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

Disturbing existing asbestos-containing material (ACM) whether it is friable or non-friable is one of the biggest risks to Fire Safety Installers.

Friable means you can break it up with just your fingers; sprayed asbestos millboard, asbestos rope or loose packing are examples of friable asbestos products. Non-friable asbestos products are like asbestos-cement sheeting or asbestos based resin board are harder to damage.

If you can break it up with your fingers it means it's easy to breathe in and you risk getting an asbestos-related disease.

The ongoing renovation of houses can sometimes cause ACMs to be covered up to modernise the appearance rather than removing the dangerous materials, so installers need to ensure what they are drilling into is not ACMs. Asbestos-cement debris is often found in roof cavities so care must be taken to ensure that a risk assessment has been undertaken and appropriate safety procedures and personal protective equipment are on hand to get the job done safely.





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

@AsbestosSafety
Asbestos-Safety-and-Eradication-Agency

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Asbestos awareness information in the fire safety installation industry

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# **Safety tips**

Keep a cartridge half face mask (P2) and some additional paper (P2) disposable masks on hand in your toolbox as backups which you can dispose of appropriately later. Ideally, you should be clean shaven to ensure the mask fits properly and does not leak.

Keep some important equipment in your work vehicle like a water spray bottle (with PVA glue mixture), disposable overalls, gloves, a 200 micron thick plastic bag and duct tape to seal the waste material. That way you are not leaving the asbestoscontaining waste lying around to cause the next person to be exposed to dangerous asbestos fibres.

Try not to give in to the "she'll be right this time" mindset in order to get a job done faster. Even though the asbestos fibres that can harm you are invisible to the human eye, they are there and you can easily take them home with you to your family!

If you have to handle or work with asbestos-containing materials (ACMs), it is important to remember:

- **DO NOT** use power tools
- **DO NOT** use abrasive cutting or sanding discs
- **DO NOT** use compressed air high-pressure water hose or brooms to sweep the waste up
- **DO NOT** walk on corrugated asbestos-cement roofs as you may run the risk of falling through
- **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 accidently 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. (This does not apply where an electrical hazard exists)

Fire Installers can be exposed to asbestos in a wide range of field specialties anywhere from fire safety in a tower block to installing a smoke detector in a suburban home.



## Sprayed asbestos and asbestos–containing vermiculite

Multi storey buildings and structural beams were often sprayed with asbestos or asbestos–containing vermiculite as fire–rating material or as an acoustic sound deadening material. Sprayed asbestos is very hazardous, resulting in airborne asbestos fibres in the immediate vicinity unless a sealant or coating has been applied. Even old asbestos removals not done very well and recoated with non asbestos fire–rating can create a significant hazard.

Asbestos–containing vermiculite was used extensively in commercial construction because of its acoustic and fire–rating qualities and can still be commonly found in older apartment blocks.



### Asbestos as penetration or riser packing

Multi storey buildings are required by law to have fire limiting measures in place. Asbestos–containing products such as

asbestos rope, bagged asbestos, vermiculite, loose packed asbestos and asbestos sealant were used to slow the spread of fire and smoke by filling in voids between floors and service areas.

Asbestos can also be found as a fire limiting measure in the service areas of a building where cables, pipes and ducting move from floor to floor. It may also exist around service or core areas such as lift or fire escape shafts and around the top of concrete or brick walls.



#### Fire doors and firewalls

Fire doors have been manufactured a number of ways over the years. The most common method was a sandwich construction in which an outer wooden frame and covering contained sheets of asbestos–cement acting as an outer layer to a central core of either asbestos or compressed asbestos material.

Asbestos firewalls are usually located above dividing walls in ceiling or roof spaces to minimise the spread of fire. They can also be employed where ignition sources are present like walls around an electrical switch room or incinerator room.

Firewalls are uncommon in standalone domestic houses but can be common in unit or apartment blocks. They can also sometimes be found between duplex pairs and in the roof spaces of town houses or semi-detached homes.

This material can often be disturbed by cable running so it can be in very poor condition. Asbestos products such as pipework lagging, electrical service components, asbestos–cement sheeting or asbestos low density board can also be present in buildings.



#### Houses and residences: Ceilings and electrical boxes

Asbestos cement and asbestos low density board ceilings are common in older houses and residential properties. Installers need to be aware of this risk before they start drilling or cutting into ceilings that can expose them to asbestos fibres.

With electrical inter connection laws coming into force for household smoke detectors, fire installers need to be prepared to encounter ACMs in their work.



Main electrical meter boards and fuse boxes can house a number of asbestos-containing components like asbestos based resin board (generally black in colour) with brand names such as Ausbestos or Zelamite stamped on them. Behind these boards can lie insulating asbestos panels of asbestos cement sheeting, insulation board or millboard or potentially a combination of them.

#### Older boxes or boards

In older electrical cabinet/boxes quite often there is already asbestos-containing debris inside them from previous installation work. This can be in the form of asbestos resin board dust, asbestos millboard debris, asbestos cement or asbestos insulation board debris. This can be particularly dangerous as just opening the box or cabinet will be enough to get asbestos fibres airborne and potentially expose you to airborne asbestos fibres.



## Running pipes and cables

The installation of pipe work or connection cabling can result in fire safety installers being exposed to asbestos. An understanding of basic safety procedures is important along with clean up and disposal requirements.



#### Sprinkler pumps

Sprinkler pumps and motors can also contain asbestos components such as clutch lining, gaskets and seals.

