



Workplace Health and Safety Queensland

Fact sheet

Asbestos

Information available on managing and removing asbestos-containing materials has been updated to reflect the changes to legislation effective from 1 January 2009.

What law applies

Responsibilities of employers, building owners, householders, renovators and asbestos removalists regarding asbestos

What is asbestos and where is it found

Types of asbestos, common locations including workplaces and dwellings, the health risks of asbestos

Information for householders and renovators

Asbestos in homes, renovating, using contractors

Identification and management of asbestos

Responsibilities, asbestos management plans, identification of asbestos, register of ACM, risk assessments, control measures

Safe working practices when maintaining asbestos

Safe work practices for painting, drilling or cleaning asbestos-containing materials, prohibited activities with asbestos

Asbestos removal

When is a certificate required, information for non-certificate holders, safe work practices for professional asbestos removalists

What law applies

Queensland's workplace health and safety legislation provides a framework for the regulation of asbestos related risk in work environments. The legislation places legal obligations on certain people and details requirements that must be complied with.

General health and safety obligations

To discharge your workplace health and safety obligations with regard to asbestos you must comply with the:

- *Workplace Health and Safety Act 1995*, which imposes obligations on people at workplaces to ensure workplace health and safety.
The *Workplace Health and Safety Act 1995* establishes mandatory requirements for controlling asbestos hazards through the:
 - *Workplace Health and Safety Regulation 2008*
 - *National Code of Practice for the Management and Control of Asbestos in Workplaces* (asbestos management code)
 - *National Code of Practice for the Safe Removal of Asbestos 2nd Edition* (asbestos removal code).

Every Queensland employer must have **workers' compensation** insurance. Most employers insure with WorkCover Queensland, while a small number of large organisations have their own insurance. This insurance coverage ensures that employees injured at work receive financial support.

What you must do

If the *Workplace Health and Safety Regulation 2008* describes how to prevent or minimise an asbestos-related risk at your workplace you **must** do what the regulation says.

Part 13 of the *Workplace Health and Safety Regulation 2008* refers to the national asbestos management code and the asbestos removal code. These codes are given legal standing in Queensland's workplace health and safety framework.

The practices, procedures and requirements set out in the national asbestos management code and the asbestos removal code **must be complied with** in the same manner as a regulation.

If there is no regulation or code of practice about a risk at your workplace you **must** choose an appropriate way to manage exposure to the risk. Obligation holders must, where there is no regulation or code of practice about a risk, take reasonable precautions and exercise proper diligence to manage the risk.

See the *Risk Management Code of Practice* for further information.

Specific regulations for asbestos

The main requirements relating to asbestos in the *Workplace Health and Safety Regulation 2008* are as follows:

1. Part 13, Division 2 prohibits the following:
 - the use of prohibited substances and prohibited asbestos-containing material (ACM) except for purposes outlined in schedule 9.
 - work on ACM unless it complies with the asbestos management code
 - cleaning ACM with power tools or power appliances, high-pressure water processes, compressed air or abrasive blasting.
2. Part 13, Division 3 requires owners of certain structures to comply with the asbestos management code. This division applies to:
 - A building used as a workplace if it was built under an approval given by a local government before 1 January 1990
 - Non-building structures where there is ACM fixed or installed in the structure (e.g. fixed plant).
 - Part 13, Division 3 does not apply to structures used for domestic residential purposes, e.g. houses, townhouses and unit blocks.
3. Part 13, Division 4 requires that ACM must be removed in accordance with the asbestos removal code.
4. Part 4 requires a person who conducts a business or undertaking (e.g. an employer or self-employed person) to hold a certificate to perform work to remove friable ACM. These certificates are held by the business and are also referred to as an A class certificate. The holder of an A class certificate has the authority to remove friable ACM and bonded ACM. Removal of friable ACM must be directly supervised by the A class certificate holder's competent person.
5. Part 5 outlines the authority required to remove 10m² or more of bonded ACM. This includes holding a bonded asbestos removal certificate. These certificates are held by individuals who are directly involved in the removal of bonded ACM and are referred to as B class certificates. These certificates **do not** authorise the removal of friable ACM. Workers who are directly involved in the removal of 10m² or more of bonded ACM do not require a B class certificate if they are directly supervised by the A class certificate holder's competent person.

What is asbestos and where is it found?

What is asbestos

Exposure to asbestos can be fatal

Types of asbestos

Bonded asbestos, friable asbestos, examples of things containing asbestos

Where is asbestos found

Products containing asbestos, buildings, workplaces and homes

The health risks of asbestos

Asbestosis, mesothelioma, lung cancer

What is asbestos

Asbestos is a naturally occurring mineral rock made up of strong fibres that have fire, heat and chemical resistant properties.

While asbestos is now banned from use it was a component of thousands of different products used in the community and industry from the 1940s until the late 1980s. Some uses of chrysotile asbestos products, mainly friction materials and gaskets continued until 31 December 2003.

Asbestos can pose a risk if fibres of a respirable size become airborne, are inhaled and reach deep into the lungs in sufficient quantities. These respirable fibres are a major health hazard and can cause serious asbestos-related diseases that can take decades to become apparent.

The lack of immediate health effects has often meant that victims are unaware of the dangers they are exposed to which means that exposure to the hazard can continue over a long period causing serious health effects.

Due to the health risks associated with asbestos it is essential that exposure is effectively managed. Working on or near damaged asbestos-containing materials without appropriate control measures in place increases the risk of exposure to airborne asbestos fibres.

Types of asbestos

Asbestos is commonly referred to by three types:

- chrysotile ("white" asbestos - belonging to the serpentine group)
- crocidolite ("blue" asbestos - belonging to the amphibole group)
- amosite ("brown" or "grey" asbestos - belonging to the amphibole group)

Under the law, asbestos-containing materials (ACM's) are divided into two types:

- **bonded asbestos-containing material** (bonded asbestos) contains a bonding compound reinforced with asbestos fibres
- **friable asbestos-containing material** (friable asbestos) is asbestos-containing material that, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.

Bonded asbestos can be found in products such as asbestos cement sheeting commonly used in building materials between 1940s to the late 1980s.

Other bonded asbestos products include:

- profiled sheets used on roofs and walls and flat sheets in flashings
- imitation brick cladding
- roof shingles
- water or flue pipes
- plaster patching compounds
- textured paint
- vinyl floor tiles
- friction products such as brake shoes, disc pads, clutch housings or elevator brakes.

Removal of 10m² or more of bonded asbestos-containing material at a workplace can only be done:

- By the holder of a bonded asbestos removal certificate (also known as a 'B' class certificate)
- under the authority of a relevant person's certificate to remove friable ACM (also known as an 'A' class certificate).

'B' class certificates are issued to applicants who can demonstrate they are familiar with the practices and procedures for removing bonded asbestos set out in the asbestos removal code.

For more information, refer to *Information Paper AR3 Approved Criteria for a certificate to perform work to remove bonded asbestos-containing material*.

A person who removes less than 10 m² of bonded asbestos material does not require a certificate, however, that person must be competent and comply with the practices procedures and requirements set out in the asbestos removal code.

More on removing asbestos

More on working safely with asbestos

Friable asbestos is easily crumbled or reduced to powder by hand.

Common forms of friable asbestos materials include:

- sprayed on fireproofing/soundproofing/thermal insulation
- acoustic plaster soundproofing
- thermal insulation (not sprayed on).

Under the *Workplace Health and Safety Regulation 2008*, removal of friable ACM must be done:

- under the authority of a certificate to remove friable ACM (also known as an 'A' class certificate)
- as set out in the asbestos removal code.

More on removing asbestos. More on working safely with asbestos

Where is asbestos found?

Materials that contain asbestos can be found in buildings, workplaces and dwellings built before 1990. Even in buildings, workplaces and dwellings built after 1990 it is possible that second hand items installed within them could contain asbestos. Asbestos can also be found in products or materials, for example brake disc pads. An extensive list of examples of asbestos-containing materials is available in Appendix A of the asbestos management code.

It is often very difficult to identify the presence of asbestos by sight. The only way to be certain is to have a sample of the material analysed by a laboratory.

Sampling of anything you suspect may contain asbestos is itself hazardous and should only be done by a competent person, and analysed only in accredited laboratories.

More information on identifying asbestos and where this can be done is available from the National Association of Testing Authorities (NATA).

Where materials are not tested you can presume that something contains asbestos and treat it as such. For example, if there is reliable manufacturer information on a product, a label stating something contains asbestos, or if it is a product of a type and age that typically contains asbestos you can presume it contains asbestos. If this presumption is made the material must be treated as if contains asbestos for working with the material or removing it.

Workplaces

Asbestos was used in a variety of workplaces from the 1940s up until the late 1980s when the dangers to health due to exposure became more widely acknowledged. Some uses of chrysotile asbestos products, mainly friction materials and gaskets continued until 31 December 2003. Asbestos is found in asbestos cement sheeting and piping, as an insulator on pipes and in buildings, as a fire retardant in textiles and as a filtering material in the chemical and food industries.

An extensive list of examples of asbestos-containing materials is available in Appendix A of the asbestos management code.

Workplaces are required by law to identify and manage asbestos, and to follow the asbestos management code.

Dwellings

In Queensland from 1940 until the late 1980s bonded asbestos was commonly used in the manufacture of asbestos-cement corrugated and flat sheets (fibro) for roofing and walls. Undisturbed or painted fibro that is in good condition does not pose a health risk.

Thermal or acoustic insulation used in homes may have also contained friable asbestos, the easily crumbled form of asbestos that can be reduced to powder by hand.

Friable asbestos is extremely dangerous and must only be removed by a person who holds a certificate to remove friable ACM (also known as an 'A' class certificate).

More on asbestos removal

To find an asbestos removalist refer to the Yellow Pages or check with the Asbestos Industry Association.

The health risks of asbestos

Breathing in asbestos fibres has been linked to three respiratory diseases, all of which can be fatal:

- **Asbestosis** is a chronic lung disease that can lead to respiratory impairment and to diseases such as lung cancer
- **Mesothelioma** is a cancer of the lining of the pleura (outer lung lining) or of the peritoneum (the lining of the abdominal cavity).
- **Lung cancer** caused by asbestos cannot be distinguished from those cancers that are caused by other agents such as tobacco smoke.

More information about asbestos related diseases is available from Queensland Health: www.health.qld.gov.au/

Information for householders and renovators

Materials containing asbestos were used in many homes built prior to 1990

Asbestos was typically used in fibro roofs, walls and soffits. In many houses fibro was also used internally for wet areas such as kitchens, bathrooms and laundries. Asbestos cement can also be found in flat sheets, profiled sheets, corrugated sheets, shingles, compressed sheets, rigid board insulation and building products such as pipes and guttering.

Second hand materials or products containing asbestos may also have been installed or used after asbestos products were phased out and may be found in newer homes.

An extensive list of examples of asbestos-containing materials is available in Appendix A of the asbestos management code.

It is often very difficult to identify the presence of asbestos by sight. The only way to be certain is to have a sample of the material analysed by a laboratory.

Sampling of anything you suspect may contain asbestos is itself hazardous and must only be done by a competent person, and analysed only in accredited laboratories.

More information on identifying asbestos and where this can be done is available from the National Association of Testing Authorities (NATA).

Householders and renovators can manage the risks of asbestos by:

- being aware of what asbestos is and where it can be found
- having suspect materials tested (by a competent person) or by treating suspect materials as if they contain asbestos
- being aware of the responsibilities of clients (which can include householders and renovators) and the responsibilities of asbestos removalists under the asbestos removal code
- ensuring that work removing any amount of friable asbestos is done by the holder of a certificate to remove friable ACM (also known as an 'A' class certificate)
- ensuring removal of 10m² or more of bonded ACM is done by either an A class or 'B' class certificate holder
- ensuring that removal of less than 10m² of bonded asbestos is done as described in the asbestos removal code
- ensuring that any work done with bonded asbestos is done as described in the asbestos management code.

Information on the asbestos laws for homeowners, renovators and owner builders carrying out asbestos related activities; such as breaking, cleaning, cutting, maintaining, removing, repairing, storing, using or separating associated asbestos waste from other waste can be found at Queensland Health: www.health.qld.gov.au/

More on removing asbestos

More on working safely with asbestos

Identification and management of asbestos

Obligations to identify and manage asbestos

The obligations under the law

Asbestos management plans

A requirement for managing asbestos in workplaces

Identification of asbestos

In workplaces and domestic premises

Register of asbestos-containing materials (ACM)

A register of ACM, risk assessments for ACM and control measures

Risk assessments

When asbestos is identified in the workplace

Control measures

Managing risks through control measures

Obligations to identify and manage asbestos

Under Part 13, Division 3, of the *Workplace Health and Safety Regulation 2008* owners of certain buildings and structures that are workplaces must comply with the requirements of the asbestos management code.

Under the *Workplace Health and Safety Act 1995*, owner is defined to include:

- a person who holds legal title
- a person who has control of a thing, structure or place
- a person who manages a structure or place as agent for the person holds title or the person who has control
- a mortgagee in possession
- a lessee
- a trustee
- a receiver, liquidator or company administrator.

Under Part 7 of the asbestos management code owners of workplaces have obligations to:

- develop and implement and maintain an asbestos management plan
- investigate the premises for the presence or possible presence of asbestos-containing materials (ACM)
- assess the condition of any ACM that are found and the associated asbestos risks
- develop measures to remove the ACM or otherwise to minimise the risks and prevent exposure to asbestos
- ensure the control measures are implemented as soon as possible and are maintained as long as the ACM remain in the workplace
- develop, implement and maintain an asbestos management plan.

Under Part 7 of the asbestos management code owners are also required to:

- consult with people at the workplace who may be affected by the presence of ACM, for example, employers, workers, contractors and occupants
- provide information and training for workers, contractors and other people who may come into contact with ACM. The training may include procedures to be followed to prevent exposure, the types and locations of asbestos and the health risks of asbestos.

Asbestos management plans

Part 8 of the asbestos management code sets out the requirements for the development of an asbestos management plan for workplaces.

Under regulatory provisions in effect prior to 1 January 2006, workplaces built before 1 January 1990 were required to have an asbestos register in relation to asbestos materials used for thermal or acoustic insulation.

Under the current *Workplace Health and Safety Regulation 2008*, all workplaces in pre-1990 buildings must comply with the asbestos management code, which specifies obligations in relation to both friable and bonded asbestos containing material. Owners of non-building structures which have ACM installed must also comply with the asbestos management code, for example, fixed plant that has chrysotile asbestos-containing gaskets.

An asbestos management plan helps owners of pre-1990 buildings and other relevant structures prevent exposure to airborne asbestos fibres.

The plan should set out clear aims, stating what is going to be done, when it is going to be done, and how it is going to be done.

It must include:

- the workplace's register of ACM
- details of maintenance or service work on the ACM including:
 - who performed the work
 - the dates it was done
 - the scope of the work
 - any clearance certificates (see clearance inspections, part 11.10 of the asbestos management code)
- how people at risk are informed about ACM in the workplace, the risks they pose and the control measures in place
- decisions about management options and the reasons for these decisions
- a timetable for action, including priorities and dates for reviewing risk assessments and specific circumstances that may affect the timetable
- monitoring arrangements
- the responsibilities of people involved in the plan
- training arrangements for workers and contractors
- a procedure for reviewing and updating the management plan and the register of ACM, including a timetable
- safe work methods.

The following general principles must be applied in developing an asbestos management plan:

- the goal is to eliminate asbestos from workplaces wherever practicable. Consideration should be given to removal of ACM during renovation, refurbishment or maintenance in preference to sealing, enclosing or encapsulating asbestos-containing material
- reasonable steps must be taken to label and record ACM in a register
- a risk assessment must be conducted for all identified or suspected ACM
- control measures must be put in place to prevent exposure to airborne asbestos fibres
- there must be full consultation, information sharing and involvement during the development of each step of the asbestos management plan
- the identification of ACM and associated risk assessments should only be undertaken by competent people
- all people on premises where ACM are present must be fully informed about the consequences of exposure to asbestos and appropriate control measures.

Identification of asbestos

It is often very difficult to identify the presence of asbestos by sight. The only way to be certain is to have a sample of the material analysed by a laboratory.

Sampling of anything you suspect may contain asbestos is itself hazardous and should only be done by a competent person, and analysed only in accredited laboratories.

More information on identifying asbestos and where this can be done is available from the National Association of Testing Authorities (NATA).

Asbestos in the workplace

Part 9 of the asbestos management code requires that owners of workplaces must ensure all asbestos-containing materials (ACM) in their workplaces are identified, as far as practicable.

An owner must:

- identify the locations of all asbestos-containing material (ACM) and determine whether any inaccessible areas are likely to contain ACM
- identify the types (e.g. asbestos cement sheet, asbestos lagging on pipes and flues, asbestos-containing material gaskets in plant or machinery) and condition (i.e. damaged or intact) of ACM.

Only people who are competent in the identification of asbestos-containing materials are permitted to carry out these tasks.

More information on identifying asbestos and where this can be done is available from the National Association of Testing Authorities (NATA).

Asbestos identified in the workplace must be recorded in a register of asbestos-containing materials.

Warning signs and labels to identify ACM in the workplace should also be used to ensure that the asbestos is not unknowingly disturbed without the correct precautions being taken.

For more information, refer to Fact Sheet – *Identifying and recording asbestos in the workplace*

Asbestos in domestic premises

Part 9.4 of the asbestos management code states how to manage asbestos in domestic premises when they are also workplaces, for example when someone is contracted to do work in a home that may expose them to asbestos, such as renovation work.

All businesses that perform work which may involve exposure to asbestos, including at domestic premises, must establish an asbestos management plan for the work to be carried out.

While many domestic premises contain ACM, they are unlikely to have a register of ACM. Precautions must be taken before work begins to identify the likelihood that ACM is present. While particular attention should be paid to buildings built prior to 1990, recycled materials used in buildings built after 1990 may contain asbestos.

Work at domestic premises that may involve exposure to ACM includes:

- demolition and renovation
- electrical maintenance or installation, including work on electrical meter boards
- maintenance or installation of walls, roofing, ceilings or flooring
- plumbing maintenance or installation.

If there is any known or suspected asbestos on the premises, the owner, occupier and/or resident must be informed.

Where asbestos is present or assumed to be present, work must be done in accordance with the risk assessment and control measures provided in Parts 10 and 11 of the asbestos management code.

Register of asbestos-containing materials

Under the *Workplace Health and Safety Regulation 2008* and the asbestos management code, owners of the following structures used as workplaces must keep an accurate register of asbestos-containing materials (ACM):

- Buildings built under approvals given by local governments before 1 January 1990
- Non-building structures where there is ACM fixed or installed, e.g. fixed plant.

Even if no asbestos is found, a register should still be kept which records this fact.

Part 9.3 of the asbestos management code details the information that the register should contain. This includes:

Identification

- dates of inspections
- location, type (i.e friable or bonded) and condition (damaged or intact) of identified asbestos
- details of materials presumed to contain asbestos
- inaccessible areas likely to contain asbestos
- any analysis results.

Risk assessment

- dates of risk assessments and details of the competent person that performed them
- findings and conclusions of risk assessments
- results of any air monitoring for airborne asbestos fibres.

Control measures

- the control measures resulting from a risk assessment
- details of any maintenance work or service on ACM.

The register is to be made readily accessible to:

- workers and their representatives
- any other employers within the premises
- any person removing ACM
- any person engaged to perform work that may disturb ACM
- any other person who might be exposed.

Risk assessments

If asbestos-containing materials (ACM) are identified in a workplace, the person in control of the workplace must ensure the risks are assessed:

- in consultation with workers and/or their representatives
- by someone competent to perform the assessment.

A risk assessment allows informed decisions to be made about control measures, induction and training, air monitoring and health surveillance requirements.

The risk assessment should take into consideration the information held in the register of ACM, including:

- the condition of the ACM (whether it is friable or bonded and stable, and whether it is liable to damage or deterioration)
- the likelihood of exposure
- whether the nature or location of any work to be done is likely to disturb the ACM.

The results of the risk assessment should be documented in the register of ACM.

More information is available in Part 10 of the asbestos management code.

Read more about risk assessments and the risk management process.

Control measures

Control measures are the ways that asbestos-related risks are managed, and should be identified and implemented as a result of risk assessments and as part of an over-arching asbestos management plan.

Part 11 of the asbestos management code states what obligation holders, such as building owners, must do to manage asbestos-related risk, including:

- implement the asbestos management plan
- control maintenance work
- not perform prohibited activities with asbestos
- perform maintenance and service work likely to disturb ACM as stated in the asbestos management code
- following safe work practices when working with asbestos

For the complete requirements see Part 11 of the asbestos management code.

Control measures should reflect the hierarchy of controls set out in Part 5 of the asbestos management code:

- a. elimination/removal (most preferred)
- b. isolation/enclosure/sealing
- c. engineering controls
- d. safe work practices (administrative controls)
- e. personal protective equipment (PPE)

A combination of these may be required to adequately manage asbestos-containing materials (ACM).

Control measures should also reflect the principles set out in Part 11.1 of the asbestos management code.

Safe work practices when maintaining asbestos

Safe work practices

Safe work practices with different asbestos products

Preparation for maintenance or service work

Establishing barriers, preparing work areas

Safe maintenance and work techniques

Tools, personal protective equipment, asbestos vacuum cleaners, decontamination, clearance inspections, waste removal and disposal

Prohibited activities with asbestos

Specific prohibitions, what you must not do under the law

Safe work practices

Safe work practices or methods prevent hazardous asbestos fibres becoming airborne and reduce the risk of them being inhaled.

All work on asbestos-containing materials (ACM) **must** be carried out in accordance with the practices and procedures set out in the:

- *National Code of Practice for the Management and Control of Asbestos in Workplaces* (asbestos management code)
- *National Code of Practice for the Safe Removal of Asbestos* 2nd Edition (asbestos removal code).

The appendices of the asbestos management code contain specific instructions for how to safely work with ACM which **must be followed** for:

- drilling of asbestos-containing materials
- sealing, painting, coating and cleaning of asbestos cement products
- cleaning leaf litter from the gutters of asbestos cement roofs
- replacing cabling in asbestos cement conduits or boxes
- working on electrical mounting boards (switchboards) containing asbestos
- inspection of asbestos friction materials

Preparation for maintenance or service work

It is essential to have the correct tools, personal protective equipment, decontamination materials, barricades and warning signs prior to work commencing, and to minimise the number of people in the work area.

Establishing barriers

- The asbestos work area should be clearly defined to ensure that non-essential people do not enter, and to warn people that asbestos work is being carried out.
- Potential entry points to the asbestos work area should be signposted or labelled in accordance with AS 1319: *Safety signs for the occupational environment*. These labels should be weatherproof, constructed of lightweight material and be adequately secured.

More information on establishing barriers can be found in section 11.4.1 of the asbestos management code.

Preparing the work area

- Before commencing work, plastic sheeting may need to be placed on the floor and any other surfaces that may become contaminated with asbestos dust. At a minimum, heavy duty 200 µm thick plastic sheeting must be used.
- Wet wiping or vacuuming of the surface that is to be worked on may also be necessary before commencing work. This is to minimise the disturbance of asbestos fibres on the surface.

More information on preparing the work area can be found in section 11.4.2 of the asbestos management code.

Safe maintenance and service work techniques

Wherever possible, **dry ACM should not be worked on.**

Techniques

Techniques to prevent or minimise the generation of airborne asbestos fibres include:

- the wetting of ACM using surfactants or wetting agents such as detergent water
- the use of thickened substances, pastes and gels, such as hair gel or shaving cream, to cover the surfaces of ACM that are to be worked on (these substances should be compatible with the conditions of use, including temperature, and not pose a health risk)
- the use of shadow vacuuming
- performing the task in a controlled environment e.g. a ventilated enclosure.

Ensure that the work has been assessed for any electrical hazards that may result from the use of water or other liquids. If an electrical hazard exists, primary consideration must be given to removing the ACM, rather than relying on dry work methods.

More information on safe maintenance and service work techniques can be found in section 11.5 of the asbestos management code.

Tools

- High-speed abrasive power and pneumatic tools such as angle grinders, sanders and saws and high-speed drills must never be used.
- Manually operated hand tools must be used wherever possible.
- If manually operated hand tools cannot provide sufficient physical force to perform the work, low-speed battery-powered tools which are able to be used in conjunction with wet methods for dust control must be used
- Battery powered tools must be fitted with a local exhaust ventilation hood whenever possible.
- At the end of the work all tools must be:
 - fully decontaminated - read section 11.9.2 of the asbestos management code
 - placed in sealed containers
 - disposed of as asbestos waste.

More information on tools can be found in section 11.6 of the asbestos management code.

Personal protective equipment (PPE)

The risk assessment should determine the need for and the appropriate types and levels of PPE. This includes respiratory equipment.

All respiratory protection equipment must meet the requirements of *AS/NZS 1716: Respiratory protective devices*.

More information on PPE is available from:

- workplace health and safety subject - personal protective equipment
- section 11.7 of the asbestos management code
- section 9.7 and Appendix C of the asbestos removal code.

Asbestos vacuum cleaners

Asbestos vacuum cleaners must comply with AS 3544-1988 *Industrial Vacuum Cleaners for particulates Hazardous to Health* and AS 4260-1997 *High Efficiency Particulate Air Filters (HEPA) – Classification, Construction and Performance*.

- Household vacuum cleaners must never be used where asbestos is or may be present - even if it has a HEPA filter.
- PPE should be worn whenever an asbestos vacuum cleaner is opened to change the bag or filter, or to perform other maintenance.
- Asbestos vacuum cleaners should only be emptied by a competent person:
 - with the correct PPE
 - in a controlled environment
 - in compliance with the manufacturer's instructions.
- Wherever possible, asbestos vacuum cleaners should not be hired as they can be difficult to fully decontaminate.
- Hiring may be more viable in some cases, e.g. when a one-off maintenance task is required.
- Asbestos vacuum cleaners should only be hired from organisations that provide vacuum cleaners specifically for work with asbestos.

More information on vacuum cleaners is available in section 11.8 of the asbestos management code.

Decontamination

The type of decontamination required depends on the type of asbestos (friable or bonded), the work method used and the site conditions.

There are two procedures for **workplace decontamination**:

- wet decontamination - using wet rags to wipe down contaminated areas
- dry decontamination - involves carefully rolling or folding up and sealing plastic sheeting and/or vacuuming the asbestos work area with an asbestos vacuum cleaner. This method should only be used where wet methods are not suitable or pose a risk because of electricity or slippage.

If extensive contamination has occurred, an asbestos removalist must be engaged to perform the decontamination. Clearance monitoring may be required.

All **tools, equipment and reusable respirators** used during the work must be dismantled (where appropriate) and decontaminated. This must be done using either wet or dry decontamination methods.

Personal decontamination must be undertaken every time a worker leaves the asbestos work area and again when the asbestos task is completed.

More information on decontamination procedures can be found in section 11.9 of the asbestos management code.

Clearance inspections

A clearance inspection verifies that an asbestos work area is safe to be returned to normal use after work involving the disturbance of asbestos-containing material has occurred. For more information about clearance inspections, refer to:

- Section 11.10 of the asbestos management code
- Fact sheet – Clearance inspections for asbestos work areas

Waste removal and disposal

Asbestos waste must always be removed and disposed of by a competent person. This includes contaminated PPE and cleaning materials used in the work.

Asbestos waste can be collected and disposed of in:

- asbestos waste bags
- solid, sealable asbestos waste containers such as bins or drums, if storage is required.

Controlled wetting of asbestos waste must be used to reduce the possibility of dust emissions during the bagging or containment of the waste.

More information on waste disposal methods can be found in section 11.11 of the asbestos management code.

Prohibited activities with asbestos

The *Workplace Health and Safety Regulation 2008* and sections 11.6 and 11.8 of the asbestos management code prohibit the use of certain tools and work methods when working with ACM as they can generate dangerous airborne asbestos fibres.

These prohibitions include the use of:

- high-speed abrasive power and pneumatic tools
- high-pressure water cleaners
- compressed air or abrasive blasting
- household vacuum cleaners even if they have a HEPA filter. Only vacuum cleaners specifically designed for safe work with asbestos may be used.

For full details of prohibited activities with asbestos refer to Part 13 of the *Workplace Health and Safety Regulation 2008* and sections 11.6 and 11.8 of the *asbestos management code*.

Asbestos removal

Removal of less than 10m² of bonded asbestos

Must be done by a competent person and comply with the asbestos removal code

Removal of 10m² or more of bonded asbestos or any quantity of friable asbestos

Safe removal of 10m² or more of bonded asbestos or any quantity of friable asbestos

Responsibilities of the client

What clients (this can include home owners) must do when having asbestos removed

Responsibilities of asbestos removalists

What asbestos removalists must do

Planning for the removal of asbestos-containing materials (ACM)

Control plans, emergency plans, hot surface plans, decontamination plans

Requirements for the removal of ACM

Requirements for asbestos removal

Specific asbestos removal procedures

Examples of procedures for specific asbestos removal tasks

Removal of less than 10m² of bonded asbestos

The removal of less than 10m² of bonded asbestos does not require a certificate, however it can only be performed by a competent person.

A competent person is a person who possesses adequate qualifications, such as suitable training and sufficient knowledge, experience or skill, to perform a specific task safely.

All removal of asbestos-containing material must be undertaken in compliance with the *Code of Practice for the Safe Removal of Asbestos* 2nd edition [NOHSC: 2002(2005)].

More on the general requirements for removing asbestos

Removal of 10m² or more of bonded asbestos, or any quantity of friable asbestos

Work to remove **any amount** of friable asbestos must be done under the authority of the holder of an “A” class certificate to remove friable asbestos-containing material.

Work to remove any asbestos containing material must comply with the asbestos removal code.

The required certificates for removal of asbestos-containing material are:

- **A Class certificates** covering work involving both the removal of friable asbestos-containing material and bonded asbestos-containing material of 10 m² or more.
- **B Class certificates** only covering work to remove 10 m² or more of bonded asbestos-containing material. This certificate **does not** permit its holder to remove friable asbestos.

More on the general requirements for removing asbestos

More on the requirements for removing friable asbestos

Read about requirements for becoming an asbestos removalist.

Responsibilities of the client

Under the *Workplace Health and Safety Regulation 2008*, if asbestos-containing material is to be removed from a structure other than a building used for domestic residential purposes (e.g. a house), then the owner of the structure or a person engaged by the owner to supervise the work must comply with part 7.2 of the asbestos removal code (responsibilities of clients).

Under Part 7 of the asbestos removal code, the client must do the following:

- ensure that an asbestos removalist is used to perform asbestos removal work
 - Removal of friable asbestos requires an A class certificate holder
 - Removal of 10m² or more of bonded asbestos requires either an A class or B class certificate holder
 - Removal of less than 10m² of bonded asbestos does not require a certificate holder, but the asbestos removalist must be competent
- nominate one or more people to liaise with the asbestos removalist
- request the details of the removalist's certificate (if the removal work is for friable asbestos or 10m² or more of bonded asbestos)
- ensure a copy of the workplace's register of asbestos-containing materials (ACM) is given to the asbestos removalist. If there is no register of ACM it is the owner's responsibility to create one before work starts
- the owner must provide an asbestos removalist with precise details of the asbestos removal requirements. This includes details of what is to be removed, i.e. details on the type (friable or bonded) and condition of ACM present, their quantity, where it is located and any hazards that may be associated with the asbestos removal work.

More information on the obligations of the client is available in section 7.2 of the asbestos removal code.

Responsibilities of asbestos removalists

Under Part 7.3 of the asbestos removal code, asbestos removalists must do the following:

- hold a certificate to remove asbestos-containing material where required by law -
 - removal of friable asbestos requires an A class certificate
 - removal of 10m² or more of bonded asbestos requires either an A class or B class certificate
 - removal of less than 10m² of bonded asbestos does not require a certificate holder, but the asbestos removalist must be competent
- If applicable, provide details of their certificate to the client
- develop an asbestos removal control plan **before** work starts
- ensure asbestos removal is carried out safely
- ensure asbestos removal supervisors have appropriate knowledge of precautions and procedures
- ensure persons performing the removal of ACM are competent to perform the tasks
- provide people doing asbestos removal work with adequate training to prevent risk to themselves and others
- establish a health surveillance program as determined by an assessment of potential risk.

More information on the obligations of asbestos removalists is available in section 7.3 of the asbestos removal code.

Planning for the removal of ACM

Planning requirements for the removal of ACM depend on:

- the specific asbestos removal task
- the type, location, quantity and condition of ACM to be removed
- whether there are workers or other people nearby.

Asbestos removalists must develop a site-specific asbestos removal control plan before starting any asbestos removal.

A control plan must include information on how identification, preparation, removal, decontamination and waste disposal will be done. More information on the components that a control plan must address is available in section 8.1 of the asbestos removal code.

Other planning that must be done by the asbestos removalist includes:

- emergency plans
- planning for ACM removal from hot surfaces
- planning for decontamination.

Information on these plans can be found in sections 8.2, 8.3 and 8.4 of the asbestos removal code.

Requirements for the removal of ACM

Requirements for removing any and all ACM

Requirements when removing friable asbestos

Requirements for removing any and all ACM

The *Workplace Health and Safety Regulation 2008* requires any removal of asbestos-containing materials at a workplace to be done in accordance with the asbestos removal code.

Part 9 of the asbestos removal code states requirements for the removal of all asbestos-containing material (ACM) from workplaces that must be followed.

The requirements include:

- determining the asbestos removal boundaries
- security, signs and barriers
- electrical and lighting installations
- preparation activities, including:
 - minimising the number of people present
 - using the correct tools
 - personal protective equipment (PPE)
 - decontamination materials
- methods for removing ACM, which include:
 - wet spray method (most preferred)
 - dry removal method (least preferred)
- inspection of equipment
- personal protective equipment including:
 - respiratory protective equipment
 - protective clothing and footwear
- air monitoring
- decontamination
- waste removal
- disposal of asbestos waste.

Requirements when removing friable asbestos

The **removal of friable asbestos** must be done:

- by holders of an A class certificate
- in accordance with the general requirements for the removal of ACM from workplaces (outlined in the section above) and detailed in Part 9 of the asbestos removal code and in accordance with the additional requirements for the removal of friable ACM detailed in Part 10 of the asbestos removal code

Both sets of requirements under the asbestos removal code must be met when removing friable asbestos.

The asbestos removal code states ACM that are friable must be removed using wet methods, wherever possible, and within an enclosed area .

Wherever practicable, enclosed 'negative pressure' asbestos work areas must be established for any large-scale removal of friable ACM.

In addition:

- all ventilation and air-conditioning networks servicing the asbestos work area must be closed down for the duration of the asbestos removal work and all vents thoroughly sealed to prevent the entry of airborne asbestos fibres into the duct network.
- upon completion, and after final cleaning of the asbestos work area, all mechanical ventilation filters for recirculated air must be replaced.
- care must be taken to ensure that airborne asbestos fibres cannot escape at points where pipes and conduits pass out of the asbestos work area.

Part 10 of the asbestos removal code provides descriptions of methods used in the removal of friable asbestos which must be followed including:

- negative pressure exhaust units – to prevent the escape of asbestos fibres from enclosed asbestos work areas
- enclosures for large-scale asbestos removal work – including design and installation considerations, testing of enclosures and decontamination
- mini-enclosures for small-scale asbestos removal work
- glove bag removal method

[View the asbestos removal code](#)

Specific asbestos removal procedures

Part 9 and 10 of the asbestos removal code detail the requirements for the removal of ACM including:

- determining boundaries for the work area and asbestos removal site
- security signs and barriers
- electrical safety
- preparation for asbestos removal work
- negative pressure exhaust units
- enclosures for asbestos removal work
- wet and dry removal methods
- glove bag removal method
- ‘wrap and cut’ removal method
- asbestos removal equipment
- personal protective equipment
- air monitoring
- decontamination
- waste removal
- disposal of asbestos waste
- recycling of construction materials.

Examples of specific asbestos removal procedures can be found in Part 12 of the asbestos removal code and must be followed when removing ACM.

These examples cover:

- removal of asbestos-cement products
- removal of vinyl floor tiles and sheet vinyl containing asbestos (for more information, refer to Fact Sheet – Asbestos flooring)
- removal of asbestos-backed vinyl and millboard from beneath a vinyl floor
- removal of asbestos gaskets and rope from plant and equipment
- removal of asbestos switchboards or meter boards
- removal of asbestos mastics and bitumen
- removal and cleaning of ceiling tiles
- removal of asbestos friction products.

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Fact Sheet – Asbestos

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