

# **Dealing with Asbestos – Part 1 General Information**

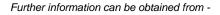
#### **Guide to Asbestos Material**

#### 1. What is asbestos?

Asbestos is a naturally occurring mineral found in the surface of the earth. It contains strong fibres that have excellent durability, fire resistance and insulating properties. Asbestos fibres are 50 to 200 times thinner than a human hair, can float in the air for a long time, can be invisible to the naked eye and can be breathed into the lungs.

Asbestos is a generic term for a number of fibrous silicate minerals, there are Two major groups of asbestos. The serpentine group contains chrysolite, commonly referred to as (white asbestos). The amphibole group contains amosite (brown asbestos), crocidolite (blue asbestos) as well as some other lesser common types, which are tremolite, actinolite and anthophylite.

In the past, asbestos was mined from the ground and manufactured into many different materials. Materials containing asbestos were very common in the Australian residential building industry between the 1940s and late 1980s before their production stopped.



http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-cop/pages/model-cop http://www.workcover.nsw.gov.au/search?query=asbestos+in+your+home

#### 2. Prohibitions on asbestos use, reuse or sale

The use of all forms of asbestos has been banned nationally since 31 December 2003. The Work Health and Safety Regulation 2011, does not allow the use including reuse or sale of any asbestos material. The ban does not apply to asbestos installed prior to this date (e.g. asbestos materials in houses).

#### 3. What was asbestos used for?

The asbestos fibres were used as a bonding and filling material in a large range of heat retardant capacity, asbestos is used in such products as wall linings (internal and external), root sheeting, vehicle brake pads, floor tiles, vinyl flooring and assorted gaskets. Lagging material containing asbestos was also commonly used over the years to insulate heating ducts and water pipes in homes, offices, industrial buildings and ships.

Asbestos was manufactured into many different items. Asbestos-containing materials were used extensively in Australian buildings and structure, plant and equipment in ships, trains and motor vehicles during the 1950s, 1960s and 1970s, and some uses, including some friction materials and gaskets, were only discontinued on 31st December 2003. Materials containing asbestos were very common in the Australian residential building industry between the 1940s and late 1980s before their production stopped.

Many of the homes and other buildings throughout Wollondilly Shire and in most other suburbs and towns throughout Australia built prior to 1990 were built using materials containing asbestos that was contained within fibre cement sheeting, commonly known as "fibro", "asbestos sheeting" or "AC sheeting".







The 'fibro', asbestos sheeting" or 'AC" sheeting was used for external and internal wall linings, in ceiling linings, eaves, fascia linings, roof covering (in corrugated form), and in the base flooring for bathrooms, laundries and other 'wet room' areas.

Some homes may be partially lined with this material with weatherboards, plasterboard and other materials being used to complete the lining.

These asbestos materials still exist in many homes and other buildings. Where the 'fibro', 'asbestos sheeting or 'AC sheeting' or other material containing asbestos is in a bonded form, undisturbed, and painted or otherwise sealed, it may remain in place as *it does not present any danger to health*. However, where fibro or AC sheeting or other bonded asbestos sheeting *is broken, damaged or mishandled, fibres can become loose and airborne posing a risk to health*. Disturbing or removing it unsafely can create a health hazard.

#### 4. What's the difference between Bonded and Friable asbestos?

There are two types of material used in housing construction that contain asbestos:

1. Bonded (Tightly Bound) Asbestos

Bonded materials containing asbestos are the most common in domestic houses. They are mainly made up of a bonding compound (such as cement), with up to 15% to 40% asbestos fibres. Bonded materials containing asbestos are solid, quite rigid and the asbestos fibres are tightly bound in the sheeting. They are commonly called 'fibro', 'asbestos cement' or 'AC sheeting'. Some of this asbestos sheeting can be in the form of corrugated roofing material with shallow or deep corrugations. Drilling, sawing or cutting bonded asbestos will create/release dust containing asbestos fibres and should be avoided whenever possible or only undertaken following recognised safe work practices for asbestos.

2. Loosely Bound (Friable) Asbestos

Loosely bound materials containing asbestos are not commonly found in domestic houses. They were primarily used in commercial and industrial settings for fire proofing, sound proofing and insulation. However, they can be found in some old domestic heaters, stoves, hot water systems and associated pipe lagging and in backing of vinyl and linoleum floor coverings.

These materials can be made of up to 100% asbestos. They are quite loose and can be turned to dust with very light pressure, such as crushing with your hand.

# Loosely bound materials containing asbestos are very dangerous as the asbestos fibres can get into the air very easily.

Note - different standards and requirements apply for the safe handling of bonded and friable asbestos materials.

#### 5. What are the dangers of asbestos?

Asbestos fibres are 50 to 200 times thinner than a human hair, can float in the air for a long time, can be invisible to the naked eye and can be breathed into the lungs.

Asbestos fibres entering the airway can cause asbestosis, lung cancer and mesothelioma. The risk of contracting these diseases increases with the number of fibres inhaled and the risk of lung cancer from inhaling asbestos fibres is also greater if you smoke. People who develop health problems from inhaling asbestos fibres have usually been exposed to high levels of asbestos for a long time. The symptoms of these diseases do not usually appear until about 20 to 30 years after the first exposure to asbestos.

Further information can be obtained from -

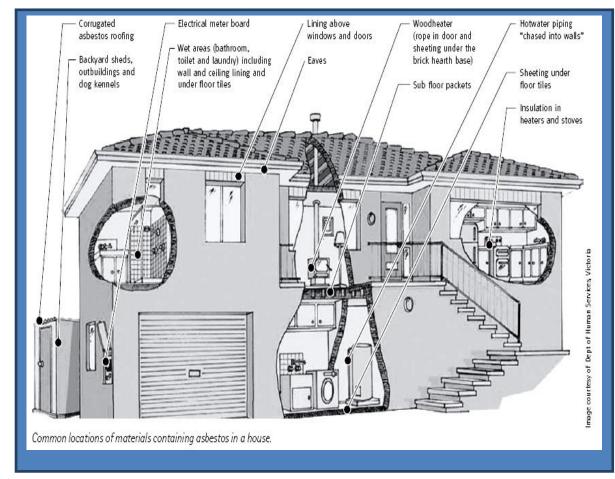
www.health.nsw.gov.au/environment/factsheets/Pages/asbestos-and-health-risks.aspx

#### 6. Could I have asbestos-containing materials in my house?

It can be sometimes difficult to tell whether your home has materials containing asbestos just by looking at it. As a general rule, if your house was built:

- Before the mid 1980s, it is <u>highly likely</u> that it would have materials containing asbestos.
- Between the mid 1980s and 1990, it is <u>likely</u> that it would have materials containing asbestos.
- After 1990, it is highly <u>unlikely</u> it would have materials containing asbestos.





Further information can be obtained from -

http://www.workcover.nsw.gov.au/search?query=asbestos+in+your+home

If you are not sure that a material contains asbestos play it safe and assume that it does. To definitely identify that an item contains asbestos it is necessary to obtain advice from an occupational hygienist, an environmental consultant or get the material tested by a NATA registered laboratory.

#### 7. Managing Asbestos in the workplace

Chapter 8 of the NSW Work Health and Safety Regulation 2011, outlines the responsibilities and duties of employers, occupiers, self-employed people, designers, manufacturers, importers, suppliers and employees. The regulation also covers a number of asbestos-related activities that are carried out in workplaces relating to the management of in situ asbestos, demolition, removal and/or refurbishment. Further information can be found at the link below.

http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+674+2011+cd+0+N

Where a person commissions licensed asbestos removal work at a workplace, clauses 473 and 474 of the Regulations require that a clearance inspection is conducted and clearance certificate obtained from the holder of a Class A asbestos removal license, an independent licensed asbestos assessor or an independent competent person.

Further information can be obtained from -

The Model Code of Practice – How to Manage and Control Asbestos in the Workplace. <u>http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-cop/pages/model-cop</u>



#### 8. Demolitions and renovations where asbestos material is present

Any development, including any renovations or demolitions, involving asbestos material removal must be undertaken by a person who carries on a business that is licensed under Clause 458 of the Work Health & Safety Regulation 2011. An exception to this requirement is where <u>less than 10 square metres</u> of non-friable or bonded asbestos (i.e. in sheet form) is being removed.

Where asbestos is to be removed during renovation or demolition projects the extent of the existence of asbestos is to be detailed in any Development Application or Applications for Complying Development Certificates for that work.

The demolition of buildings and other structures must comply with the Australian Standard AS2601-2009 The demolition of structures.

Further information can be obtained from -

The Model Code of Practice – How to Safely Remove Asbestos. <u>http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-cop/pages/model-cop</u>

#### 9. Cleaning and maintenance of asbestos materials

When cleaning and maintaining asbestos materials it is necessary to follow similar precautions as for asbestos removal. Avoid processes that will cause dust, and keep material wet to minimise dust release.

For example, when cleaning weathered external asbestos like an asbestos cement roof, do not dry scrape, use a high pressure water hose or hard brush to remove debris from the surface. Instead, apply a biocide (diluted with water) to the surface, using a soft bristle/hair brush that does not scour the surface or just applying the solution liberally, over the surface. Allow a contact time of at least 20 minutes then rinse the surface with clean water. In order to minimise further deterioration, lichen growth etc, you should seal or paint the surface.



Care should be taken when cleaning guttering to asbestos roofing, as there may be deposits of asbestos fibres in guttering and some basic precautions should be taken when cleaning guttering. Some important points to consider include:

- Wear sturdy gloves, a Class P1 or P2 disposable face mask and overalls (preferably disposable type),
- Make sure the section of guttering to be cleaned is wetted down first,
- Remove debris carefully and place into a durable plastic bag (200 micron thickness plastic),
- All waste should be treated as asbestos containing and bags sealed and labelled, and
- Waste needs to be taken to an authorised waste facility.

If internal asbestos walls are in good condition, it is not necessary to seal them, although painting is a good option. If required, <u>do not undertake vigorous cleaning of the surface</u>, only ever lightly scrub taking care not to break through the painted coating, making sure the surface remains wet at all times.

Wherever possible avoid drilling or sawing asbestos sheeting. If this needs to be done, every attempt must be made to reduce and contain any dust created by selecting the correct equipment to minimise the generation of airborne asbestos and the protection of the person(s) doing the work and others within the vicinity.

For further guidance refer to The Model Code of Practice – How to Manage and Control Asbestos in the Workplace.

http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-cop/pages/model-cop

Asbestos around the home should be monitored regularly for any changes. Asbestos exposed to the elements (e.g. corrugated roof sheets) is more susceptible to weathering and damage. Trees should be pruned away from asbestos roofs and fences to prevent aggravating the material and dislodging any fibres.



#### **10. Exempt and Complying Developments**

Exempt Development may involve the removal and disposal of asbestos below the threshold of the limit of 10 square metres of 'fibro', 'asbestos sheeting' or' AC sheeting' (this is the limit in the Work Health and Safety Regulation 2011). Council strongly advice's home owners to seek advice from a suitably licensed contractor prior to carrying out any asbestos removal work.

Any Complying Development that involves asbestos removal (as is the case with much home renovation) must be undertaken by an appropriately licensed asbestos contractor. The residence is then deemed to be a workplace of the Contractor and therefore the provisions of the Work Health and Safety Regulation 2011 automatically apply. Unless appropriately licensed, an owner builder cannot carry out such works themselves.

An application for a Complying Development Certificate is to include the details of the estimated area of bonded or friable asbestos involved in the works. A contract containing evidence of the engagement (contractual arrangements) of a business licensed under the Work health & Safety Regulation 2011 is to be provided to the Council or the Principal Certifying Authority. The contract is to specify the landfill site (waste depot) which is lawfully able to accept the asbestos and to which the asbestos material is to be delivered. This latter aspect is to ensure that the disposal of asbestos material, being a hazardous substance, complies with the relevant provisions of The Protection of the Environment Operations (Waste) Regulation 2014.

#### 11. Who can remove bonded asbestos material (under 10 square metres)?

A license is not required to remove up to <u>10 square metres of **bonded** (non friable) material</u> (the size of a small bathroom) in the form of 'fibro', 'asbestos sheeting", asbestos roofing material, or "AC sheeting". However, before commencing you should seek expert advice as to the manner in which the work should be performed, the special personal protection equipment that should be utilised, the precautions to be taken to protect the safety of others, the method of storage, transport and disposal.

It is strongly advised that a home owner engage the services of a suitably licensed contractor to carry out any asbestos removal work, irrespective of the amount involved.

#### 12. Who can remove bonded or friable asbestos material (over 10 square metres)?

Work involving bonded asbestos removal work of <u>more than</u> 10 square metres <u>or any friable</u> asbestos removal work must be carried out by a licensed asbestos removalist who is licensed to carry out such work in accordance with clause 458 of the Work Health and Safety Regulation 2011.

Home owners should ensure that they sight a copy of the contractor's license and obtain a signed contract prior to the commencement of any work involving asbestos material.

A contract with a licensed person must indicate whether any bonded asbestos material or friable asbestos material will be removed, and if so, must specify the landfill site (that may lawfully receive asbestos) to which the bonded asbestos material or friable asbestos material is to be disposed.

#### 13. Licensing

Licensing for asbestos removalists is regulated and administered by WorkCover NSW.

There are two types of asbestos licenses, designated as Class A and Class B licences.

Class A - licenses the person to carry out work with friable and bonded asbestos.

Class B - licenses the person to carry out work with bonded asbestos only.

Further information can be obtained from -

http://www.workcover.nsw.gov.au/search?query=asbestos+licences



#### 14. Compliance with rules about asbestos

Council's Building Surveyors or the person appointed as the Principle Certifying Authority in respect to any particular building project have a role in ensuring that the conditions of Development Consent or a Complying Development Certificate are complied with.

Should a person not comply with the terms of the Consent then there is a range of actions that could be taken to enforce compliance and these include the issue of directions on the site, the service of Orders, the issue of a Penalty Infringement Notice (on-the-spot-fine), or the launching of prosecution proceedings in the appropriate court.

In some situations, Council also has a legal obligation to notify WorkCover. Their role is to enforce the provisions of the Work Health and Safety Act 2011 and Regulations.

The penalties for non-compliance with the laws relating to work involving asbestos material are severe.

#### 15. Where can asbestos materials be safely disposed of?

Asbestos Waste can be categorised into two types:

- Stabilised Asbestos is any waste containing asbestos in a bonded matrix, e.g. asbestos cement sheeting ("fibro"), bituminous floor tiles / roof sheeting; and
- Asbestos Fibre and Dust Waste is any waste containing asbestos dust or fibres, e.g. brake lining dust, acoustic insulation, thermal insulation (lagging), dust from ventilation collection systems.

The Protection of the Environment Operations (Waste) Regulation 2014 contains special requirements relating to the transportation, disposal, re-use or recycling of any type of asbestos waste, regardless of whether the activity is required to be licensed.

The requirements for the transport of asbestos waste are that bonded asbestos material must be securely packaged at all times; friable asbestos material must be kept in a sealed container; asbestos-contaminated soils must be wetted down; and all asbestos waste must be transported in a covered, leak-proof vehicle.

The requirements for the disposal of asbestos waste are that asbestos waste in any form must be disposed of only at a landfill site (waste depot) that is lawfully licensed to receive that waste; the transporter of asbestos waste must notify the occupier or operator of the waste depot that the load contains asbestos waste; and that the transporter, when unloading and disposing of the asbestos waste, must do so in such a manner as to prevent the generation of dust or the stirring up of dust. The operator of the licensed waste depot has other responsibilities in respect of the covering of the waste.



The Protection of the Environment Operations (Waste) Regulation 2014 can be accessed at;

http://www.epa.nsw.gov.au/wasteregulation/poeo-reg-2014.htm

The nearest Sydney Metro Asbestos Waste Landfill Sites are located at:

- Eastern Creek Waste Management Centre, Wallgrove Road, Eastern Creek; 1300 651 116
- SITA Environmental Solutions, 1725 Elizabeth Drive, Kemps Creek; (02) 9756 6899
- > Horsley Park Waste Management Facility, 716-56 Wallgrove Road, Horsley Park; (02) 9620 1944
- Blacktown Waste Services, 920 Richmond Road, Marsden Park; (02) 9835 4544



## 16. Imported landfill - contamination of your land

Before accepting fill on your land, check with council to find out if filling of land is permitted on your premises and what approvals are required. Council approval is often required to ensure that only uncontaminated fill is used on residential properties and safety control measures are put in place. Council will also check that fill is not placed in areas where it may cause harm to plants and wildlife or pollute watercourses.

Landowners and occupants can be ordered to remove unapproved fill and pay the costs of taking it to a lawful waste facility.

### 17. Illegal dumping of asbestos containing materials

Illegal dumping includes the unlawful transporting or dumping of waste or land filling without the consent of Council.

Illegal dumping can have adverse affects on wildlife and the local environment, by encouraging vermin and introducing weeds, and also creates visual and environmental pollution. It can contaminate land and local waterways, and can pose a health risk or fire hazard to the community.

Under the *Protection of the Environment Operations Act, 1997* and the *Environmental Planning and Assessment Act, 1979*. Council can issue a clean up notice, an on the spot fine or prosecute an offender in the Local Court.

For more serious offences, offenders can be prosecuted in the Land and Environment Court. Penalty notices of up to \$250,000 can apply to an individual.





# 18. Links to relevant websites containing up to date information on dealing with asbestos

The information contained in this guideline is current as of the date of printing. Regulations relating to asbestos can and do change, therefore, Council advises all persons to access the links below prior to undertaking any asbestos related work to ensure that the work will be undertaken in accordance with current legislative provisions.

- WorkCover <u>www.workcover.nsw.gov.au</u>
- > NSW EPA <u>http://www.epa.nsw.gov.au/Search/QuickSearch.aspx</u> (type asbestos into the search bar)
- Wollondilly Shire Council <u>www.wollondilly.nsw.gov.au</u> (type asbestos into the search bar)
- Asbestos Removal Contractors Association <u>http://www.arcansw.asn.au/</u>