In many cases, the presence of ACMs is no cause for alarm. For example, internal asbestos-cement sheet walls or ceilings which are in good condition and coated with paint do not pose a risk to health, while they are not showing signs of degradation or damage.

If you are thinking about doing plumbing work with an ACM in your way or removing the ACM, please consider the following:

- > Can the ACM be bypassed?
- > Are there other safe ways of dealing with the ACM?
- Does what you're about to do comply with your state or territory laws and safety procedures?
- ➤ Do you have asbestos training to handle or work with the ACM, or should you use a licensed asbestos removalist?

If you have to handle or work with the ACM, it is important to remember:

- > DO NOT use power tools
- > DO NOT use abrasive cutting or sanding discs
- > DO NOT use compressed air
- **> DO NOT** use a high-pressure water hose
- **DO NOT** walk on corrugated asbestos-cement roofs as you may run the risk of falling through the roof
- ➤ DO NOT leave ACMs where they may be broken or crushed allowing fibres to escape into the air or into the environment
- > DO NOT cover it over as this only hides it which could result in someone accidentally cutting into it
- **> DO** get the material tested by a NATA-accredited laboratory if you are unsure if it contains asbestos
- Always ensure the ACM is thoroughly wet down and kept wet during your work to minimise the release of asbestos fibres and/or dust

For more information contact the work health and safety regulator in your state or territory.









What are some of the common plumbing activities I need to take care with?

Pipe repair and connection to pipes insulated with asbestos, followed by drilling are the biggest risks to plumbers when carrying out work. Asbestos can be in a friable or non-friable form in products.

Friable means you can break it up with just your fingers.

For example pipe lagging is friable, asbestos cement pipe is generally non-friable. If you can break it up with your fingers it means it is easy to breathe in and you risk getting an asbestos-related disease.

These areas are all on top of regular types of asbestoscontaining materials encountered in a residence such as roofs, walls, ceilings, soffits or eave linings.

Safety tips

If you have any reason at all to believe there might be asbestoscontaining materials (ACMs) where you are working, stop work immediately and don't risk it. It is important to treat it as asbestos until it is tested and confirmed not to be asbestos.

ACMs are categorised as either friable or non-friable. Both friable and non-friable asbestos pose a significant health risk to all workers and others. If the materials are not properly maintained or removed carefully, asbestos fibres can become airborne and can be inhaled. It is important to note that friable asbestos can only be removed by a class A licensed asbestos removalist.

Asbestos is always a risk when it is disturbed in a way that produces dust that contains asbestos fibres. Airborne fibres are easily generated either through weathering or from building related activities such as demolition, drilling, cutting or sanding.

If the ACM is in good condition (i.e. undamaged, undisturbed, well maintained), the safest option is to leave it alone and visually inspect the materials from time to time for deterioration and damage. It is unlikely to pose a health risk if it is in good condition.

Plumbers can be exposed to asbestos in a wide range of field specialities from plumbing, roofing and gutters or fixing up a drain to the street of a suburban home.





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. The right-hand image above is a microscopic view of pipe lagging showing the fine straight amosite asbestos fibres just held in plaster.

In the family home

> Asbestos rope:

Easily applied rope insulation is often still found on pipework attached even to new HWS installations. Asbestos woven textile used as wrapping insulation to pipes is often just discarded onsite.







> Asbestos cement sewer vents and flue pipes:

This can be from heaters or hot water service units (both gas and electrical). The standard toilet/sewer pipe was very commonly constructed using this type of pipe with various caps and shaped ends.







Water and drain pipes and the connecting sealant between sections are asbestos-containing materials.











Drain trap surrounds and water meter covers, sinks and rare toilet cisterns can also be asbestos cement.





Asbestos can be found inside older hot water service units. These are getting rarer now but can sometimes be found sitting in a roof space replaced by a newer hot water unit.





One commonly overlooked example is the insulation or pipe chasing inside walls and wall cavities particularly of brick/ cement/double brick homes; where the pipes (usually the hot pipe) are insulated or "chased" with asbestos-based plaster. This plaster used to be available dry, in bags and applied wet onsite to insulate the pipes from heat loss to the bricks or mortar. 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.

Why is it important for plumbers to be aware of asbestos before beginning work?

Asbestos is a known carcinogen, and inhaling asbestos fibres is associated with diseases including pleural disease, asbestosis, lung cancer and mesothelioma. Even limited or short-term exposure to airborne asbestos fibres can be dangerous and in some cases fatal.

There are legal requirements regarding asbestos management, its removal and disposal which can vary between the different states or territories. Be sure to check with your local council or the relevant state or territory government for legal

It is important to know whether asbestos is present before you begin work to ensure that it remains undisturbed so its fibres

don't become airborne. If you don't know, you should assume ACMs are present and take every precaution necessary.

If a property was built or renovated before 1990, it is likely to contain some form of ACM. Due to its prevalence in Australian homes, it is important to know whether the property you are working on contains ACM and how to avoid disturbing it.

In line with most state and territory asbestos regulations, it is the requirement of workplaces built prior to 2004 to prepare, maintain and update an asbestos register that identifies any ACMs located at a workplace, and that the register is made available to staff, contractors or other visitors.

When there is potential to come across asbestos on a worksite, it is important to always ask for the asbestos register and ensure you protect yourself.

You also must be trained to wear disposable overalls, gloves and a cartridge half face mask (P2) etc. and use other equipment like a water spray bottle, a 200 micron thick plastic bag and duct tape. That way you are not leaving the waste material lying around as shown in the photos inside this pamphlet.

Finally, it is vital that you ask yourself the following questions:

- > Is the ACM non-friable?
- > Is the area less than 10 square metres?
- > Will the removal task take less than 1 hour?
- > Do I have handling/working with asbestos training?
- > Has PPE decontamination and waste collection/disposal been addressed?

If you answer yes to all the above, a removalist licence and notification to the regulator is not required, but you will need the relevant liability insurance (asbestos is excluded from a majority of regular insurance policies) and

If you answer no to any one of the above, a licensed removalist is required with the relevant liability insurance and qualifications.

Whatever you decide, you must protect yourself and others around you.