Australian Government \* Asbestos Safety and Eradication Agency



## Asbestos safety for trades and construction workers

This guide provides information about where you might find asbestos, the laws that relate to asbestos management and removal and how to protect yourself and others from exposure to harmful asbestos fibres.



## ASBESTOS SAFETY

## Don't risk your health

Anyone working in the building and construction industry is likely to come into contact with asbestos at some stage.





Asbestos was used in over **3,000 common products** prior to being phased out by 1990 and banned in 2003. It is still present in millions of homes and public and commercial buildings.

Products containing asbestos are still produced overseas, and despite bans and border controls these products sometimes enter Australia illegally.

## Asbestos is known to cause cancer

Inhaling asbestos fibres is associated with fatal diseases including asbestosis, lung cancer and mesothelioma. All of these asbestos-related diseases contribute to approximately **4000 deaths in Australia each year**.



## You don't need a lot of exposure to asbestos fibres to develop a fatal disease later in life.

The people at greatest risk of exposure are those that undertake repairs, maintenance, renovations and other work on older buildings and infrastructure which contain asbestos materials.

Asbestos containing materials that are sealed,

undamaged and left undisturbed are unlikely to release asbestos fibres and do not need to be removed. Their condition should be monitored over time.



You need to work with asbestos all the time for it to be harmful. Some people who develop an asbestos-related disease can only identify one exposure in their past. Others who were regularly exposed to airborne asbestos fibres do not become ill.

## When is asbestos harmful?



Asbestos can be in a friable or non-friable form in products.



**FRIABLE:** flaky, powdery, can be broken up easily with your fingers. Can be found in sprayed insulation and asbestos felt vinyl backing. It is extremely hazardous because the fine asbestos fibres can be easily released into the air and inhaled.



**NON-FRIABLE:** bonded securely as part of another compound, often cement. Can be found as part of cement sheets, adhesive substances or materials like fibro. It is not dangerous if in good condition. It can be hazardous when disturbed, damaged or deteriorating as asbestos fibres can be released.

## Where can you find asbestos?

Asbestos is present in many locations





Residential

Commercial



#### Public buildings

Buildings constructed or renovated before 1990 are likely to contain some asbestos.

#### Asbestos can be found in:



#### How can I tell if something is asbestos?

#### You cannot tell if building material contains asbestos by simply looking it.

The only way to be sure is to have a sample tested by a NATA (National Association of Testing Authorities) accredited laboratory. At present, there is no conclusive on-site test for the presence of asbestos.

If the building is a workplace (commercial and public buildings) the person with management or control of the workplace must keep an **asbestos register** that tells you where it is and what condition it is in.

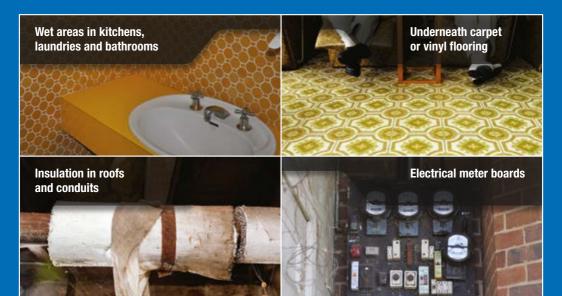
Before starting work in a home, you should ask the owner if they know of any asbestos in the property. Although a home can also be a workplace, homeowners are not required to keep an asbestos register. Remember that many householders will not be aware that their home may contain asbestos.

Asbestos professionals who can assist with identifying asbestos include:

- occupational hygienists who have experience with asbestos
- · licensed asbestos assessors and removalists, and
- Individuals who have undertaken a recognised training course in asbestos

#### Always check if asbestos is present before you begin work:

- ask to see the asbestos register, or
- ask an asbestos professional for advice and have a sample tested, or
- assume the material contains asbestos and take the necessary precautions.



## What do the laws require?

There are strict rules under Australian work health and safety (WHS) laws to ensure the safe management, control and removal of asbestos in the workplace. This includes residential premises that become a 'workplace' when a contractor is working there.

- · Business owners and employers must provide a safe working environment and training for workers who may come into contact with asbestos.
- Business owners and employers must ensure other people are not exposed to asbestos fibres so far as is reasonably practicable.
- Workers have a duty to take reasonable care for their own health and safety and to not adversely affect the health and safety of other persons.

If asbestos is likely to be disturbed as part of demolition or refurbishment, then it must be safely removed before the work starts.

#### Asbestos removal and the law

In most circumstances, WHS laws require asbestos to be removed from workplaces by a licensed asbestos removalist. There are two classes of licensed asbestos removalist:1

- · Class A: authorised to remove all types of asbestos
- Class B: authorised to remove only non-friable asbestos materials



No more than 10m<sup>2</sup> of non-friable asbestos can be removed without a license, except in the Australian Capital Territory (ACT) where any amount of asbestos material must be removed by a licensed asbestos removalist.

In Victoria there is an additional requirement that removal of less than 10m<sup>2</sup> of non-friable asbestos can only be done without a license where the total time of all asbestos removal work that is done in any period of 7 days is less than 1 hour.

10m<sup>2</sup> of non-friable asbestos is equivalent to about four sheets of asbestos cement wall sheeting or one wall of an average size bathroom.

1 In WA Class A is called "unrestricted" and Class B is called "restricted"

## **З МҮТН**

I don't need to take any precautions when doing asbestosrelated work, including removing only small amounts of asbestos.

Although you can remove up to 10m<sup>2</sup> without a license (except in the ACT where this is not allowed) any work involving asbestos still has risks to health. This is why WHS laws require workers carrying out asbestos-related work to: FACT

- be trained in asbestos identification, safe handling and control measures
- use the right tools and equipment, and
- follow safe removal, decontamination • and disposal methods.

**Did You Know...** even if you follow the regulations and safety requirements to remove small amounts of asbestos, it is much safer and easier to engage a licensed asbestos removalist who is fully trained, insured and equipped to prevent or minimise exposure to asbestos.

It often works out cheaper, too!

### **Maintenance tasks**

Even if you don't remove asbestos but come into contact with it as part of repair or maintenance work, you must take precautions to avoid disturbing or damaging the asbestos material.

If you need to cut a small hole into an asbestos eave to install a cable or remove an asbestos-containing vinyl tile to install a plumbing fixture, you must contain or capture any asbestos dust, such as using on-tool dust extraction. You must also wear appropriate personal protective equipment.

There are codes of practice in each state and territory to help you comply with your duties under the WHS laws.

#### **Cleaning and restoration work**

Take care when cleaning asbestos material as even minor damage can result in the release of dangerous fibres. Do not use any abrasive cleaning processes, including sanding, scrubbing, water blasting or compressed air.

Do not use industrial drying fans in areas where damaged or friable asbestos material might be present, until the area has been certified as clear of any remaining asbestos.







#### **Removal of flooring**

Asbestos was commonly used in the backing of vinyl flooring and as carpet underlay. The backing is typically 'felt-like' and is bonded or glued to the underside of the flooring material.

This material can contain a high percentage of asbestos and easily release fibres during the removal process if not carried out appropriately.

Do not use sanders or grinders on flooring suspected of containing asbestos as this can generate a large amount of fibres and lead to extensive contamination.

## Always use work practices that will prevent or minimise the release of asbestos fibres into the air.

- Do not use brooms or brushes to dry-sweep asbestos containing dust
- Do not use high-speed power tools to cut, grind, sand or drill asbestos materials
- Do not use high pressure water or compressed air to clean asbestos materials



## Disposal

Under environment protection laws, all asbestos waste must be transported securely and disposed of at a landfill site licensed to accept asbestos waste.

A licensed professional will usually include the cost of disposing the asbestos waste legally with the cost of removal. Licensed asbestos removalists are listed on your WHS Regulator's website.

## ST MYTH

All I need to remove small amounts of asbestos is a P2 respirator and coveralls. While wearing the right protective gear is important, it is not enough to fully protect you and others from asbestos. There is a lot of other equipment and specific work practices that you must use to prevent asbestos contaminating everything around you. In many circumstances

it is easier and safer to engage a licensed professional to remove the asbestos for you.



# What steps must be followed to remove asbestos?



If you are removing a small amount of asbestos yourself, you need to plan the whole job before you start – from getting equipment and setting up the work area, to clean up and final disposal of waste.

Get everything ready before you start the job, because once you are contaminated you need to be able to step straight into the decontamination area.

#### This checklist will help you with the things you need to do.



#### Step 1: Get the right equipment

- Personal protective equipment (PPE) disposable coveralls, disposable gloves, a tight fitting Class P2 respirator and fully enclosed shoes without laces that can be easily cleaned.
- Plastic sheeting (new, minimum 200 micrometres (µm) thick polythene) and duct tape.
- Warning notices and barricades.
- Bolt cutters (for sheets bolted in place).
- □ Access to a garden hose with a fine spray nozzle or a spray bottle containing a wetting agent (water, or water with detergent).
- Bucket of water and disposable rags.
- Solid asbestos-waste container, labelled appropriately.
- □ Asbestos waste bags (new, labelled, 200 µm thick polythene plastic).
- Class H vacuum cleaner with high efficiency particulate air (HEPA) filters for cleaning up dust.



#### Step 2: Plan and prepare the work area

- □ Assess all the risks associated with the removal and document how you will carry out the work (e.g. as part of a Safe Work Method Statement).
- Assemble PPE, removal equipment and tools (NO power tools) including materials for waste containment and disposal.
- □ Identify an asbestos disposal facility, their opening hours and their requirements for asbestos disposal.
- Check the environmental laws for asbestos transport requirements.
- □ Check the weather for outdoor work windy days will spread any asbestos dust so reschedule any work.

- Prepare the work area
  - · remove any portable electrical or gas items
  - cover all electrical or gas outlets with taped plastic NOTE: water used to wet down the area may cause an electrocution hazard
  - · shut off the electricity or seek help from an electrician
  - isolate the area and limit access by erecting signs and barriers and tell others to avoid the area
  - · cover all vents and turn off air-conditioning and fans
  - clear the area of personal belongings, soft furnishing and anything that may become contaminated
  - cover the floor or ground with new, heavy-duty 200 µm polythene plastic sheeting
- Prepare a clean area with all the equipment you need for the job and a dirty area with all the rags and wipes you need for decontamination.
- Prepare a storage area for waste a trailer or skip that can be covered for transport and disposal.



#### Step 3: Remove the asbestos safely

- □ Thoroughly wet down the material before you start and at regular intervals during the removal process by lightly spraying surfaces with water, or with water mixed with detergent, or with a PVA solution. Use water from a low-pressure garden hose if working outdoors.
- □ If sheets are bolted in place, dampen and cut the bolts while avoiding contact with the asbestos material. Remove the bolts or fixings slowly without damaging the asbestos and place them in the asbestos-waste container.
- Unbolt or use bolt cutters to release gutters, drain pipes and ridge caps.
- □ Carefully lower large pieces of asbestos material to the ground do not drop them or put them in rubble chutes.
- □ Stack asbestos-cement sheets carefully on the plastic sheeting so they do not break
- Place small pieces of asbestos debris in an asbestos-waste container.
- □ Double-wrap large pieces of asbestos material in plastic sheeting (minimum 200 µm thick) and seal all openings securely with duct tape.
- Label all wrapped or bagged asbestos waste.



#### Step 4: Decontaminate

Decontamination of the work area and tools can be done in two ways:

- wet decontamination (or 'wet wiping') uses disposable rags to wipe contaminated surfaces. Rags must not be re-wetted in the bucket or the water will be considered contaminated and therefore becomes asbestos waste.
  All used rags are asbestos-contaminated waste.
- dry decontamination involves rolling/folding up and sealing contaminated sheeting or using an asbestos-grade Class H HEPA filtered vacuum cleaner.

Tools that are used in an asbestos area must be either:

- disposed of as asbestos-contaminated waste, or
- decontaminated, double-bagged and labelled for transport to another asbestos area.

Before any PPE is removed, it should be thoroughly vacuumed and also wet wiped in the case of footwear. Remove the respirator last and dispose with other asbestos waste.

Full details on how to decontaminate are described in your state/territory's Code of Practice for asbestos removal.

Once the asbestos material has been removed, inspect the whole work area to ensure it has been cleaned properly and there is no visible sign of asbestos dust.

# STEP 5

#### Step 5: Dispose of asbestos waste legally

All asbestos waste must be disposed of safely. This includes:

- materials containing asbestos that have been removed and contained in bags or sheets
- all PPE and clothing, clean-up rags and anything else contaminated with asbestos.

You must:

- Keep the asbestos material wet until it is wrapped and sealed, or bagged.
- Wrap the material (including any offcuts or contaminated items) in two layers of 200 µm plastic sheeting or double-bag in asbestos waste bags.
- Only half-fill the bags and sheets to leave enough room to seal the waste (eg to goose-neck the bags).
- Completely seal the packages with adhesive tape.
- □ Put asbestos warning stickers on the outside of the packages or bags, or clearly label the packages or bags ASBESTOS WASTE using a permanent marker pen.
- □ Store packaged asbestos waste in a solid, secure and clearly labelled waste bin or skip until removed
- Ensure the packaged asbestos waste is transported securely and disposed at a designated asbestos-waste disposal facility as soon as possible after removal. Visit www.asbestossafety.gov.au/search-disposal-facilities to find your nearest licensed facility.

You must comply with all the requirements of the work health and safety laws and environment protection laws in your state or territory. These laws can vary from state to state so it is important that you check requirements in your jurisdiction.

#### www. asbestossafety .gov.au

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#### **Further information:**

State and Territory work health and safety regulators have a range of resources on asbestos:

- NSW www.safework.nsw.gov.au
- QLD www.worksafe.qld.gov.au
- VIC www.worksafe.vic.gov.au
- TAS www.worksafe.tas.gov.au
- SA www.safework.sa.gov.au
- NT www.worksafe.nt.gov.au
- WA www.commerce.wa.gov.au/worksafe
- ACT www.worksafe.act.gov.au
- Cwth www.comcare.gov.au

