & Demolition (formerly Type 3) surveys for refurbishment	Update Company Name	On-going since 2007	
Management (formerly Type 2) – 10% pre 1990 stocks	Update Company Name	On-going since 2007	Voids as and when vacant
Review completeness of previous survey information	Update Company Name	ТВА	
Priority risk assessments for previous surveys	Update Company Name	ТВА	
Training session on interpretation of asbestos survey reports	Update Company Name	ТВА	
Asbestos awareness training	Update Company Name	Completed	Dec 2007 Refresher Dec 2009
Asbestos Management for Managers Training	Update Company Name	Completed May 2010	
Asbestos Management Plan Training	WHA	ТВА	
Implementation of Asbestos Management Plan	WHA	Completed February 2009	
Asbestos Management Plan issued to Departments & Contractors	WHA	ТВА	
Asbestos Management Plan Annual Review	Update Company Name		

List of Contractors and Consultants

NAME	ADDRESS	DISCIPLINE	STATUS
Update Company Name			