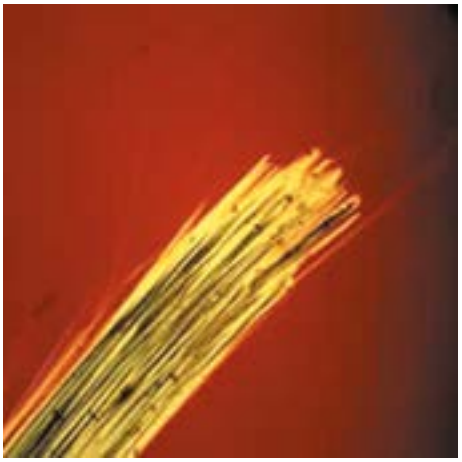
ASBESTOS



Approved Code of Practice

Management of Exposure to Asbestos in Workplace Buildings and Structures

Health and Safety at Work (Jersey) Law, 1989

ACoP 8 Revised 2020

Cover: Magnified image of asbestos fibres, reproduced with the kind permission of SP Shutler Associates Ltd.

Health and Safety at Work (Jersey) Law, 1989

Approved Codes of Practice (ACoP) provide practical guidance on how to meet the legal requirements set out in the legislation. If you follow the advice you will be doing enough to comply with the law in respect of those specific matters to which the ACoP refers. You may use alternative methods to those set out in the ACoP in order to comply with the law, however, the ACoP has a special legal status. If you are prosecuted for a breach of health and safety law and it is proved that you did not follow the relevant provisions of the ACoP, you will need to show that you have complied with the law in some other way or the court will find you at fault.

Management of Exposure to Asbestos in Workplace Buildings and Structures

Approved Code of Practice

Notice of Approval

This Code of Practice, entitled "Management of Exposure to Asbestos in Workplace Buildings and Structures", has been approved by the Minister for Social Security under Article 10 of the Health and Safety at Work (Jersey) Law, 1989 (the Law).

The Code replaces all previous editions of the Management of Exposure to Asbestos in Workplace Buildings and Structures: Approved Code of Practice, ACoP 8.

It provides practical guidance for all persons who have duties under Part 2 of the Law and are owners or occupiers of premises or carry out undertakings that could result in exposure of persons to asbestos fibres.

This Code of Practice came into force on 1 October 2015

Deputy Susie Pinel
Minister for Social Security

12 August 2015

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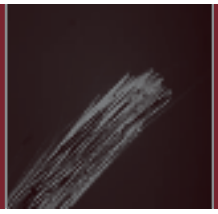


Preface

Asbestos-containing material (ACMs), which have been widely used in the construction of buildings and structures in Jersey, are recognised as causing a range of serious, and often fatal, diseases to persons through the inhalation of asbestos fibres.

This Approved Code of Practice (ACoP) has been approved by the Minister for Social Security in order to provide practical guidance to persons who have duties under Part 2 of the Health and Safety at Work (Jersey) Law, 1989, and who have responsibility for workplaces or are involved with working with asbestos.

It also contains practical guidance for those who have duties under the Asbestos-Licensing (Jersey) Regulations 2008, the Health and Safety (Management in Construction) (Jersey) Regulations, 2016, and the Health and Safety at Work (Construction) (Personal Protective Equipment) (Jersey) Regulations, 2002.

PART ONE of this ACoP sets out the general principles for the control of exposure to asbestos fibres.

PART TWO sets out the manner in which employers and others who have responsibility for the maintenance and repair of buildings and structures, can manage the risks from exposure to asbestos through the development of an asbestos management plan.

PART THREE contains guidance on work with ACMs which is subject to the Asbestos-Licensing (Jersey) Regulations 2008.

PART FOUR contains guidance on work with ACMs not subject to these Regulations.

ACMs were used extensively in Jersey during the past century. It is important that any person who carries out work where they may come across asbestos, or who intentionally works with the material, follows the legal requirements placed upon them in order to ensure that they, and persons who may be affected by the way they work, are not exposed to an unacceptable risk of premature death or illness due to exposure

to asbestos fibres. The diseases caused by exposure to asbestos fibres not only cause unnecessary suffering to victims and their dependants, but can also result in a business incurring heavy financial costs and penalties.

This ACoP addresses the subject by establishing the procedures to be followed in order to reduce the risks from asbestos to an acceptable level. The document also indicates where it will be necessary to obtain specialist assistance in determining or controlling the risks.

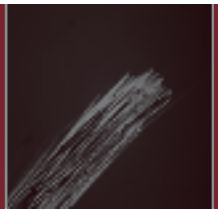
With increasing knowledge and technical advances there will be ongoing changes in effective practices and the equipment available to achieve the goals set out in the ACoP, so these are not discussed in the ACoP in detail. The document refers to publications issued by the UK Health and Safety Executive (HSE) which are likely to be subject to frequent and ongoing revision reflecting the changes in what is “accepted best practice”. This is a reflection not only of the objective of the ACoP, but also of the Health and Safety at Work (Jersey) Law, 1989. The HSE publications which are referred to are current at the time of publication, however, in view of the improvements that continue to be made, care should be taken to ensure that any references quoted in the ACoP are still current.

Who should read this publication?

This guidance is relevant to all persons with responsibility for maintenance, repair and management of premises being used as a workplace (i.e., any premises which form part of a business, including shops, offices, industrial buildings, hotels, schools, residential homes for the elderly etc.). These persons may include building owners, managing agents, tenants and others who have legal responsibility for the premises. Others involved with work activities, such as employees and/or safety representatives may also find the ACoP useful.

Where buildings are occupied by tenants, the extent of responsibility of all parties, including the building owner, will depend upon the contract or other tenancy agreement.

Legal precedents have established that common parts of blocks of flats are not part of the private dwelling and are therefore classified as non-domestic, thereby falling



within the scope of this ACoP. This would include foyers, corridors, lifts and lift shafts, staircases, boiler houses, gardens and outhouses.

Owners and occupiers of domestic premises (private dwellings where somebody lives) do not have the same legal responsibilities as the above categories, but it is important to realise that contractors working in or on domestic premises are at work and are therefore subject to the standards set out in this ACoP, even though the owner or occupier may not have any obligations themselves.

The occupiers of rented domestic premises may be offered protection under the Statutory Nuisances (Jersey) Law, 1999, Public Health and Safety (Rented Dwellings Minimum Standards and Prescribed Hazards) (Jersey) Order, 2018 and can obtain advice from the Environment Department.

The Law

Employers have a duty under the Health and Safety at Work (Jersey) Law, 1989, to ensure, so far as is reasonably practicable, the health, safety and welfare of their employees and others who may be affected by their undertaking. The main legislation applying to asbestos is:

- Health and Safety at Work (Jersey) Law, 1989
- Asbestos-Licensing (Jersey) Regulations, 2008
- Health and Safety (Management in Construction)(Jersey) Regulations, 2016
- Health and Safety at Work (Construction) (Personal Protective Equipment) (Jersey) Regulations, 2002

Health and Safety at Work (Jersey) Law, 1989

Part 2 of the Health and Safety at Work (Jersey) Law, 1989, Articles 3 to 8, places general duties on all persons involved with work activities.

Article 3 sets out the duty of an employer to his employees. Article 3 (2) goes on to give examples of the extent of this duty which includes:

- The provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health.
- Arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances.
- The provision of such information, instruction and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of his employees.
- So far as is reasonably practicable as regards any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health, and the provision and maintenance of access to and egress from it that are safe and without such risks.
- The provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risks to health and adequate as regards facilities and arrangements for their welfare at work.

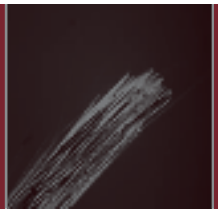
Article 3 (3) requires all employers with 5 or more employees to prepare a written health and safety policy document. This should include the arrangements for controlling the risks of exposure to asbestos fibre.

Article 4 sets out the duties of employees. They are required to take reasonable care of themselves and other people who may be affected by the way they work. Employees must also co-operate with their employer and any other person upon whom any legal requirements are imposed, for example, by adopting safe systems of work, wearing appropriate personal protective equipment provided such as respirators etc.

Article 5 requires employers to take into account the effect their work may have on others, including the general public or other groups of workers etc. The self employed must also take into consideration the manner in which they carry out their work and the effect it may have on both themselves and others.

Article 6 requires that persons, in control of premises which are used as a place of work by individuals other than their employees, ensure that any areas which are under their control do not pose a risk to those persons using them.

Article 7 sets out the duties on designers, manufacturers, importers and suppliers to ensure that products intended to be used at a place of work can be used safely and



without risk to health.

Finally, Article 8 requires that no person shall intentionally or recklessly interfere with, or misuse, anything provided in the interests of health, safety or welfare as required by Law.

Regulations

The Asbestos-Licensing (Jersey) Regulations 2008 set out the legal requirements relating to work with asbestos insulation, asbestos insulation board and asbestos coatings.

The Regulations prohibit work with asbestos insulation, asbestos insulation board and asbestos coatings, other than certain short duration work, unless it is carried out by a person who holds a licence granted by the Minister for Social Security, or has received written approval from an Inspector of the States of Jersey Health and Safety Inspectorate, to work on a licence issued under the regulatory asbestos licensing regimes in the UK or Northern Ireland.

It is important to recognise that irrespective of whether the work being carried out requires a licence under these Regulations, this ACoP applies to all activities or situations where there is a potential for persons to be exposed to asbestos fibres.

The Health and Safety (Management in Construction (Jersey) Regulations, 2016, as amended. These Regulations set out detailed requirements for health and safety in construction.

Regulation 4 defines ‘high-risk construction work’ which includes construction work involving the disturbance or removal of asbestos.

Regulation 19 requires the contractor who has control of the high-risk construction work, which includes work with asbestos, to prepare a written safe work method statement for the work before it is started.

The Construction (Personal Protective Equipment) (Jersey) Regulations, 2002
These Regulations provide for the provision and wearing of personal protective equipment in construction and civil engineering work, which includes work with ACMs.

Regulations 7 to 13 set out requirements relating to the assessment, provision, compatibility, maintenance, replacement, information, instruction, training and use in the wearing of personal protective equipment.

Other legislation

Employers must ensure that any work with asbestos is covered by their insurance policy, as required by the Employers' Liability (Compulsory Insurance) (Jersey) Law, 1973. Employers should also check their policy documents to ensure that work with any asbestos-containing material is covered (including non-licensed ACMs).

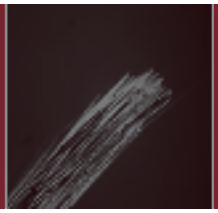
Further detailed information on the requirements of the Law and Regulations is contained in guidance published by the Health and Safety Inspectorate. Copies may be obtained from the Inspectorate, or through the website www.gov.je/hsi

Meaning of reasonably practicable

Requirements set out in health and safety legislation may be subject to the qualifying terms "practicable" and "reasonably practicable" which have been interpreted by the courts in a consistent manner whenever they are used in health and safety legislation.

The term "practicable" implies a very strict standard and infers a statutory obligation that has to be carried out if, in the light of current knowledge, it is feasible, irrespective of cost or difficulty.

The term "reasonably practicable" is a narrower term than "physically possible" and allows economic considerations to be taken into account as one factor, with, for example, time or trouble, to be set against the risk. Where it is shown that the risk is insignificant compared to the costs involved, the measures required to overcome the risk may not be considered to be "reasonably practicable". When taking into account the known health risks from exposure to asbestos, however, the use of the term does impose the requirement for a very high standard.



Legal status of an ACoP

ACoPs provide practical guidance on how to meet the legal requirements set out in the legislation. If you follow the advice you will be doing enough to comply with the law in respect of those specific matters to which the ACoP refers.

You may use alternative methods to those set out in the ACoP in order to comply with the law, however, the ACoP has a special legal status. If you are prosecuted for a breach of health and safety law, and it is proved that you did not follow the relevant provisions of the ACoP, you will need to show that you have complied with the law in some other way or the court will find you at fault.

Background

The presence of asbestos in workplace buildings and structures

For the purpose of this ACoP, asbestos is the name given to a naturally occurring fibrous form of mineral silicates which form part of the amphibole and serpentine groups. There are three main types of asbestos which have been commonly used in the construction industry: crocidolite, amosite and chrysotile, often described as blue, brown and white asbestos respectively.

As a naturally occurring material, asbestos is mined and then broken down into groups of loose fibres which are used in varying quantities in the manufacture of a wide variety of products. The presence of asbestos fibres in these finished products may not be obvious, and the different types of asbestos cannot be distinguished by their appearance or colour.

ACMs have been widely used throughout the world in buildings and structures as a construction material for a number of purposes including fireproofing, thermal insulation, electrical insulation, sound insulation, decorative plasters, roofing products, flooring products, heat resistant materials and gaskets. Further examples are included in the Appendix.

In the 1960s and 1970s annual imports of asbestos into the UK peaked at over 150,000 tonnes each year. The use of any new materials containing crocidolite and amosite asbestos was prohibited in the UK in 1985, and chrysotile asbestos in 1999.

The use of all ACMs, including most second-hand supply (except for certain very high performance materials), was banned by 2000.

In Jersey, significant amounts of ACMs were imported in the last century for use in the construction of buildings and structures. Because of the extensive use of ACMs considerable amounts still remain which, so long as they are maintained in good condition and not disturbed, do not present a significant risk.

When ACMs are damaged or disturbed, asbestos fibres may be released into the air which if breathed in can cause serious, and often fatal, diseases. For example, drilling

holes with power tools, sawing or sanding materials if the ACMs are in a poor condition. Simply working near to ACMs may result in a disturbance.

The hazards to health from asbestos

Asbestos is classified as a class 1 carcinogen. Breathing in asbestos fibres can lead to asbestos-related diseases, which kill more people than any other single work related illness. Statistics produced by the HSE show that more than 5000 people are dying from occupationally acquired asbestos related disease in the UK every year. This equates to 96 people dying every week, with a quarter currently having worked in the building and maintenance trades, although this percentage is expected to increase.

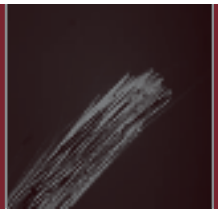
The burden of disease typically suffered by workers in asbestos manufacture, heavy industry and shipyards has been inherited by a new generation of workers in other trades, due to the extensive use of asbestos-containing materials (ACMs) as a building material in the UK from the 1950s through to the mid 1980s. The more asbestos fibres breathed in, the greater the risk to health. Therefore, workers who may be exposed to asbestos when carrying out maintenance and repair jobs are at particular risk. Such workers include:

- Construction and demolition contractors, roofers, electricians, painters and decorators, joiners, plumbers, gas fitters, plasterers, shop fitters, heating and ventilation engineers, and surveyors
- Anyone dealing with electronics, e.g. phone and IT engineers and alarm installers
- General maintenance engineers and others who work on the fabric of a building.

The delay between first exposure to asbestos and the onset of disease can vary between 15 and 60 years.

Exposure to asbestos can cause the following diseases:

- **Mesothelioma** is a cancer which affects the lining of the lungs (pleura) and the lining surrounding the lower digestive tract (peritoneum). It is almost exclusively related to asbestos exposure and by the time it is diagnosed, it is almost always fatal.

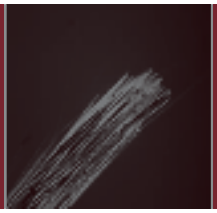


- **Asbestos-related lung cancer** cannot be differentiated from lung cancer caused by smoking and other causes, but it is estimated that there is around one lung cancer for every mesothelioma death. Smoking is known to significantly increase the risk of developing asbestos-related lung cancer.
- **Asbestosis** is a non-malignant condition which develops when fibres penetrate deep into the lung, resulting in serious scarring. This condition causes progressive shortness of breath, and in severe cases can be fatal. It normally occurs after heavy exposure to asbestos over many years.
- **Pleural disease** is a non-malignant condition affecting the outer lining of the lung (the pleura). It includes two disabling forms of the disease, diffuse pleural thickening and pleural plaques.

  Diffuse pleural thickening occurs when the lining of the lung thickens and swells. This can result in the lung being squeezed causing shortness of breath and discomfort in the chest. This generally develops after heavy asbestos exposure.

  Pleural plaques form on the outer layer of the pleura and are a collection of fibrous tissues (patches of thickening). They are known to occur after either occupational or environmental exposure to asbestos, and are evidence of past exposure to asbestos. They may precede more serious asbestos- related diseases, but are not usually disabling in their own right.
- **Pleural effusion** is a non-malignant condition and consists of a build up of fluid between the two pleural layers. It is the earliest manifestation of disease following asbestos exposure, usually occurring within 10 years of exposure. Effusions usually last for 3-4 months and then resolve completely. They can also progress to diffuse pleural thickening.

ACMs only pose a risk to health if the asbestos fibres become airborne and are then inhaled. The scientific evidence relating to the level of exposure that will lead to disease is unclear, but it is know that the more asbestos fibres or dust inhaled, the greater the risk to health. Whilst there has been a suggestion that exposure to crocidolite and amosite is more hazardous than exposure to chrysotile, **all forms of asbestos are dangerous and there are no safe limits of exposure**.



Part One

General principles for the control of exposure to asbestos fibres

General prohibitions of asbestos

1 The import, use, reuse, sale and export of any asbestos and any asbestos-containing material is prohibited, except for the removal, remediation and disposal as asbestos waste in the manner prescribed by this ACoP or under relevant legislation administered by the Department of the Environment.

General principles for managing the risks of exposure to asbestos

2 In order to manage the risks associated with potential exposure to asbestos in the workplace the following general principles must be applied:

- Identification of where asbestos is present;
- Assessment of the risks posed by the asbestos;
- Management of the asbestos to ensure the risks are adequately controlled;
- Planning and organising of all work with, or likely to disturb, asbestos;
- Prevention or reduction of exposure to asbestos to as low as reasonably practicable, and in any event below the control limit of 0.1 fibres/ cm^3;
- Provision of suitable training and supervision;
- Regular monitoring and review of management controls to ensure they remain effective.

3 It is important to remember, not all ACMs that are found have to be removed. Provided that there is no likelihood of asbestos fibres being released, it may be better to introduce controls to ensure that the ACM is not disturbed. Such controls include identification, labelling and also making people aware of the presence of the ACM.

Prevention or reduction of exposure to asbestos fibre

4 Exposure to asbestos fibres must be, so far as is reasonably practicable, prevented. If exposure to asbestos fibre is unavoidable, a suitable and sufficient assessment of the risks created by the likely exposure must be carried out. In any event the exposure must be kept as low as is reasonably practicable by measures other than the sole use of respiratory protective equipment. Where it is not reasonably practicable to reduce the exposure to below the control limit (see below) by these measures alone, appropriate respiratory protective equipment must be worn in addition to taking these measures to ensure that the control limit is not exceeded.

5 A control limit is the maximum concentration of asbestos fibres in the air (averaged over any continuous 4 hour period) that must not be exceeded.

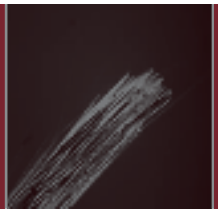
6 The UK 'Control of Asbestos Regulations 2012' set out the control limit for all types of asbestos of 0.1 asbestos fibres per cubic centimetre of air (0.1 f/cm^3). The control limit is not a 'safe' level and exposure from work activities involving asbestos must be reduced to as far below the control limit as possible.

7 In addition, short term exposures must be strictly controlled and exposure must be less than 0.6 fibres/cm^3 in the air measured over a 10 minute period, whilst using respiratory protective equipment if exposure cannot be sufficiently reduced using other means.

8 The lowest airborne respirable asbestos concentration that can be reliably measured using the current standard methodology, described in the HSE publication *`Asbestos: The analysts' guide for sampling, analysis and clearance procedures'* HSG 248, is 0.01 fibres/cm^3.

9 It is considered reasonably practicable to clean the working area after disturbance of ACMs thoroughly enough for the respirable airborne fibre concentration after final cleaning to be below this limit. The figure of 0.01 fibres/cm^3 is therefore taken as the clearance indicator threshold, and an area will not normally be regarded as fit for reoccupation until the asbestos in air measurements are below this level.

10 The value of 0.01 fibres/cm^3 is also used where air monitoring is carried out to determine the levels of asbestos fibres in air for other purposes, where it may be described as the reassurance or background indicator.



11 Further information on sampling and analysis of suspected ACMs is contained within the HSE publication *'Asbestos: The analysts' guide for sampling, analysis and clearance procedures'* HSG 248.

Training of operatives

12 Every employer must ensure that adequate information, instruction and training is given to all employees who are, or are liable to be, exposed to asbestos, or who supervise such employees. The self-employed should also have a similar level of knowledge and competence.

13 Asbestos awareness training should be provided for all persons whose work could forseeably expose them to asbestos whilst carrying out their normal day-to-day work. In particular it should be given to all demolition workers and those working in the refurbishment, maintenance and allied trades where it is foreseeable that their work will disturb the fabric of the building.

14 Detailed guidance on the provision of appropriate information, instruction and training is provided in the HSE publication *'Managing and working with asbestos: Control of Asbestos Regulations 2012: ACoP and guidance'* L143 Second Edition, but in general terms training should cover:

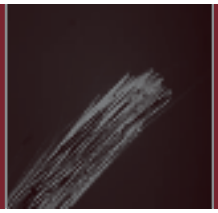
- The properties of asbestos and its effect on health, including the increased risk of lung cancer for those who smoke;
- The types, uses and likely occurrence of asbestos and ACMs in buildings and plant;
- The general procedures to be followed to deal with an emergency, for example inadvertent damage to an ACM; and
- How to avoid the risks from asbestos, including the importance of checking that an appropriate asbestos survey for the specific workplace has been carried out and any ACMs identified and properly managed.

15 Additional training should be provided for persons who knowingly disturb ACMs which are not licensable during the course of their work. This may include a

roofer or demolition operative removing asbestos cement sheets, asbestos surveyors or those who carry out asbestos sampling and analysis. Further guidance on the provision of training for such workers is provided in Part Four of this ACoP.

16 Specialist training is required for workers involved in work with ACMs subject to the Asbestos-Licensing (Jersey) Regulations 2008 (asbestos insulation, asbestos insulation board and asbestos coatings). Further guidance on this is provided in Part Three of this ACoP.

17 Refresher training for asbestos awareness, non-licensable and licensable work should be appropriate to the work the individual is doing, and reflect the level of competence and specific training needs of the individual involved. It should not be a simple repeat of the initial information, instruction and training provided. Persons knowingly working with non-licensed ACMs and those carrying out licensed work should receive refresher training at least once every 12 months.



Part Two

The asbestos management plan

Responsibilities

18 An essential step in the process of managing the exposure to asbestos in non-domestic buildings and structures is to put in place an asbestos management plan which aims to record the presence of ACMs and the manner in which exposure to asbestos fibres is managed, both during normal occupation and when work which may disturb ACMs is planned or carried out.

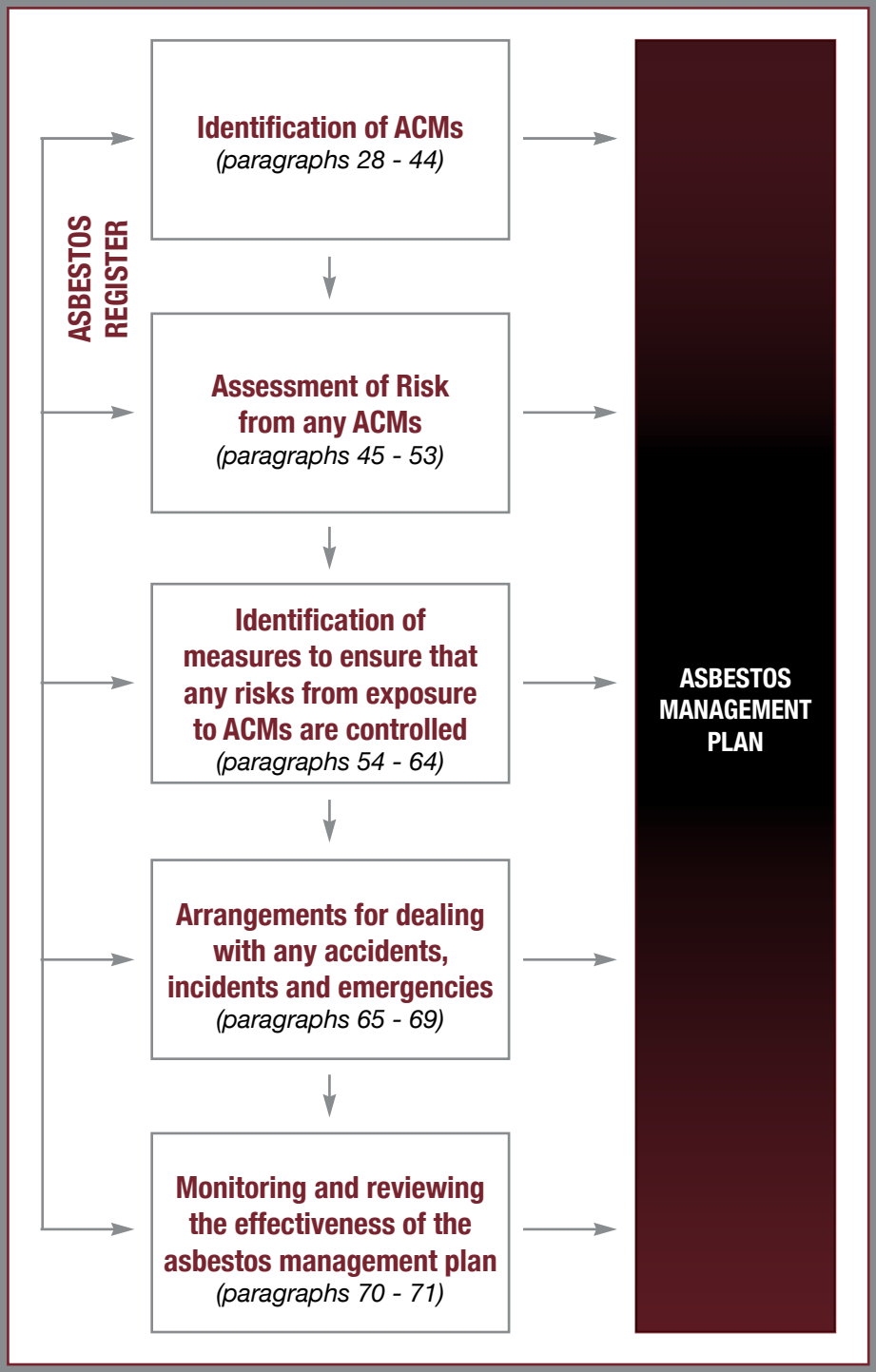
19 The prime duty for carrying out this function is placed upon employers or the self employed when they have responsibility for the maintenance and repair of premises which they occupy. Where others, such as the building owner, managing agent or landlord, have responsibility for all or part of the premises, they also have a duty to ensure that the asbestos management plan is prepared in respect of the areas under their control.

20 The asbestos management plan should be prepared with full consultation, involvement and information sharing between all parties having responsibility for the workplace and be communicated to all employees or self employed persons, including contractors and maintenance workers, who use the premises as a workplace. A copy of the asbestos management plan must be readily available at all times.

21 Any decision reached that there are no ACMs present in a non-domestic building or structure must be capable of being justified by adequate evidence. It is considered reasonable to assume that any building built after 2000 is unlikely to contain asbestos.

22 Domestic premises owned by domestic clients (owner occupied) do not need an asbestos management plan, as such premises fall outside the scope of the health and safety at work legislation. Where construction work, including refurbishment, intrusive works and demolition is carried out, the contractor, or other person at work, must take appropriate steps to identify any ACMs that may be disturbed as a result of their working activities.

Figure 1 : Asbestos Management Plan Flow Chart



"The asbestos register should be kept for the life of the building"

23 The asbestos management plan (see Figure 1) should include:

1. An asbestos register. The register should include:
   - The identification of asbestos-containing materials that may be on the premises;
   - An assessment of risk from any such asbestos-containing materials;
2. Identification of measures required to be carried out to ensure that any risks from exposure to asbestos-containing materials are controlled;
3. Arrangements for dealing with any accidents, incidents and emergencies;
4. Arrangements for monitoring and reviewing the effectiveness of the asbestos management plan.

24 There is also a responsibility on employers and the self employed, when working on any building or structure, to ensure that both the individuals carrying out the work, and others, are not exposed to the release of asbestos fibre from ACMs. Prior to undertaking any work where there is a risk of working on or with ACMs, they should ascertain from the person having responsibility for the premises whether there are any ACMs in the building or structure, and ask to see the asbestos management plan and/or asbestos register in particular.

25 If no asbestos management plan is in place, or no asbestos register provided, no work should be carried out until an appropriate survey of the relevant areas has been carried out by a competent person (see paragraphs 31-34). This is particularly important in the case of work in domestic properties, where the householder will not have any responsibility under health and safety at work legislation to produce an asbestos management plan. Contractors working in or on domestic properties will be at work and must therefore, prior to starting work, take appropriate steps to identify any ACMs that may be disturbed as a result of their working activities.

26 The asbestos register should be made available, on request, to the emergency services, in particular the States of Jersey Fire and Rescue Service, so that they can take the appropriate precautions in the event of an emergency. You may wish to consider keeping a copy of the register next to the fire alarm panel. Consideration should also be given to storing a copy of the asbestos management plan off site.

27 There is also a responsibility on employers and the self employed, when working on any building or structure, to ensure that both the individuals carrying out the work, and others, are not exposed to the release of asbestos fibre from ACMs. Prior to undertaking any work where there is a risk of working on or with ACMs, they should ascertain from the person having responsibility for the premises whether there are any ACMs in the building or structure, and ask to see the asbestos management plan and/or asbestos register in particular.

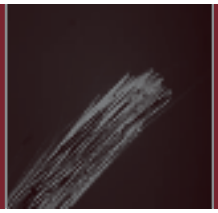
Preparation of the asbestos register

28 Because of the widespread use of ACMs, asbestos is likely to be present in many workplace buildings or structures. Examples of typical uses of ACMs are contained in the Appendix.

29 The identification of any ACMs can be assisted by reviewing building plans or other documentation, such as specifications, that may exist, but in many situations not all work which has been carried out on the building or structure may have been recorded. Anyone who may be able to provide more information should be consulted, including members of staff who are familiar with the premises. Any information that has been provided must be checked for accuracy.

30 In practice, in most cases there is insufficient evidence available to justify a decision that no ACMs are present. In such cases an asbestos survey should be carried out to determine whether or not there may be any asbestos present on the premises and its condition checked. All areas of the premises such as storage areas, corridors, yards, sheds, outbuildings, service ducts, corridors, vertical risers and external pipe runs should be included - in fact any part of the premises where asbestos might have been used. Fixed plant and machinery, like printing machines and parts of process plant, and also mobile units which only come onto the premises from time to time, must also be included.

31 It is essential that the person undertaking the survey is competent to undertake the task. The HSE publication *'Asbestos: The survey guide'* HSG 264, provides guidance to those carrying out surveys, and contains useful information for persons who commission surveys.



32 The surveyor can be an individual or an organisation. Before employing anybody to undertake a survey you must check that the person or organisation you employ is competent to undertake the type of survey required.

33 Individuals can demonstrate competence to undertake specified surveys through a combination of qualifications and experience. The most widely held training qualification in the UK is the British Occupational Hygiene Society (BOHS) Module 'P402: Building surveys and bulk sampling for asbestos'. This is a basic minimum qualification for individuals carrying out asbestos surveys and does not, on its own, demonstrate competency. Therefore, in addition, individuals must also have at least 6 months full time, relevant practical field experience on asbestos surveys under the supervision of experienced and suitable qualified personnel. Further training and experience will be necessary to ensure competence in refurbishment and demolition surveys, particularly for large premises.

34 Some organisations who offer to undertake asbestos surveys are independently accredited by UKAS as complying with BS EN ISO/IEC 17020: 2012 to undertake surveys for ACMS. Accreditation provides assurance that an organisation employs competent individuals and that there is a quality system within which those individuals are required to work. Information on UKAS accredited organisations is available on the internet at www.ukas.com

Types of asbestos surveys

35 The type of asbestos survey required will vary during the lifespan of the premises, and several may be needed over time. It is therefore important that the client and the surveyor know exactly what type of survey is to be carried out and where, and to what specification.

36 For the purposes of managing the exposure to asbestos in accordance with Part Two of this ACoP, there are two different types of asbestos survey: a "Management" survey and a "Demolition/refurbishment" survey.

37 A **Management survey** is undertaken to address the risks from asbestos associated with the continued use of the building (i.e., normal occupancy and activities and associated maintenance). This type of survey is designed to ensure that

no-one is harmed by the continued presence of asbestos in premises (i.e., ACMs remain in good condition and that no-one inadvertently disturbs ACMs during maintenance and other work). The purpose of the survey is to locate, so far as is reasonably practicable, the presence and extent of any suspect ACMs in the building and assess their condition.

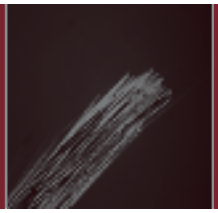
38 All areas should be accessed and inspected so far as reasonably practicable. This includes under carpets, above false ceilings and inside risers, service ducts, lift shafts etc. It may involve minor intrusive work. The degree of disturbance will depend on the extent of intrusion that is, or will be, necessary for normal maintenance activities. The areas to be sampled inside buildings should normally be unoccupied during sampling.

39 All non-domestic buildings normally require a management survey as part of the on-going arrangements to manage asbestos, and to assist with the preparation of the asbestos register.

40 Where demolition or major refurbishment is planned, a management survey is not sufficient to ensure that all ACMs in a building have been identified. A **Demolition/refurbishment survey**, a far more intrusive survey than a management survey, designed to establish the full extent and complete presence of asbestos, must be undertaken of the relevant areas prior to work starting. This type of survey is not normally required to simply prepare the risk register.

41 The intention of a demolition/refurbishment survey is to locate all the ACMs, including those which are hidden, so that they can be removed before the demolition or refurbishment takes place. This will involve intrusive and destructive inspection work in order to penetrate all parts of the building structure.

42 As aggressive inspection techniques will be needed to break through walls, ceilings, claddings and partitions, demolition and refurbishment surveys should only be conducted in unoccupied premises to minimise the risks to persons on the premises. Ideally the building should not be in service and all furniture and furnishings removed.



43 In the event that only certain parts of a building are to be upgraded, refurbished or demolished, only the areas affected need to be subject to the intrusive demolition/refurbishment survey. In such instances, effective segregation of the survey area must be provided (e.g., full floor-ceiling partition). Under no circumstances should people other than the surveyors involved in the work remain in the rooms or areas of buildings when intrusive sampling is performed.

44 Although carrying out sampling of materials for the purposes of identifying asbestos is not subject to the Asbestos-Licensing (Jersey) Regulations 2008, any sampling of materials carried out for the purposes of identification must have suitable precautions in place to control the risks from exposure to asbestos during the sampling process. Further guidance is provided in *'Asbestos: The survey guide'* HSG264.

Assessment of risk from any asbestos-containing materials

45 The person having responsibility for the maintenance or repair of the non-domestic building or structure must carry out a suitable and sufficient assessment of the risks posed by the presence of any ACMs.

46 The management survey report, therefore, has to provide sufficient information to enable an asbestos register to be prepared and for an assessment of the risks posed by the presence of any ACMs to be carried out. For any presumed or known ACMs this will include:

- The location, extent and product type (e.g. cement, board, lagging etc.);
- The accessibility, condition and surface treatment of the materials, and their ability to release fibres into the air should they be disturbed in some way;
- The type of asbestos (e.g. crocidolite, amosite or chrysotile).

47 The risk assessment must evaluate the risk to persons posed by each area of ACM. In addition to the factors listed above, consideration will need to be given to the foreseeable types of maintenance or other disturbances which may take place.

48 ACMs which:

- Have already deteriorated or been damaged;

- Are likely to be disturbed in the course of planned work;
- Are very accessible and likely to be disturbed or damaged in normal use;
- May be damaged by vandalism;

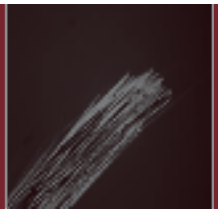
will present a greater risk, and must be given high priority for action e.g. protect/enclose, seal/encapsulate, repair or remove.

49 Each separate location and type of presumed or known ACM will need to be assessed individually. This will establish which of these are most likely to potentially release high airborne levels of fibres, and should be taken into account when determining what remedial action is required, and which materials should have the highest priority for action (repair, sealing, removal or leaving in place and monitoring the condition).

50 The most significant risk will be from asbestos in areas where maintenance or reorganisation is needed regularly, particularly if those areas are subject to heavy use during the normal working day; or where there is asbestos which is liable to damage (for example, where it might be hit by forklift trucks or heavy trolleys, or maintenance of air conditioning and heating systems will disturb it). The risk will be greater still if the ACM is in a confined space and/or an unventilated area. Remember that the potential for disturbance must be considered. For example, a maintenance worker using power tools close to an ACM could disturb it. Asbestos in a very poor condition might be disturbed simply by somebody just walking past. There is unlikely to be any significant risk from ACMs in areas that are unoccupied, inaccessible, and not likely to be disturbed by maintenance activities.

51 Even when ACMs are in parts of the premises where people regularly work they will not present a high risk to health provided that: the ACM is in good condition and fibres cannot escape into the air; it is not prone to accidental damage; and there is a system in place to prevent anyone from working on it without proper protection. Where it is considered that there may be a risk of asbestos fibres being released, appropriate action must be taken to control the risks.

52 Further guidance on the assessment and management of asbestos in buildings is contained within the HSE publication *`A comprehensive guide to Managing Asbestos in premises'* HSG 227.



53 It should be noted that the assessment of risk of any ACMs identified during a demolition/refurbishment survey is not required, as all such ACMs will have to be removed prior to the work commencing.

Identification of measures required to ensure that any risks from exposure to asbestos-containing materials are controlled

54 The next stage in the preparation of the asbestos management plan is to decide on the manner in which the risk of exposure to asbestos fibre is going to be controlled. The proposed actions, and the justification for their selection, must be recorded in the asbestos management plan.

55 Possible actions may include:

- Leaving the ACMs in place and monitoring their condition;
- Protect/enclose ACM;
- Seal/Encapsulate the ACM to reduce the likelihood of fibre release;
- Repair ACM;
- Removal of the ACM.

56 Although asbestos is a hazardous material, it can only pose a risk to health if the asbestos fibres become airborne and are then inhaled. ACMs only release fibres into the air when they are disturbed, which may happen because of accidental or deliberate damage or disturbance.

57 If the ACMs are in good condition and are unlikely to be damaged or disturbed, then it may be better to leave them in place and to introduce a monitoring regime. Where ACMs are in places where they will be prone to damage, a monitoring regime is unlikely to be sufficient. There are also instances where ACMs will have to be removed despite them being in good condition, for example prior to demolition, major building work or planned maintenance which is likely to disturb them.

58 ACMs which are only slightly damaged can be repaired, encapsulated or enclosed. These options are worth considering if no major alterations or refurbishment to that area of the premises is planned.

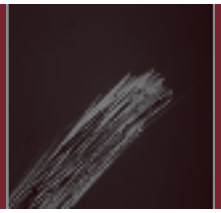
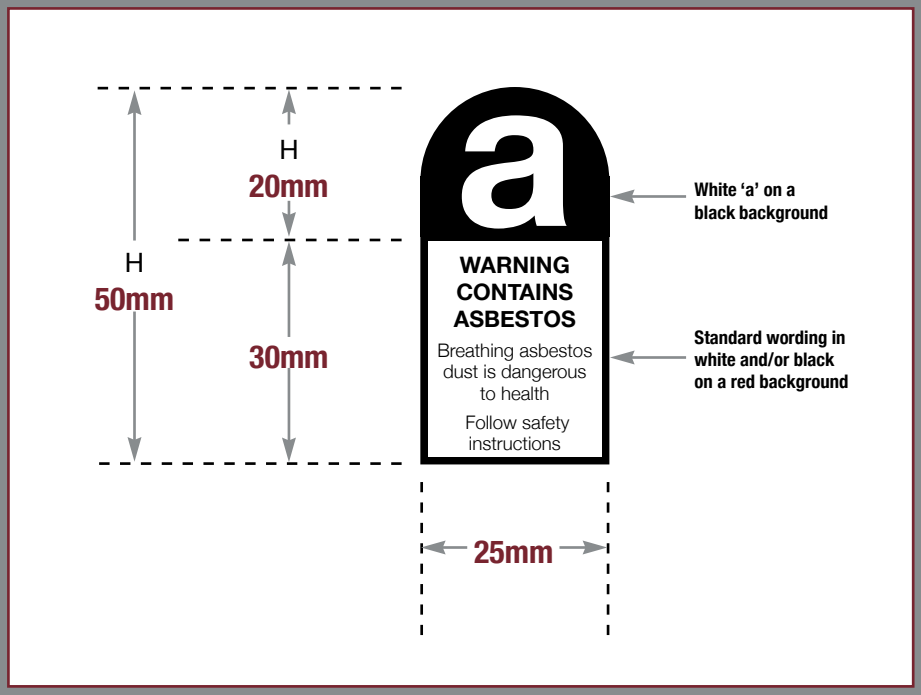


Figure 2 : International Asbestos Label



59 ACMs in poor condition, that is where the material's exposed surface has substantial areas of visibly loose fibres that may be released by very slight disturbance, or any material which has suffered significant damage or deterioration, will usually need to be removed.

60 Where it is decided to leave ACMs in place, including those which have been sealed/encapsulated and/or repaired, they should be clearly identified, for example with suitable asbestos warning labels, see Figure 2 (except where this may cause undue alarm, such as in public places). Arrangements must also be made to carry out inspections at regular intervals to ensure that the condition of the ACM does not deteriorate, and/or that there has not been an increase in the potential risk to persons of exposure to asbestos fibres due to, for example, a change of use of an area. A record of all such inspections should be maintained and signed off by a competent person. Comparing photographs taken at each inspection can be a useful way of monitoring the condition of ACMs over time.

61 The time period between monitoring will vary depending upon the type of ACM, its location and the activities in the area concerned, but would not be expected to be more than 12 months in most cases. ACMs in locations where there is a lot of activity will need more frequent monitoring. The surveyor may make recommendations in this respect.

62 Decisions about what to do in order to manage the risk from each area of ACMs in the premises must be recorded in the asbestos management plan, and any records/ drawings must be kept up to date. For example, if a decision is made to remove ACMs, once this is done the management plan and any relevant drawings/ records must be updated.

63 Most work carried out on asbestos insulation, asbestos insulation board and asbestos coatings, may only be carried out by contractors licensed or approved under the Asbestos-Licensing (Jersey) Regulations 2008 (see Part Three of this ACoP).

64 Work on ACMs which are not subject to these Regulations must be carried out by trained and competent operatives in accordance with the guidance set out in Part Four of this ACoP.

Arrangements to deal with accidents, incidents and emergencies

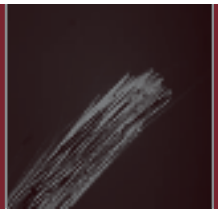
65 Employers and others with responsibilities under this ACoP should have emergency procedures in place for any accident, incident or emergency relating to asbestos; for example, accidental disturbance of ACMs during building work, unless the amount of asbestos in the premises is so small that any risk would be minimal. These procedures should be contained in the asbestos management plan, and include the steps to be taken to minimise the risks of exposure to asbestos and measures in place to carry out emergency repairs.

66 In any circumstance where there is an accidental uncontrolled release of asbestos into the workplace, the cause of the uncontrolled release should be identified and adequate control regained as soon as possible.

67 Any persons in the affected area must leave immediately. All tools and materials should be left in the potentially contaminated area. The area should be sealed to prevent further access and to prevent the spread of asbestos fibre to other areas. Where persons have been contaminated with visible dust or debris then arrangements should be made to decontaminate those affected. Any clothing or personal protective equipment should be decontaminated or disposed of as contaminated waste.

68 Appropriate arrangements must be in place to ensure that the extent of the contamination is assessed by a competent person and the area that may have been contaminated by asbestos fibres is thoroughly cleaned of visible debris or dust. This work should only be carried out by operatives or contractors who have been trained and are competent to carry out the work, and who have the appropriate equipment. In the case of a significant disturbance of asbestos insulation or asbestos insulation board, this will almost certainly require the use of a licensed asbestos contractor. Air sampling should also be carried out, where it is necessary, to ensure that the remedial measures taken have been effective in reducing the potential for exposure to asbestos fibres.

69 If an employee has been potentially exposed to asbestos fibres in an incident, a note that the exposure has occurred should be added to the employee's personal record. A copy of the note must be given to the employee with instructions that it should be kept indefinitely. It is also recommended that they consult their GP to have



a note of their possible exposure made on their personal medical record, which should include date(s), duration, type of fibre and likely exposure levels (if known).

Monitoring and reviewing the effectiveness of the asbestos management plan

70 The management plan should be reviewed at least every 12 months to ensure that the management processes remain effective and the arrangements are being properly implemented.

71 Any changes in the arrangements or circumstances affecting the management of exposure to asbestos, such as new staff having responsibility for implementing the arrangements, or the deterioration or removal of ACMs, must be recorded and the asbestos register updated accordingly.

Part Three

Work on asbestos-containing materials subject to the Asbestos-Licensing (Jersey) Regulations 2008

The Asbestos-Licensing (Jersey) Regulations 2008

72 In view of the serious risks to health caused by exposure to asbestos fibres when working on or disturbing ACMs, most work with ACMs which can lead to the high release of asbestos fibres is restricted to asbestos removal contractors. These contractors must be licensed by the Minister for Social Security under the Asbestos-Licensing (Jersey) Regulations 2008, or have received written approval from an Inspector of the States of Jersey Health and Safety Inspectorate, to work on a licence issued under a similar regulatory scheme in the UK or Northern Ireland. An up-to-date list of asbestos removal contractors who are licensed by the Minister for Social Security, or who have had their UK or Northern Ireland licence extended to cover work in Jersey, is available on the Health and Safety Inspectorate website www.gov.je/hsi or directly from the Inspectorate.

73 The Licensing Regulations apply to work with asbestos insulation, asbestos insulation board and asbestos coatings (except textured decorative coatings), which includes removal and repair and work in a supervisory or ancillary capacity. Supervisory work means work involving any direct supervision or influence over those removing, repairing or disturbing asbestos. Ancillary work means work that is associated with the main task of work with asbestos. An example would be the putting up and taking down of scaffolding to provide access for licensable work where it is foreseeable that the scaffolding activity is likely to disturb the asbestos.

74 The requirement for a licence does not apply to situations where:

- The work is of short duration, i.e., where any one person carries out work with these materials for less than one hour in a seven day period, or the total time spent by all workers on the work does not exceed a total of two hours; or
- The work consists solely of air monitoring or collecting samples for the purpose of identification or sample analysis; or encapsulating or sealing an ACM that is in **good condition**.

75 Unlicensed employers cannot string out lengthy jobs by using a number of different employees, nor can they permit one employee to work with asbestos insulation, asbestos insulation board or asbestos coatings for a large number of short spells in any week. This exception is designed to allow for minor maintenance and repair work only, when appropriate control measures must still be implemented.

76 In all other cases an employer or self employed person wishing to carry out work on asbestos insulation, asbestos insulation board or asbestos coating, must apply for a licence from the Minister for Social Security or, where they are already in possession of a licence issued by the UK Health and Safety Executive or Health and Safety Executive Northern Ireland, apply to the Health and Safety Inspectorate for their licence to be approved for working in Jersey.

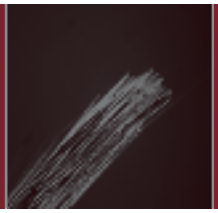
77 The exemption for the need to apply for a licence under the Asbestos-Licensing (Jersey) Regulations 2008, does not provide any exemption from the requirements under the Health and Safety at Work (Jersey) Law, 1989, the Health and Safety (Management in Construction)(Jersey) Regulations, 2016, and the Construction (Personal Protective Equipment) (Jersey) Regulations, 2002. Any work carried out on ACMs should, therefore, be carried out in a manner which meets these legal requirements and the relevant guidance set out in this ACoP.

Application for a licence to work with asbestos insulation, asbestos insulation board or asbestos coating

78 All licences issued for work with asbestos insulation, asbestos insulation board and/or asbestos coating, which include work carried out in a supervisory or ancillary capacity, are granted by the Minister for Social Security.

79 Persons applying for a licence must satisfy the Minister that they have adequate knowledge, experience and arrangements to carry out the work safely and without risks to the health of employees and others during the work.

80 The Health and Safety Inspectorate carries out the administrative procedures involved in the assessment of applicants for a licence under the Asbestos-Licensing (Jersey) Regulations 2008 and provides the Minister for Social Security with information relating to the application. It is, however, the responsibility of the Minister to issue or refuse the application.



81 Every applicant will be formally assessed on all aspects of managing and working with ACMs, including knowledge of asbestos and asbestos requirements, practical aspects of the work, management policies, systems and record-keeping arrangements. All applicants must be able to demonstrate that senior management is actively responsible for health and safety. All applicants must also be able to demonstrate a working knowledge of current Jersey legislation relating to asbestos, and be familiar with current HSE publications.

82 The process for the formal assessment is carried out by the Health and Safety Inspectorate in accordance with the `Asbestos Licence Assessment Guide' developed by the Health and Safety Inspectorate. Copies of the guide are available from the Inspectorate.

83 In the first instance, an application for a licence should be made to the Health and Safety Inspectorate who will assist and advise on the requirements for processing an application in accordance with the Asbestos Licence Assessment Guide. The application form for a licence and any subsequent renewal is available on the Inspectorate website or from the Inspectorate.

84 Where an employer or self employed person already holds a licence issued by the UK HSE or the Health and Safety Executive Northern Ireland, they may apply to the Health and Safety Inspectorate for the licence to be extended to work to be carried out in Jersey. The appropriate application form, a copy of the licence issued by the relevant authority and details of the company profile should be submitted to the Health and Safety Inspectorate. Checks on the information will be carried out, and contact made with the issuing authority of the licence, to review the applicant's performance history (if available).

85 Providing the checks are satisfactory, an Inspector will provide written approval to the licence holder to carry out work in Jersey, subject to the conditions set out in the licence held and for the time period that it covers. Additional conditions may be applied if considered appropriate. Any amendments to the UK licence must be notified to the Inspectorate immediately. Although not exhaustive, examples would include changes in terms and conditions, reduction in term and changes in business address. Failure to notify the Inspectorate of any such changes may result in the approval to work in Jersey being withdrawn.

Table 1 : Asbestos licence standard conditions

1 This licence (including any schedule), or a copy thereof, should be made available on request, by the licensee, for inspection by any person to whom the licensee submits a tender or quotation for work with asbestos insulation, coating or board, and shall be available at all worksites.

2 The licensee shall give notice in writing of the work to the Health and Safety Inspectorate at least 14 days before the work is commenced, or such other period as the Inspectorate will allow. The notice shall specify the type of work to be carried out, the likely duration of the work, and the address of the premises at which the work is to be carried out and the date of commencement of the work activity. The Health and Safety Inspectorate must be informed as soon as possible if this date changes.

3 The notice of work required by Condition 2 above shall include:

(a) a suitable and sufficient written statement of the method of work to be used when asbestos or asbestos-containing material is being handled;

(b) a suitable and sufficient written specification of the equipment for the protection and decontamination of those engaged in asbestos work and also for the protection of other persons.

4 The licensee shall ensure that all work with asbestos is supervised by a competent employee having detailed knowledge of the Asbestos-Licensing (Jersey) Regulations 2008, and other legal requirements relating to work with asbestos, relevant codes of practice and guidance material published both in Jersey and the United Kingdom.

5 All asbestos waste accumulated by the licensee during any work with asbestos insulation, coating or board must be disposed of in a manner approved by the Government of Jersey, Infrastructure, Housing and Environment Department.

“All operatives who work with asbestos must be carefully selected and suitably trained...”

Asbestos licence conditions

86 The issue of a licence under the Asbestos-Licensing (Jersey) Regulations 2008, may be subject to such conditions or restrictions as the Minister for Social Security may consider appropriate. In practice most licences contain five standard conditions, which are set out in Table 1.

87 The licence holder is required to notify the Health and Safety Inspectorate of any licensable work, in writing, at least 14 days before work commences, using the Notification Form available on the HSI website or from the Inspectorate. A suitable and sufficient written Plan of Work, setting out details of the work and how the risks are being adequately controlled, must also be drawn up by a competent person following a visit and full appraisal of the site and be submitted at the same time. Table 2 sets out the detailed information required in a Plan of Work.

88 Generic information about frequently used company procedures will not need to be in the site-specific Plan of Work. These can form part of general procedures or policy documents and be cross referenced in the site specific Plan of Work, but a valid copy must be provided to the Health and Safety Inspectorate to be held on file, and be available on site for reference purposes.

89 Further guidance on the Asbestos-Licensing (Jersey) Regulations 2008 is contained in *'Guidance on the Health and Safety at Work Asbestos-Licensing (Jersey) Regulations 2008'* S.W.7 which can be downloaded from the HSI website: www.gov.je/hsi or by contacting the Inspectorate.

90 Employers must make sure their employees follow the plan of work so far as it is reasonable to do so. If the work cannot be carried out in accordance with the plan of work, it must be stopped until the risks are reassessed, a new plan of work is drawn up or the existing plan amended. Any significant changes must be notified in writing to the Health and Safety Inspectorate.

Personnel requirements

Appointment of supervisor

91 Prior to carrying out work with asbestos insulation, asbestos insulation board and asbestos coatings, the employer must appoint a competent employee

Table 2 : Elements required for Plan of Work

PLAN OF WORK

ASBESTOS-LICENSING (JERSEY) REGULATIONS 2008

The purpose of a Plan of Work is to provide a practical document, which summarises the key control measures based on the specific characteristics of a particular site and the actual work involved. It is intended to direct the work of the asbestos removal team. Generic information about company procedures, eg in relation to hygiene facilities, decontamination, transiting, PPE/ RPE, equipment checks, bagging of waste etc. should not be included in the Plan of Work, other than by cross reference. This information should be contained in the company's latest standard procedures, a copy of which should be retained on site and lodged with the HSI. The Plan of Work should clearly identify when and how the site procedures on a particular job will differ from the standard arrangements.

1 DETAILS OF CONTRACT

- **Name of client and contact details**
- **Name of Principal Contractor (if applicable)**
- **Details of any other asbestos licence holder involved (if applicable)**
- **Full address of site**
- **Name and telephone number of the competent person preparing the Plan of Work**
- **Name and telephone number of supervisor**
- **Number of employees engaged on the work including persons working outside any enclosures**
- **Start date and finish date of work – to include setting up and dismantling of enclosures**
- **Name and contact details of UKAS accredited analyst undertaking 4 stage clearance and issuing certificate(s) of reoccupation**
- **Confirmation analyst appointed by the Client**

2 SCOPE OF WORK

- **Provide details of any asbestos survey**
- **Description of the work**
- **The type and form of asbestos, including condition**
- **Location of asbestos, e.g. roof space**
- **Quantity to be removed e.g. number of bags**
- **Arrangements for considering and approving departures form the Plan of Work**

3 CONTROL MEASURES

- **Details of expected exposure levels using controls specified**
- **Number and specification of negative pressure unit(s).**
- **Calculated airflow (at least 1000m3 /hr for enclosures < 120m3)**
- **Number of air changes per hour**
- **Checks undertaken to ensure adequate negative pressure and/or airflow**
- **Arrangements for smoke testing and witnessing**
- **Details and location of viewing panels and CCTV**
- **Sketch plan showing size of enclosure, location of airlock and bag lock, NPUs, transit route etc**
- **Location of DCU, including positions of water and electrical supplies and drainage point**
- **Relevant photographs**
- **Arrangements for four-stage clearance**

Table 2 : Elements required for Plan of Work

4 METHOD OF WORK

- Describe fibre suppressant technique to be used
- If wet strip system, describe injection technique, time allowed for penetration
- If AIB describe means of fixing eg screwed, nailed etc., and dimensions of tiles/ sheets to be removed
- Additional local exhaust ventilation required
- Tools and other equipment to be used, including access equipment
- Any additional controls to reduce exposure

5 WASTE DISPOSAL

- emporary storage arrangements for bags (if applicable)
- Waste routes and location of skip (show on sketch)
- Transportation and final disposal arrangements.

6 AIR MONITORING

- Details of sampling strategy including personal and/ or background sampling
- Analysis by which laboratory

7 SITE SPECIFIC EMERGENCY PROCEDURES

- Fire risks and precautions taken
- First aid arrangements
- Arrangements to deal with minor and major incidents (including inadvertent asbestos disturbance during enclosure construction)

8 OTHER RELEVANT SITE SPECIFIC INFORMATION: Not in standard procedures

- Certificate of Notification issued by the Health and Safety Inspectorate available on site
- Copy of last clearance certificate to be kept in DCU
- Welfare facilities
- Clients' requirements.
- Disconnection / isolation of utility services
- Work on live plant etc
- Extremes of temperature (potential for heat or cold stress)
- Any special characteristics of site
- Site security

to supervise the work. The supervisor must ensure that the work is carried out in accordance with the plan of work.

Number of operatives involved in the work

92 In most cases a minimum of three operatives (including the site supervisor) will be required on site at any one time when licensed asbestos removal work is being undertaken. An 'outside man', i.e., an operative outside of the working enclosure, must be available at all times whilst work is taking place in the enclosure. Although in practice this person is often the supervisor, this need not be the case.

93 If consideration is being given to using less than three operatives on a project, this must be clearly justified in the Plan of Work and agreed with the Health and Safety Inspectorate in advance.

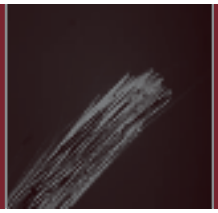
Training

94 All operatives who work with asbestos insulation, asbestos insulation board and asbestos coatings must be carefully selected and suitably trained in order for them to be able to carry out their work without exposing themselves or others to asbestos fibres. Training on its own does not make people working with asbestos 'competent'. Competence is developed over time by implementing and consolidating skills learnt during training, on-the-job learning, instruction and assessment.

95 The training should be appropriate for the role for which the person is being trained (for example operative, supervisor or manager) and the nature of the work being trained for (for example asbestos removal, work ancillary to asbestos removal etc.), and the type of training being provided, i.e., initial training or refresher training.

96 Refresher information, instruction and training for licensable work should be appropriate to the work each worker is doing and be based on training needs analysis (TNA). Refresher training should be provided at least annually or more frequently if:

- Work methods change;
- The type of equipment used to control exposure changes;
- The type of work changes significantly;
- Gaps in competency are identified;



97 Persons in a supervisory capacity should be provided with additional training, at an appropriate level, so that they can effectively carry out their role on site. This should include their responsibilities for directing, supervising and monitoring all aspects of work on site, including peoples' health and safety.

98 A record of the information, instruction and training received by each operative should be maintained. Detailed guidance on training for employees, supervisors and others working with asbestos-containing materials is set out in the HSE publication *'Asbestos: The licensed contractors' guide'* HSG 247.

Health records and medical surveillance

99 Employers must keep a health record for any employee who undertakes licensable work. The health record should ideally be kept indefinitely, but in any event for a minimum of 40 years after the last entry made in it or until the employee would reach the age of 80 years, whichever ensures the longer retention time. It should be kept in a safe place and contain at least the following information:

- Surname, forenames, sex, date of birth, permanent address, postcode, and Social Security number;
- A record of the types of work carried out with asbestos and, where relevant, its location, with start and end dates and with average duration of exposure in hours per week, exposure levels and details of any respiratory protective equipment (RPE) used;
- A record of any personal monitoring which has been undertaken;
- A record of any work with asbestos prior to this employment of which the employer has been informed; and
- Dates of medical examinations.

100 Anyone who undertakes licensable work must have been medically examined within the previous two years. Employers will need to obtain certificates of examination for any employees who state that they have been examined within the previous two years. Employers must check with the previous employer or examining doctor that certificates are genuine.

101 Medical examinations should take place during the employee's normal working hours and be paid for by the employer. Employees should cooperate with their employer in attending medical examinations.

102 Where an employee is diagnosed with a condition related to exposure to asbestos, the employer should review the health of all other employees similarly exposed, as well as reviewing the assessments and methods of work.

103 If the examination reveals the presence of any potentially limiting health conditions then a decision should be reached on whether a general fitness assessment is required in addition to the asbestos medical examination.

Personal monitoring

104 Personal air monitoring will be necessary to check the effectiveness of the control measures adopted to reduce airborne fibre levels and to confirm that the RPE chosen provides the appropriate degree of protection where the airborne level of asbestos fibres exceeds, or is liable to exceed, the control limit of 0.1 f/cm^3 averaged over a continuous period of 4 hours.

105 Personal monitoring is not required for every job, however, the data should be used to guide assessment and planning for future, similar jobs.

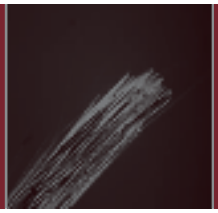
106 A personal sampling strategy should be developed to ensure that, over time sampling, captures exposures to all operatives across a full range of activities, with a particular focus on higher risk activities e.g. during actual removal activities.

107 All results of personal monitoring carried out should be retained on the individual's personal exposure record.

Working methods

Encapsulation

108 The removal of existing ACMs can itself present the greatest risk of significant exposure to asbestos fibres. In some cases it may not be necessary to remove the ACMs, and the materials can be protected or encapsulated.



These processes themselves require proper management as control limits may be exceeded. Encapsulation may require a specialist contractor with an understanding of the techniques to carry out the work, as fibres may be released. Before considering this option consideration should be given to the following matters:

- The type and condition of the ACM;
- Whether the substrate is sound enough to allow the encapsulation to adhere;
- Whether any water penetration via the substrate will increase the weight on the encapsulation and cause it to fall away from the ACM;
- Whether further damage could occur due to traffic operations, bird or rodent attack or vandalism;
- Whether access is available to allow the process to be effective;
- Whether the encapsulant will ensure the thermal and acoustic attributes of the structure are maintained;
- Whether the approach is simply putting off the day when the asbestos has to be removed at further significant cost.

109 Various types of encapsulation are available, each suitable for particular applications. Each have their particular advantages, be they 'boxing-in' the ACM with board materials, or the use of bulk brush or spray applied polymeric or cementitious materials. The correct choice depends on the location and condition of the ACM, its ability to take the weight of any encapsulant and the ease in which the encapsulant can be applied to the ACM. Some materials will simply seal the surface and not offer any protection against impact damage.

Removal of asbestos insulation, asbestos insulation board and asbestos coatings

110 Work involving the removal of asbestos insulation, asbestos insulation board or asbestos coatings must be carried out in a manner that reduces the potential exposure to asbestos fibres to those undertaking the task, and other persons in the vicinity. The contractor carrying out the removal of ACMs will be expected to include details in the Plan of Work of the control measures that are to be put in place to achieve this aim.

111 Detailed guidance on methods of removing asbestos insulation, asbestos insulation board and coatings is contained in HSE publication *'Asbestos: The licensed contractors' guide'* HSG 247. This includes guidance on:

- Controlled asbestos removal techniques;
- The four-stage clearance procedure; and
- Cleaning and disposal of asbestos waste.

112 The method of removal of the asbestos will have an obvious effect on the amount of asbestos fibre that becomes airborne and the method selected should minimise fibre release. The methods to be used should be clearly stated in the Plan of Work, but uncontrolled dry stripping of asbestos **must never take place**.

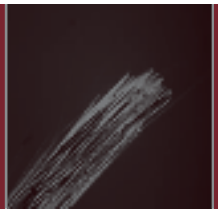
113 There are two broad categories of controlled stripping techniques which can be used to minimise the release of fibres during asbestos removal:

- Controlled wet stripping; and
- Dry stripping with control at source, e.g. wrap-and-cut, glovebags, shadow vacuuming

114 The type of method (or combination of methods) used will depend on a number of factors including:

- The type of ACM, e.g., lagging, sprayed coating, board;
- The thickness of the ACM;
- The presence and nature of any coating on the ACM;
- The type and nature of fixing, e.g., nailed, screwed;
- Miscellaneous factors, e.g., whether pipework is redundant, the material is damaged, accessibility etc.

115 Enclosures are a fundamental component in the control of the risks associated with the release of asbestos fibres during removal work, and are required for almost all licensable asbestos removal work. Where consideration is being given to such work without the provision of an enclosure, this should be discussed with the Health and Safety Inspectorate at an early stage.



116 The enclosure should be maintained under negative pressure and the pressure should be uniform as possible throughout the enclosure. Negative pressure units and supplementary air inlets should be located to achieve good air flow and to avoid dead spots. For standard timber/ polythene asbestos enclosures door flap deflection can be used as a practical means to confirm the air extraction rate and the extent of negative pressure within the enclosure. A door flap deflection of between 200-250mm can be used as a key indicator of achieving satisfactory ventilation of enclosures with a volume of <120m^3. The actual airflow through the NPU should also be measured at the start of each job to confirm that the required airflow is achieved.

117 Wherever possible, each enclosure must have enough viewing panels to be able to monitor the work from outside the enclosure. Airlocks must be of appropriate size to enable asbestos operatives to carry out transiting and decontamination procedures, with enough working space with door flap deflection. Bag locks should be of adequate size to enable the controlled handling and movement of waste out of the enclosure.

118 Detailed guidance on the requirements for enclosures for work with ACMs is contained in HSE publication *'Asbestos: The licensed contractors' guide'* HSG 247. Guidance on airflow management and ventilation of asbestos enclosures is contained in the HSE report *'Asbestos enclosure ventilation research'* 2014.

Maintenance of plant and equipment

119 This section applies to all forms of equipment used to control levels of dust, such as vacuum cleaners, air extraction equipment and filtration units. All equipment should be subject to regular visual inspection (at the start of every shift), monitoring and maintenance, which should all be recorded.

120 Equipment used in the controlled removal of ACMs should comply with BS 8520. This British Standard has 3 parts:

Part 1 (BS 8520-1:2009): *'Controlled wetting equipment. Specification';*

Part 2 (BS 8520-2:2009): *'Negative pressure units. Specification';*

Part 3 (BS 8520-3:2009): *'Operation, cleaning and maintenance of class H vacuum cleaners. Code of practice'.*

121 Thorough examination and testing of air extraction equipment must be carried out at least every 6 months by a trained and competent person. The performance of the unit should be checked after it has been thoroughly examined to establish that airflow through the unit, and pressure drop across the HEPA filter, meets the manufacturers specification. Where the airflow has dropped below its design capacity (e.g., a 2000 cfm unit is only achieving 1500 cfm), this should be clearly marked on the unit itself and included on the test certificate. The lower figure must be used in ventilation calculations.

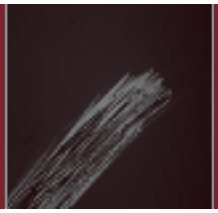
122 Class 'H' vacuum cleaners should be thoroughly examined every 6 months by a competent person and in accordance with the manufacturer's instructions. The effectiveness of the HEPA filter should be established during these examinations, but a filtration test for the entire vacuum cleaner must be available, not just the HEPA filter.

123 Defects in any equipment should be reported and corrected as soon as possible. Where a defect may result in exposures above the relevant control limit, the work should be stopped until the defect is repaired.

Hygiene measures

124 Asbestos workers are potentially most at risk of developing asbestos -related diseases. Removal processes by their nature disturb and release asbestos fibres, resulting in operatives and their clothing being contaminated with fibres which can become airborne and thus become inhaled. Any operative working with asbestos insulation, asbestos insulation board and coatings should therefore be subjected to rigorous decontamination procedures. This will also prevent the spread of asbestos contamination outside the work areas. This is not only important for the operatives themselves but also for others who may become exposed to asbestos fibres which are not removed.

125 The provision of an appropriate hygiene unit, usually referred to as a decontamination unit, or DCU, is essential for licensed asbestos work. The unit should contain, in a prominent position in the clean end, a copy of the clearance certificate from the most recent asbestos removal job. Where transiting arrangements are in place (i.e., the DCU is not directly linked to the enclosure) additional procedures,



PPE and preliminary decontamination is required at the enclosure before travelling to the DCU for full decontamination.

126 Advice on appropriate decontamination procedures for licensed asbestos work is contained in HSE publication *'Asbestos: The licensed contractors' guide'* HSG 247. It is essential that the procedures selected are strictly followed in order to ensure that the potential exposure to asbestos fibres is controlled.

Personal protective equipment

127 Personal protective equipment (PPE) and respiratory protective equipment (RPE) are the last line of defence against exposure to asbestos fibres, and exposure to asbestos should be prevented or reduced to as low as is reasonably practicable by engineering controls before RPE is employed.

128 PPE must be suitable for the task and the individual, maintained in an efficient state, in good repair and in a clean condition.

129 Once it is established that exposure is liable to exceed the control limit of 0.1 f/cm^3, despite the precautions taken, RPE must be provided and worn. This will normally include all licensable asbestos work.

130 Various types of RPE are available and it is essential that the RPE selected matches the type of work to be done, including the working environment, the wearer, other PPE in use and the exposure concentrations (expected or measured).

131 In practice, asbestos workers are most likely to wear a limited range of RPE. A FFP3 filtering half mask may be used for various tasks such as site pre-clean, site set-up, enclosure dismantling, waste handling outside the enclosure and DCU cleaning, whilst a TM3 power-assisted respirator with full face mask and P3 filter(s) is generally required for entry into a live enclosure. Air-fed equipment may be used in some circumstances in place of power-assisted full-face masks.

132 Further guidance on the selection of RPE is contained within HSE publications *'Asbestos: The licensed contractors' guide'* HSG 247 and *'Respiratory protective equipment at work: A practical guide'* HSG 53.

133 To obtain adequate performance during use, the selected RPE must be suited to the individual and worn correctly every time. An essential aspect of the performance of RPE, with a tight fitting full face mask, is the need for a good contact between the face seal of the mask and the operative's skin.

134 A good fit can only be achieved if the operative is clean shaven in the areas of contact and the mask is of a suitable size and shape to fit the wearer. For workers who normally wear glasses, either contact lenses, or a full-face mask which permits the fixing of special frames inside the face piece, should be worn. If neither of these options are suitable, equipment that does not rely on a good face seal for protection should be provided, e.g., a powered or air-supplied hood or blouse.

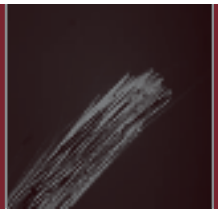
135 Face fit tests, which involve the individual testing of the face seal on the wearer, must be carried out as part of the initial selection of the RPE and/or where the model of RPE is changed. They must also be repeated at least once every 12 months and if the individual loses or gains weight, undergoes any substantial dental work or develops any other facial changes around the face seal area. The user should also carry out a fit check on every occasion that a mask is worn to ensure that a good fit has been obtained.

136 Further information on face fit testing is available in HSE information publication *'Fit testing of respiratory protective equipment facepieces'* HSE OC 282/28.

137 A poorly fitting respirator may create a false sense of security and result in significant exposure to asbestos fibres. Employers should maintain a written respiratory protection program with specific procedures for fit testing and training.

138 Employees must be given adequate instruction, information and training on the following:

- How to fit and use the RPE correctly (including pre-use face fit each time it is worn);
- The uses and limitations of all RPE worn in the work area;
- How to recognise a reduction in air flow and what to do if it happens;



- The manufacturer's instructions on the use, storage and maintenance of the equipment;
- How to clean contaminated RPE when leaving the work area; and
- How to recognise medical signs and symptoms that may limit or prevent the effective use of RPE.

139 RPE may be prone to misuse, careless storage, or may not be suited to an individual, so it is essential that the use of RPE be subject to a strict management system. Guidance on a suitable approach is given in BS EN 529: 2005 *'Respiratory protective devices'.*

140 In addition to RPE, other PPE will be required, including:

- Coveralls to prevent asbestos being carried from the workplace enclosure;
- Wellington boots or other smooth, easily cleanable footwear (without laces);
- Disposable underclothing, socks and gloves;
- Other PPE as required, if shown necessary by the risk assessment.

141 Disposable protective one piece coveralls, constructed from a material that will resist penetration from fibres, with seals at fasteners, neck, wrists and ankles must be worn whenever asbestos is likely to be deposited on clothing.

142 A Type 5, category 3 disposable coverall is the appropriate standard for asbestos work, and most commonly used in practice. The coveralls should be worn in such a way as to reduce the ingress of dust inside the garment. The coverall hood should be worn over the straps of the RPE and the coverall legs should be worn over footwear.

143 Further PPE may be required based on the outcome of the assessment; for example, waterproof clothing for outdoor work.

144 Personal clothing that accidentally becomes contaminated must be treated as if it were PPE and be decontaminated or treated as asbestos waste.

Role of the analyst

145 An analyst will normally need to be appointed for all work subject to the Asbestos-Licensing (Jersey) Regulations 2008. The analyst is responsible for completing site clearance certification for the work area, and may also be involved in determining the air monitoring strategy during the asbestos removal, either in conjunction with the client or the contractor. The decision to appoint an analyst for work which is not subject to the Regulations will need to be considered as part of the assessment process carried out in the preparation of the work.

146 The analyst must be accredited by an independent organisation to carry out the work. UKAS is currently the sole accreditation body in the United Kingdom.

147 If the analyst has direct supervisory control over the asbestos work being undertaken by a licensed contractor, i.e., has direct and immediate influence over the active site activities, including the equipment and controls being used, the work methods used, inspecting the DCU etc., the analyst may also need to be licensed under the Regulations.

148 In order to maintain the independence of the analyst, they should be appointed and paid directly by the person or organisation (i.e., the client) having responsibility for commissioning the work and not by the asbestos removal contractor.

149 The key role of the analyst is to assess the site after the asbestos removal is complete to determine whether the area is thoroughly clean and fit for reoccupation. The assessment procedure is a 4-stage certification process as follows:

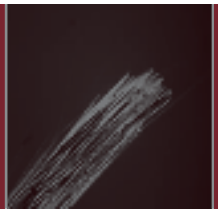
Stage 1: Preliminary check of site condition and job completeness;

Stage 2: A thorough visual inspection inside the enclosure/work area;

Stage 3: Air monitoring;

Stage 4: Final assessment post enclosure/work area dismantling.

150 Detailed guidance on the role and responsibilities of the analyst, and the 4-stage clearance procedure, is contained within the HSE publications



'Asbestos: The licensed contractors' guide' HSG 247 and *'Asbestos: The analysts' guide for sampling, analysis and clearance procedures'* HSG 248.

Waste disposal

151 Asbestos waste, debris, or material considered to be contaminated with asbestos fibres should be placed directly into suitable bags and sealed, or packed and sealed. This includes all enclosure building materials (such as timber and sheeting) and any items that have been present and unprotected inside contaminated areas and cannot, or will not, be cleaned (including tools and equipment). It also includes all disposable PPE used in the enclosure, transit and waste routes, and disposable or discarded items used in cleaning and decontamination, such as clothes and towels. Waste water from the buckets in the airlocks should be discarded through the filtered drainage system in the shower of the DCU.

152 Solid waste should be double bagged using suitable, UN-approved packaging. This should include a red inner bag, which contains the appropriate asbestos warning label, and a clear outer bag. The following protocol should be followed for bagging (or wrapping) waste:

- Ensure the waste material has been dampened down (in the case of AIB) or is wet (a doughy consistency for lagging materials);
- Place the waste carefully into a red waste bag and seal with strong tape;
- In the inner stage of the bag lock (or airlock if no bag lock), the bag should be wiped down and transferred to the middle stage;
- In the middle stage the red bag should be placed in a clear asbestos waste bag, which should then be sealed and wiped down in a similar manner;
- The double-bagged waste should then be collected from the outer stage and transferred to the waste skip.

153 Large items should not be broken up or cut down for disposal in plastic sacks. Such items should be doubled wrapped in suitable polythene sheeting (1000 gauge or equivalent) and labelled accordingly, for example, by securely attaching a red asbestos bag or printed label (with the same information as the bag) to indicate it is asbestos waste.

154 Where bagged or wrapped waste is stored temporarily, it must be kept in an appropriately locked skip or, where this is not practicable, in a suitable locked location. Care should be taken to ensure that any temporary storage location is not in an area where it may be exposed to vandalism, nor close to an area considered to be sensitive, e.g., a school playground. Where temporary storage of waste bags is required on site (only where it is not reasonably practicable to transfer waste bags directly to a suitable waste skip) this should be in a dedicated, locked room. Appropriate asbestos warning signs should be erected and every exposed surface of the room be smooth and impervious so as to allow thorough cleaning after the bags have been removed. This is usually achieved by lining with polythene sheeting.

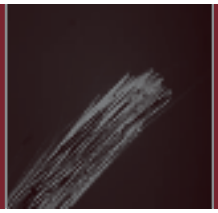
155 A sealed bulkhead must be provided in vehicles used to transport asbestos waste to segregate passengers from the waste. Tools and other equipment should also be segregated to prevent bags being ruptured during transit.

156 Asbestos waste can only be disposed of at a site which holds a waste management licence under the Waste Management (Jersey) Law 2005. Such licences are granted by the Minister for the Environment.

157 The waste must be taken as soon as possible, by arrangement with the waste regulator, to the asbestos waste facility at La Collette. Companies transporting asbestos waste must be registered with the Department of the Environment under the Waste Management (Jersey) Law 2005, and comply with the requirements of that Law. Before transporting asbestos waste, its movement must be pre-notified to the Department of the Environment, using a prescribed form available from the Department of the Environment.

Arrangements to deal with accidents, incidents and emergencies

158 The risk of an accident occurring in an enclosure during asbestos removal is always a possibility, for example, a worker collapsing or falling from height within the enclosure. Emergency procedures for the evacuation of ill or injured personnel, therefore, need to be written into the Plan of Work.



159 Decontamination should be carried out as far as possible. Where practicable employees should vacuum themselves and the victim, and sponge down RPE and boots, but evacuation of the seriously ill or injured person should not be delayed by over-elaborate attempts to decontaminate the casualty. If the victim can be moved, work colleagues can move them outside, if necessary, by slitting the walls of the enclosure. In some situations it may be necessary for the casualty to be treated inside the enclosure.

160 Arrangements for contacting the emergency services should be established in advance. If an accident occurs, information should be given to the relevant accident and emergency services at the time of the call to enable those services to prepare their own response and precautionary procedures for asbestos and other hazards. Spare disposable protective clothing and disposable respiratory protective equipment should be kept available for personnel who have to enter the enclosure and who do not have their own equipment; for example, paramedics.

161 As asbestos personnel work in many different premises and buildings, it is important that they are familiar with the procedures and arrangements in the event of a fire or other emergency requiring evacuation. Even in unoccupied buildings, there may be specific factors associated with the site which increases the potential risk of fire or other emergency situation; so the means of identifying such an event, and the means of escape must be planned. This is particularly important if the enclosure or DCU is located in a relatively inaccessible area, or the escape route is awkward or lengthy. Although, where practicable, basic decontamination is desirable if escape becomes necessary, evacuation from the premises must be the overwhelming priority and should not be delayed by undergoing decontamination.

162 After reaching a safe area after any accident or emergency, PPE and RPE should be decontaminated as far as possible.

Part Four

Work on asbestos-containing materials not subject to the Asbestos-Licensing (Jersey) Regulations 2008

Legal requirements

163 The Asbestos-Licensing (Jersey) Regulations 2008, do not apply to work with:

- **Asbestos cement**, which is a mixture of asbestos (predominately chrysotile) and cement which, in the dry state, absorbs less than 30% water by weight;
- Asbestos-containing **thin textured decorative coatings**, such as paints and ceiling plasters, used to produce visual effects;
- Any article of **bitumen, plastic, resin or rubber** which contains asbestos, where any thermal or acoustic properties are incidental to its main purpose.

164 Work with these materials, however, is still subject to the requirements of the Health and Safety and Work (Jersey) Law, 1989, the Health and Safety (Management in Construction)(Jersey) Regulations, 2016, and the Health and Safety at Work (Construction) (Personal Protective Equipment) (Jersey) Regulations, 2002. Employers should also ensure that any work with asbestos is covered by their insurance policy, as required by the Employers' Liability (Compulsory Insurance) (Jersey) Law, 1973. In addition, the disposal of non-licensed asbestos waste must be carried out in accordance with the Waste Management (Jersey) Law 2005.

165 Although the potential for release of high concentrations of asbestos fibre is less than when working with asbestos insulation, asbestos insulation board and asbestos coatings, there is still a potential for release of high levels of fibres when working on any materials which contain asbestos. For example, indications of typical fibre concentrations for work with asbestos cement are contained in Table 3.

Personnel requirements

Supervision of work

166 An experienced and competent operative should supervise any work that is carried out and prepare the safe work method statement for undertaking the work.

Table 3 : Typical fibre concentrations for work with asbestos cement

Type of Activity		Typical exposure (f/ml)
Machine sawing with exhaust ventilation		Up to 2
Machine cutting without exhaust ventilation - abrasive disc cutting - circular saw - jig saw		 15 - 25 10 - 20 2 - 10
Hand sawing		Up to 1
Machine drilling		Up to 1
Removal of asbestos cement sheeting		Up to 0.5
Stacking of asbestos cement sheets		Up to 0.5
Remote demolition of asbestos cement structures dry*		Up to 0.1
Remote demolition of asbestos cement structures wet*		Up to 0.01
Cleaning asbestos cement	Roofing	Vertical cladding
Dry brushing (wire)	3	5 - 8
Wet brushing (wire)	1 - 3	1 - 2

Notes

* Subsequent sweeping up after remote demolition may give rise to concentration greater than 1 f/ml.

1 Inclusion of a technique does not indicate that it is acceptable (e.g. machine cutting without exhaust ventilation). These concentrations are given to illustrate the high exposures which can result if good work practices are not followed.

2 The exposures quoted are based on measurements taken by the HSE. The same process in different locations may result in higher or lower concentrations.

Training of operatives

167 In addition to the basic asbestos awareness training which should be provided to all operatives whose work could foreseeably expose them to asbestos whilst carrying out their normal day-to-day work (see paragraphs 12-14, page 17), persons who will intentionally disturb non-licensed ACMs, such as asbestos cement and textured coatings, should receive additional training, specific to the risks associated with non-licensable asbestos work. Workers likely to fall within this category include roofers and demolition operatives removing asbestos cement roof sheets, maintenance workers etc.

168 In general terms such training should include:

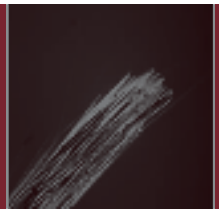
- Safe work practices;
- Assessment and correct use of control measures and protective equipment;
- Decontamination procedures;
- Waste handling procedures;
- Emergency procedures;
- Relevant asbestos related legislation.

169 Detailed guidance on the provision of appropriate information, instruction and training for non-licensable asbestos work is provided in the HSE publication *'Managing and working with asbestos: Control of Asbestos Regulations 2012: ACoP and guidance'* L143.

Working methods

170 A method statement should be prepared, which sets out:

- The scope of the work and how long it is likely to last;
- When the work will be carried out;
- The procedures to be followed to reduce exposure and prevent the spread of asbestos;
- The equipment needed, including PPE;



- Decontamination and waste disposal arrangements;
- Emergency procedures;
- Control measures for non-asbestos hazards which may pose a risk; for example, falls from height.

171 Any asbestos material should be wetted before any work is started as this is the most effective method of controlling airborne fibre release as the material is disturbed. Specialist wetting agents can make work easier, but some asbestos materials do not absorb liquid easily so other methods will also need to be used to control dust exposure; for example, a Class H vacuum cleaner. Minimising breakage of any ACM will also help reduce fibre release.

172 Detailed guidance on appropriate working methods to be taken when working with ACMs which are not subject to the requirements for a licence under the Asbestos-Licensing (Jersey) Regulations 2008, is set out in HSE publication *'Asbestos essentials: A task manual for building, maintenance and allied trades of non-licensed asbestos work'* HSG 210.

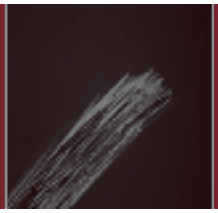
Personal protective equipment (PPE)

173 Appropriate PPE should be determined by the assessment carried out when preparing the method statement. PPE must be suitable for the task and the individual, maintained in an efficient state, in good repair and in a clean condition.

174 PPE and respiratory protective equipment (RPE) are the last lines of defence against asbestos fibres, and do not preclude the need for appropriate working methods to be implemented to reduce the potential release of fibres.

175 Disposable protective one piece coveralls, constructed from a material that will resist penetration from fibres, with seals at fasteners, neck, wrists and ankles must be worn whenever asbestos is likely to be deposited on clothing.

176 A Type 5, category 3 disposable coverall is the appropriate standard for asbestos work. The coverall should be worn in such a way as to reduce the



ingress of dust inside the garment. The coverall hood should be worn over the straps of the RPE and the coverall legs should be worn over footwear.

177 Wellington boots, or other smooth, easily cleanable boots (without laces) are preferable to disposable shoes.

178 If gloves are worn, these should be single-use disposable gloves. If latex gloves are worn, these should be 'low protein powder-free' gloves to reduce the risk from latex allergies.

179 RPE should be selected on the basis of the assessment of the work to be carried out, but should always have an Assigned Protection Factor of 20 or more. Suitable types of RPE include disposable respirators (type FFP3 or type FMP3), half mask respirator with P3 filter or semi-disposable respirator with P3 filter.

180 The RPE selected should be fitted and worn in accordance with the manufacturer's instructions. A face fit test, which involves the individual testing of the face seal on the wearer, must also be carried out as part of the initial selection of the RPE and/or where the model of RPE is changed, and at least once every 12 months. The types of RPE listed above are not suitable for people with beards or stubble, or for long periods of continuous use. Alternative types of RPE should be used in these instances. If the worker wears glasses, these should be put on after the respirator has been fitted properly – there must not be a gap between the mask and the face. The hood of the coverall must be fitted over the RPE straps. Further guidance on the selection of RPE is provided in *'Personal protective equipment'* Equipment and method sheet EM6, contained within *'Asbestos essentials'* HSG 210.

181 At the end of the shift, the RPE should be taken off last and, if disposable, disposed of as asbestos waste. If not disposable, it should be decontaminated, cleaned and stored in accordance with the manufacturer's instructions. Filters on half-masks should be changed regularly, and disposed of as asbestos waste.

Hygiene and waste arrangements

182 When the removal work is completed, the surface of the working area and any equipment used should be wiped down with appropriate cleaning

rags soaked in water. A contaminated rag should never be re-soaked as this will contaminate the water. Tape may be useful for removing small dust deposits.

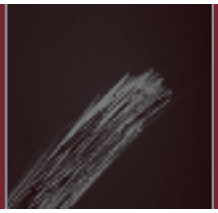
183 Any asbestos waste, debris or contaminated materials (including cleaning rags) should be doubled bagged in suitable, UN approved bags which contain the appropriate asbestos warning label. The inner bag should be sealed with tape and wiped clean before being carefully placed into the second bag, which should then also be sealed. For non-licensed waste, both bags can be clear, but a red asbestos bag or printed label (with the same information as the bag) must be securely attached to indicate it is asbestos waste.

184 If the asbestos waste, debris or other material cannot fit into a waste bag, it must be double wrapped in two layers of strong polythene. A red asbestos bag or printed label (with the same information as the bag) should be securely attached to indicate it is asbestos waste.

185 Operatives must decontaminate themselves after working with asbestos in order to ensure that they do not expose themselves or others to asbestos fibres. The decontamination procedure should ensure that any asbestos contamination is removed prior to removal of the respirator. Further guidance is provided in HSE publication *'Personal decontamination'* Equipment and method sheet EM8, within *'Asbestos essentials'* HSG 210.

186 Existing site washing facilities can be used but access should be restricted to the asbestos workers during the time they carry out their work, and the facilities thoroughly cleaned afterwards. All disposable personal protective equipment should be disposed of as asbestos waste following each working shift.

187 Where bagged or wrapped waste is stored temporarily, it must be placed in a dedicated locked skip or, where this is not practicable, in a suitable locked vehicle. A sealed bulkhead must be provided in vehicles used to transport asbestos waste to segregate passengers from the waste during transit. Tools and other equipment should also be segregated to prevent bags being ruptured during transit. Care should be taken to ensure that any temporary storage location is not in an area where it may be exposed to vandalism, nor close to an area considered to be sensitive, for example, a school playground.



188 Asbestos waste can only be disposed of at a site which holds a waste management licence under the Waste Management (Jersey) Law 2005. Such licences are granted by the Minister for the Environment.

189 The waste must be taken as soon as possible, by arrangement with the the waste regulator, to the asbestos waste facility at La Collette. Companies transporting asbestos waste must be registered with the Department of the Environment under the Waste Management (Jersey) Law 2005, and comply with the requirements of the law. Before transporting asbestos waste, its movement must be pre-notified to the Department of the Environment, using a prescribed form available from the Department of the Environment.

Environmental or personal monitoring

190 There is normally no need for environmental or personal monitoring to be carried out during non-licensed work as the required control measures should reduce levels of exposure to well below the control limit. If the assessment prepared as part of the method statement determines that environmental or personal monitoring is required, or the Client wants clearance air sampling to be carried out for reassurance purposes, it should be carried out by a UKAS accredited organisation in accordance with the HSE publication *'Asbestos: The analysts' guide for sampling, analysis and clearance procedures'* HSG 248.

Arrangements to deal with accidents, incidents and emergencies

191 The procedures for dealing with emergencies during planned non-licensed work should be included in the method statement. These should cover instances such as medical emergencies, fire, uncontrolled release of asbestos fibres due to unforeseen circumstances, power failures etc.

192 In any circumstances where there is a suspected accidental uncontrolled release of asbestos, such as inadvertent disturbance of suspected asbestos-containing materials, emergency procedures should be implemented without delay.

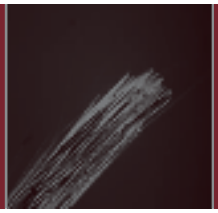
193 Work should stop immediately and the area segregated to prevent anybody else entering. Steps should be taken to ensure any exposures are kept as low

as possible, the spread of contamination to other areas minimised and the contamination cleaned up. It is highly likely that a licensed contractor may need to be involved in all or any of these steps.

194 Where persons have become contaminated with visible dust or debris, or where contamination is suspected, then arrangements should be made to decontaminate those affected. The person should put on suitable RPE, remove the affected clothing or wipe down with damp rags and leave the area. They should then shower thoroughly. Any contaminated clothing or rags should be disposed of as asbestos waste.

195 Arrangements should then be taken to decontaminate the affected area. This work should only be carried out by operatives who have been trained and are competent to carry out the work. As this is likely to require specialist equipment, such as a Class 'H' vacuum cleaner, a licensed contractor will almost certainly be required. Air sampling should then be carried out, where appropriate, to confirm that the remedial measures taken have been effective.

196 If an employee has been potentially exposed to asbestos fibres in an incident, a note that the exposure has occurred should be added to the employee's personal record. A copy of the note must be given to the employee with instructions that it should be kept indefinitely. It is also recommended that they consult their GP to have a note of their possible exposure made on their personal medical record, which should include date(s), duration, type of fibre, type of RPE worn and likely exposure levels (if known).



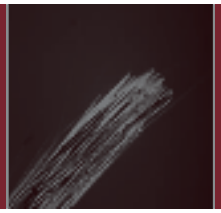
Appendix

Uses of asbestos

The following lists the uses and characteristics of products in order of potential for release of fibres ("friability"):

Sprayed coatings	
Use	Thermal and acoustic insulation, and fire and condensation protection systems.
Content	Up to 85% asbestos in hydrated asbestos cement. A mixture of asbestos types was used until 1974; crocidolite for thermal insulation of steam turbines until 1970; amosite for fire protection of structural steel, condensation protection and acoustic control; and chrysotile mixed with mineral wool and cement-type binder. Chrysotile was also used as a coating on top of other sprayed asbestos.
Remarks	■ Applications ceased in 1974; spraying was prohibited in the UK. ■ Extremely friable; high potential for fibre release unless sealed. Potential increases if disturbed during repair or maintenance and as materials age or disintegrate. Released dust may accumulate. ■ Repair and removal require a licensed contractor. ■ May be found in multi-storey flats and schools, for example on structural framework and the ceilings of swimming pools, and as fire stopping in ceiling voids.

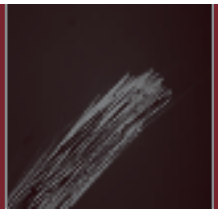
Lagging	
Use	Thermal insulation of pipes, boilers, pressure vessels, preformed pipe sections, slabs, tape, rope, corrugated paper, quilts, felts.
Content	Variable asbestos content. Examples include: ■ 68% in calcium silicate slabs; ■ 15% in magnesium carbonate insulation with an asbestos surface coating; ■ 100% in blankets, felts, etc. All types of asbestos have been used.
Remarks	■ The use of lagging was gradually discontinued between 1974 and 1980, and is very rare in buildings constructed after 1975. ■ Potential for fibre release if not sealed. Potential increases if disturbed during repair or maintenance, and as material ages or is damaged. Dust may then accumulate. ■ Repair and removal require a licensed contractor. ■ Widely used in public buildings, schools, factories, and hospitals, on pipes and boilers and for insulation between floors. Quilts were commonly used on steam boilers in industrial premises but rarely in houses or flats. Asbestos rope or cord was wound round pipework or insulation, and itself often coated in a cement containing asbestos. "Loose fill" asbestos was installed as loft insulation.



Insulating boards	
Use	Fire protection, thermal and acoustic insulation, and also in general building work because of their resistance to moisture movement. “Asbestolux” and “Marinite” are examples of the trade names.
Content	16-40% amosite or, until 1965, a mixture of amosite and crocidolite. Density of approximately 700 kilograms per cubic metre. “Shipboards” are a rigid composite of amosite, hydrated lime and silicon oxide with a lower density.
Remarks	■ Widely used from the 1950s until middle 1970s. UK manufacture ceased in 1980, and it is unlikely to be found in buildings after 1982. ■ Work on insulation board can give rise to high levels of dust, especially if broken, drilled or sawn. ■ Requires a licensed contractor to remove the boards. ■ Found in all types of industrial, commercial, public and private buildings. Particularly common in 1960s and 1970s system built housing. Used widely in ducts and for fire stopping, infill panels, partitions, ceiling tiles, roof under lays, wall lining, bath panels, external canopies and porch linings. Asbestos is also found in insulating board cores and linings of composite products used for acoustic attenuators, cladding infill panels, domestic boiler casings, partition and ceiling panels, oven linings and suspended floor systems.

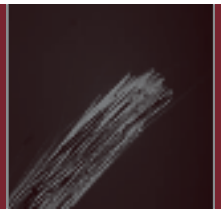
Ropes, yarns	
Use	Lagging, jointing and packing materials, heat/fire resistant gaskets and seals, caulking in brickwork, boiler and flue sealing, and plaited tubing for electric cable.
Content	Asbestos content usually 100%. Only chrysotile used after 1970.
Remarks	■ Fibres may be released when unbonded material is stored in bulk. Caulking is unlikely to release fibres.

Cloth	
Use	Jointing and packing, gaskets, thermal insulation and lagging including fire-resistant blankets, mattresses and protective curtains, gloves, aprons, overalls, etc.
Content	Usually 100% but some textiles are aluminized to reflect heat. Usually chrysotile asbestos.
Remarks	■ Fibres may be released if abraded or frayed. ■ Equipment using asbestos cloth is found in foundries, kitchens and laboratories.



Millboard, paper and paper products	
Use	General heat insulation and fire protection, electrical and heat insulation of equipment, roofing felt and damp-proof courses, steel composite wall cladding and roofing, vinyl flooring, facing to combustible boards, flame resistant laminate and corrugated pipe insulation.
Content	Very close to 100%. All types of asbestos have been used, but only chrysotile since 1965.
Remarks	■ Fibres are not highly bonded in uncoated materials, and liable to be released when subject to wear or abrasion. Can be a hazard when handled. ■ Removal should be undertaken by a licensed contractor.

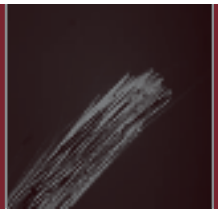
Asbestos cement products	
Use	*Profiled sheets.* Roofing, wall cladding and weather-boarding. *Semi-compressed flat sheet and partition board.* Partitioning in farm buildings and housing, shuttering in industrial buildings, decorative panels, bath panels, soffits, linings to walls and ceilings, portable buildings, propagation beds in horticulture, fire surrounds, and composite panels for fire protection. *Fully compressed flat sheet and partition board.* Used as semi-compressed products but where stronger materials are required. *Tiles and slates (made from fully compressed flat sheet).* Cladding, decking and promenade tiles, and roofing. *Pre-formed moulded products.* Cistern and tanks, drains, sewer pipes, rainwater goods, flue pipes, fencing, roofing components, cable troughs and conduits, ventilators and ducts, and window boxes.
Content	10-15% asbestos bound in a matrix of Portland cement or autoclaved calcium silicate. All three common types of asbestos have been used - crocidolite between 1950 and 1969, amosite between 1945 until at least 1976, but mainly chrysotile.
Remarks	■ Widely used in many building types. ■ Fibres are firmly bonded and only released if the material is mechanically damaged or when the material is aged. ■ Externally the material will weather slowly but fibre release will be at a low rate. ■ Moss, algae and lichen may grow on the material surface. Cleaning has the potential to release fibres. Low pressure cleaning with biocide additions can cause splashing and a contaminated slurry, but it is preferable to any means that involves abrasion. ■ The material is fragile and precautions are required to prevent falls through the sheets. ■ Should not be used inside buildings where likely to suffer damage or abrasion, or where it has to be cut, sawn or drilled, or otherwise frequently disturbed. ■ Can be painted with an alkali resistant primer to seal, prevent warping and protect the surface.



Asbestos bitumen products	
Use	Roofing felts, damp-proof courses, semi-rigid roofing, gutter linings.
Content	Chrysotile fibre or paper in bitumen.
Remarks	■ Fibre release unlikely during normal use, but may age and become brittle. Some fibre release will occur if brittle material is broken up. ■ Material should not be burnt after removal, as asbestos will be released by the fire.

Flooring materials	
Use	Floor tiles and backing for PVC flooring.
Content	*Thermoplastic floor tiles.* Up to 25% asbestos. *PVC floor tiles and unbacked PVC flooring.* Usually less than 10% chrysotile asbestos. *Asbestos-paper backed PVC flooring.* The backing may be 100% chrysotile.
Remarks	■ Fibre release unlikely to be a hazard under normal conditions of use but is possible when the material is cut, or when flooring, particularly when the backing is removed. When removal is necessary, flooring should be lifted carefully, and any dust dampened and collected. Any residue sticking to the floor is best covered or skimmed. Power sanders should not be used. ■ Waste material must not be burned but disposed of safely.

Textured coatings and paints	
Use	Coatings on walls and ceilings.
Content	±3.5% chrysotile asbestos.
Remarks	■ Potential for fibre release when dry mixes are prepared or when old coatings are rubbed down. Materials must not be power sanded or scraped off dry. If they must be removed, wettable materials can be scraped off wet, after soaking with water containing detergent. Other materials may require treating with paint stripper prior to wetting and scraping off. The advice of the manufacturer, if known, should be sought. ■ Wet materials must be bagged in double plastic sacks after removal and sealed prior to disposal. ■ Supply and application prohibited since 1988, but still widely in place, for example as “Artex” on walls and ceilings.

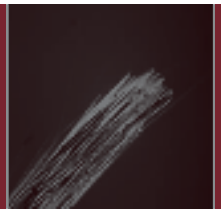


Mastics, sealants, putties and adhesives	
Use	Asbestos has been used in these products to give anti-slumping characteristics, improve covering power and prevent cracking and crazing.
Content	Approx 0.52%
Remarks	■ Unlikely to release fibres on application. Hardened product should not be sanded.

Reinforced plastics	
Use	PVC panels and cladding, and reinforcement for domestic goods.
Content	Variable, mostly chrysotile.
Remarks	■ Fibre release unlikely during use unless cut using powered equipment.

Wall plugging compound	
Use	Wall fixings.
Content	More than 90% asbestos with cotton fibre and plaster dust.

Domestic appliances and motor vehicles	
Use	Asbestos has been used in various domestic appliances and motor vehicles for heat insulation or friction properties. *Hairdryers, fan and radiant electric heaters, toasters, washing machines, tumble dryers, spin dryers, dish washers, refrigerators and freezers* - paper, element formers, brake pads, compressed fibre gaskets and seals, rubberized or other polymer gaskets and seals. *Cookers* - insulating board, fire cement, compressed fibre seals, rubberized or other polymer seals. *Simmering mats* - millboard. *Iron stands* - paper millboard and asbestos cement. *Oven gloves*, fire blankets - textiles. *Catalytic gas heaters* - compressed asbestos fibre panels. *Gas warm air heaters* - aluminium backed paper, cloth and insulating board. *Boilers and pipe work* - asbestos/plaster with or without a surface fibre layer. *Electric warm-air and storage heaters* - caposil insulating blocks, insulating board, paper, string, compressed fibre washers, rubberized or other polymer-bonded washers.
Content	Varies according to the type of material used. Manufacturers/suppliers should be able to provide information.



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