Australian Government
Asbestos Safety and Eradication Agency

Asbestos awareness for plumbers

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.

Don’t risk your health

Anyone working in plumbing trades is likely to come into contact with asbestos at some stage, for example when working on existing asbestos cement wall linings in wet areas of kitchens, laundries and bathrooms or when carrying out maintenance on asbestos cement sewer or water mains.

Asbestos was used in over 3,000 common products before 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 manufactured 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 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.

When is asbestos harmful?

Asbestos can be found in a **friable** or **non-friable** form.

FRIABLE: flaky, powdery, can be broken up easily with your fingers; or due to a work process, the asbestos material becomes such that it may be crumbled or reduced to powder by hand pressure. Can be found in loose-fill insulation and pipe lagging. 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 pipes or fibro sheets. It can be hazardous when disturbed, damaged or deteriorating as asbestos fibres can be released.

If in any doubt about the type or condition of the asbestos material, you should treat it as friable.

Where can you find asbestos?

Asbestos is present in many locations

Residential

Commercial and Public Buildings

Infrastructure

Environment – asbestos waste in soil

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

Whether working in commercial properties, residential apartment blocks, suburban homes or working on pipes and drains in a suburban street you're likely to come across asbestos and your work could put you at risk of being exposed to harmful fibres.

How can I tell if something is asbestos?

You cannot tell if a building material contains asbestos by simply looking at 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 identification.

Always check if asbestos is present before you begin work:

> ask to see the **asbestos register**

> if there is no register ask an **asbestos professional** for advice and have a sample tested, or

> **if you cannot confirm whether the material contains asbestos, assume that it is asbestos** and **take the necessary precautions**.

Pipe lagging

Pipe lagging is usually found in commercial properties but also has been found in residential apartment blocks. Be on the lookout for this material anywhere there is a central boiler or hot water service in older buildings.

Asbestos rope

Rope insulation can be found on pipework in suburban homes and can even be attached to new hot water systems. Asbestos woven textile used as wrapping insulation to pipes is often just discarded onsite.

Sewer vents and flue pipes

Asbestos cement vent pipes for sewerage systems and the dispersal cap or rain hat on top are very common. Also common are exhaust pipes or flue pipes for heaters, incinerators and electric or gas hot water services or water heaters.

Water and drain pipes

Asbestos cement gutters and downpipes can usually be found in conjunction with an asbestos cement roof but can sometimes be left in place after the asbestos cement roof has been removed. Asbestos cement stormwater pipework can also be found in, for example, underground carparks. There are also asbestos cement pipe drains that run out onto street kerbs.

Asbestos debris can spread from gutters and downpipes to adjacent areas.

Drain traps

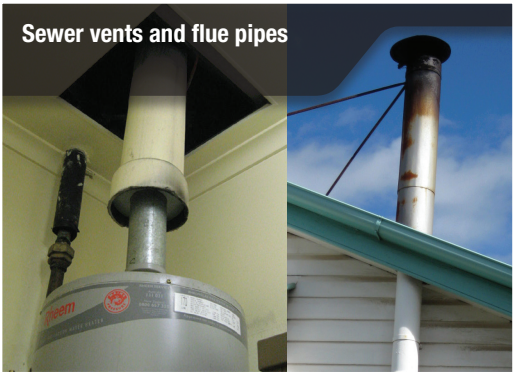
Drain surrounds are extremely common outside the house usually located outside of the main drain or sewerage areas i.e. bathroom/ toilets. These products were being used in building construction long after asbestos sheeting had stopped being used.

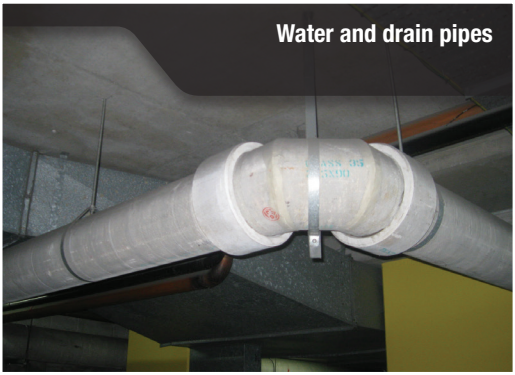
Also, look out for...

- Asbestos cement sheeting used in **wet area walls**, for example kitchen and laundries.
- Asbestos in **older hot water service units**. Sometimes old units can be left in roof cavities after being replaced by a new unit.
- **Asbestos insulation or pipe chasing** inside walls and wall cavities where the pipes (usually the hot pipe) are insulated or “chased” with asbestos-based plaster. This is common in double brick houses, apartment blocks and unit blocks, especially to shower pipes. If you can see the very top of the wall, you can sometimes see the insulation packing as the pipe passes down – but not always!
- Asbestos used in the **backing of vinyl flooring** and as **carpet underlay**.
- **Asbestos contamination in soil** occurs as a result of poor demolition and asbestos removal practices or where asbestos waste has been illegally dumped. Asbestos cement water and sewer pipes in the ground can also deteriorate or break up leaving small fragments in the soil. Asbestos in soil is often degraded and deemed as friable.

Pipe lagging

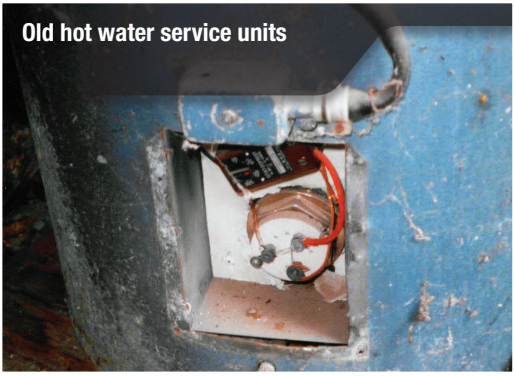
Asbestos rope

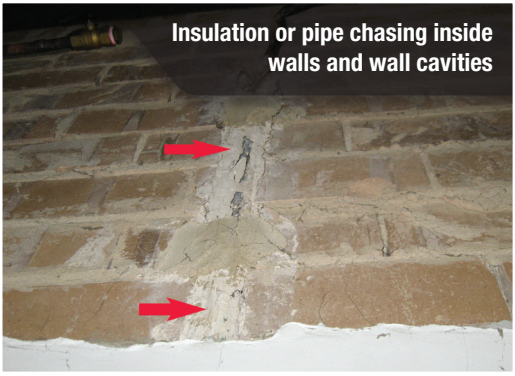

Sewer vents and flue pipes


Water and drain pipes

Drain traps

Water and drain pipes


Old hot water service units


Insulation or pipe chasing inside
walls and wall cavities

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 **ensure other people are not exposed** to asbestos fibres so far as is reasonably practicable.
- Workers must take **reasonable care for their own health and safety** and not adversely affect the health and safety of other persons.

Plumbers carrying out work involving asbestos materials – including repairing or replacing asbestos cement water pipes or cutting a hole into an asbestos cement sheet to access plumbing – must:

- be trained in asbestos identification, safe handling and control measures
- use equipment designed to capture or suppress airborne asbestos, and
- follow safe removal, decontamination and disposal methods.

If asbestos needs to be removed…

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

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:

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

No more than 10m^2 of non-friable asbestos can be removed by a business or organisation without a license, except in the Australian Capital Territory (ACT) where any amount of asbestos material must be removed by a licensed asbestos removalist. All plumbers working in the ACT are required to complete training in *10852NAT - Course in Working Safely with Asbestos Containing Materials.*

In Victoria the removal of less than 10m^2 of non-friable asbestos can only be done without a license where the total time of all asbestos removal work carried out in any period of 7 days is less than 1 hour. This does not mean that removing up to 10m^2 of non-friable asbestos is safe, just that it is legally allowed if all precautions are taken.

WHS laws also require a **Safe Work Method Statement** (SWMS) to be completed for construction work that disturbs or is likely to disturb asbestos, because this is considered high-risk construction work.

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, so it is important that you check requirements in your jurisdiction.

Regulators in each state and territory publish codes of practice and other types of guidance to help you comply.

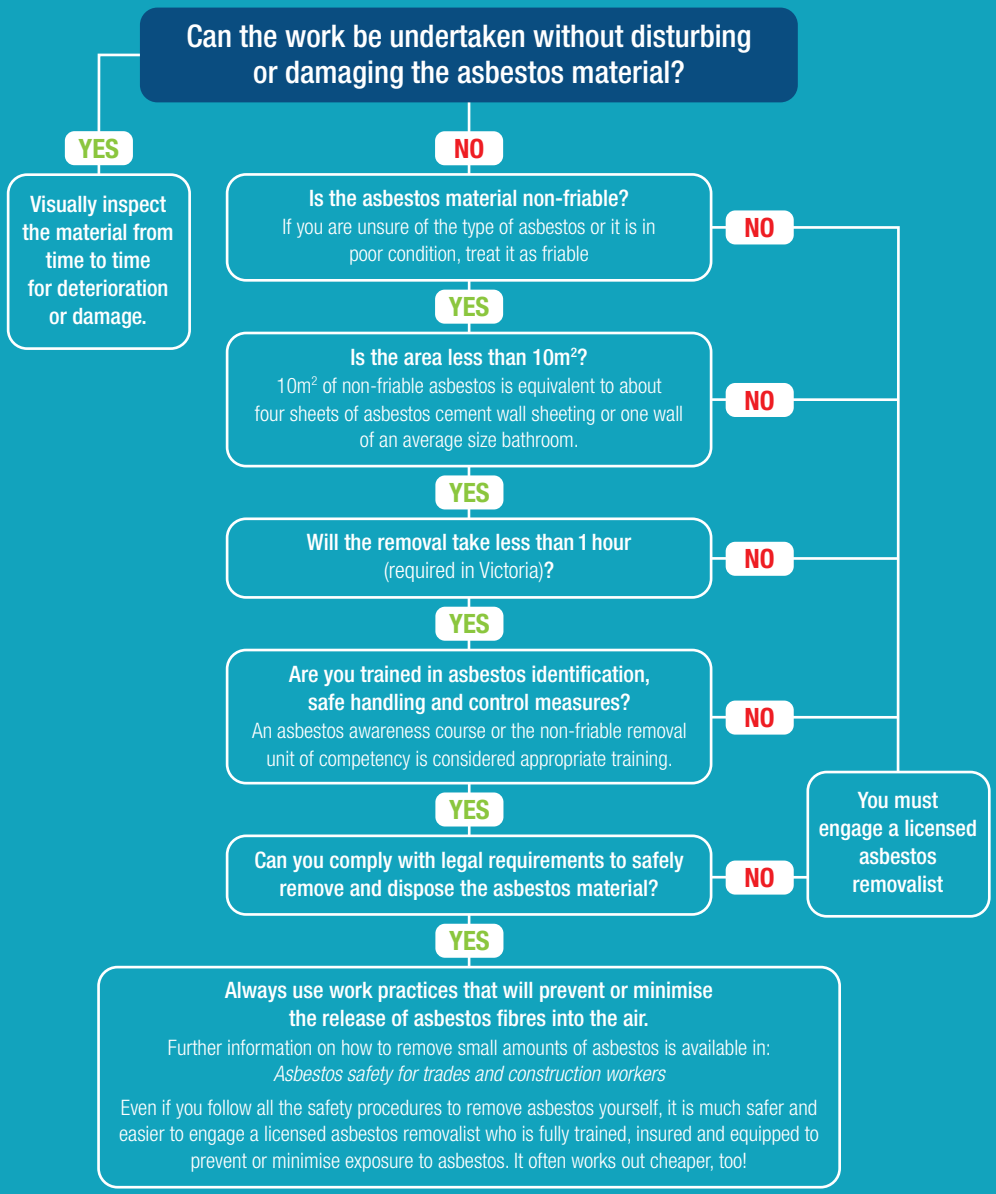
If you are not trained in the safe handling of asbestos – don't touch it!

You also may not be protected by your insurance if something goes wrong because most regular insurance policies exclude asbestos liabilities.

Things to consider before starting a job

Not sure whether a material contains asbestos?

- 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.



Safety Tips

- Always consider using a licensed asbestos removalist if asbestos needs to be removed
- Ensure a Safe Work Method Statement is generated and followed for the work
- Wear the right personal protective equipment (PPE) and ensure it is fitted correctly
- Thoroughly wet down the asbestos material and keep it wet during your work to minimise dust - first check that all electrical equipment is de-energised
- 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
- Do not walk on asbestos-cement roofs as they are often brittle and may break
- Do not leave asbestos materials where they may be broken or crushed
- Wrap asbestos waste (including any offcuts or contaminated items) in two layers of 200 µm plastic sheeting or double-bag in asbestos waste bags
- Ensure the packaged asbestos waste is transported securely and disposed at a designated asbestos-waste disposal facility as soon as possible after removal.

Keep some important equipment in your work vehicle like a cartridge half face mask (P2), disposable overalls, disposable gloves and other equipment like a water spray bottle, a 200 micron thick plastic bag and duct tape.

www.
asbestossafety
.gov.au

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

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