

BUILD
RIGHT

Is that asbestos?



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AS DEMOLITIONS RAMP UP IN CHRISTCHURCH AND AUCKLAND, THERE WILL BE PLENTY OF SITUATIONS WHERE ASBESTOS IS ENCOUNTERED. THE ONUS IS ON CONTRACTORS TO CHECK FOR ASBESTOS AND TO HAVE A PLAN IN PLACE TO DEAL WITH IT IF FOUND.

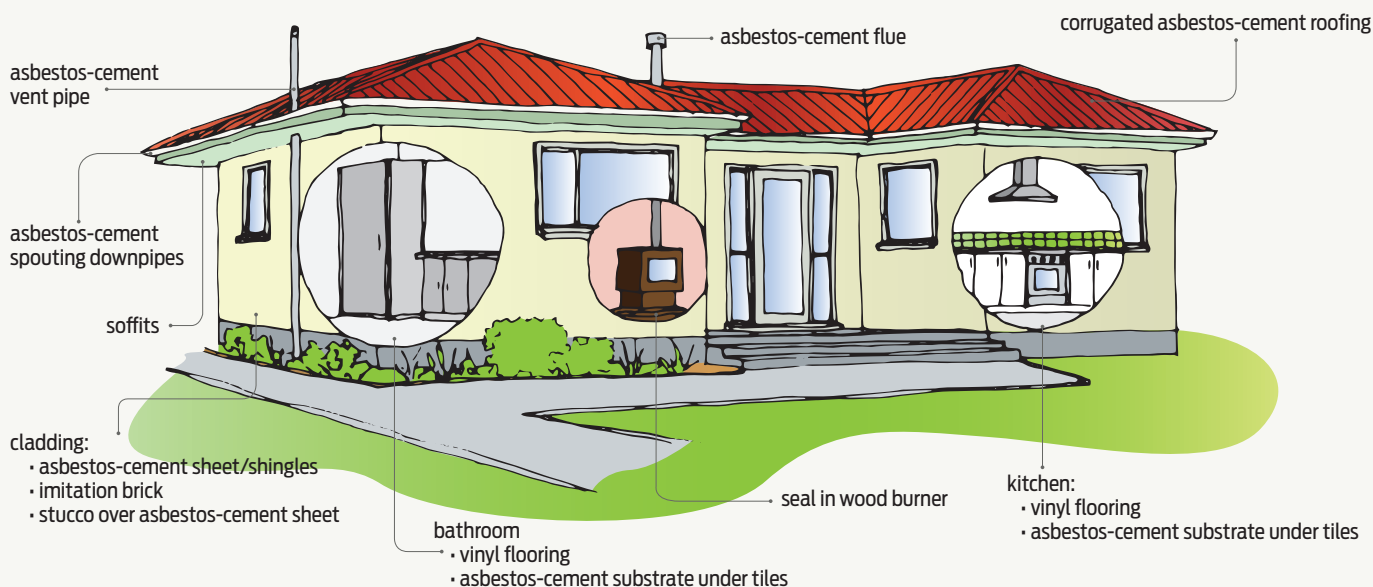


Figure 1 Potential locations of materials containing asbestos.

THE CANTERBURY EARTHQUAKES left many houses badly damaged, requiring either demolition or major repairs. As many of these dwellings contain asbestos, this has created a significant health risk to construction workers and the public in Christchurch.

Asbestos exposure may also be a risk in Auckland as the housing shortage will require a major building programme that may include the demolition of many existing houses to make way for new higher-density housing.

Health risks from asbestos

Asbestos is a health hazard if it is friable – easily crumbled – as airborne fibres can be inhaled and become embedded in the lungs. The inflamma-

tion and subsequent scarring of the lung tissue by the asbestos fibres can result in diseases such as asbestosis, lung cancer and mesothelioma. It may take more than 20 years before an asbestos-related disease develops.

Undamaged, non-friable asbestos presents little risk to health. However, when it is damaged as a result of age, weathering, abrasion, water-blasting, chemical or algal attack or the effects of fire, it is likely to become friable and then become a health risk.

Who is at risk?

Asbestos-containing building materials are likely to have been damaged in the earthquakes and will certainly be damaged during demolition.

This means that demolition and construction workers are at significant risk of exposure to asbestos fibres.

Specialist asbestos removal contractors must hold a certificate of competence that demonstrates they have the knowledge, skills and experience to remove asbestos safely. Most regular contractors, however, are unlikely to have the appropriate knowledge of how to deal with asbestos safely.

Who is responsible for safety?

Although the Health and Safety in Employment Act 1992 places the responsibility for the safety of employees with the employer, demolition and construction workers must be aware of the

dangers of asbestos and know how to manage any risk to themselves and to others.

Conduct a survey

Before a contractor begins work on a house, they should carry out a simple survey to satisfy themselves that they are not at risk of exposure to asbestos. Several questions need asking.

How old? What materials are used?

The first indicator as to whether asbestos is likely to be present or not is the age of the house. Asbestos and asbestos-containing materials (ACMs) were very widely used in the building industry from the late 1930s until around 1990.

Many materials in buildings built or renovated during this period are likely to contain asbestos (see Figure 1). External materials containing asbestos may include corrugated Super Six roofing, guttering, downpipes and rainwater heads, asbestos-cement soffit linings, external wall claddings such as asbestos-cement sheets and shingles, imitation brick and stone claddings, and stucco plaster over asbestos-cement sheet.

Interior finishes and materials may include stippled and textured ceilings, suspended ceiling tiles, the backing to vinyl and linoleum sheet and tile flooring, the lining board behind a gas heater or a fuse board, hot water pipe and cylinder lagging, and insulation.

Flues, metal flue joint and wood burner seals and night-store heaters may all contain asbestos. Asbestos was also sometimes added to plasterboard and plasterboard jointing compound, and lathe and plaster skim coats have been found to contain asbestos.

More detailed survey may be needed

If the answer is 'no' to both these questions: 'Was the building built or renovated between 1940 ➤



Corrugated asbestos roof.



Asbestos guttering.

Table 1

CHECKLIST FOR IDENTIFYING POTENTIAL LOCATIONS OF ASBESTOS

LOCATION	CHECK	YES	NO
CEILING	Are ceilings stippled/textured?	<input type="checkbox"/>	<input type="checkbox"/>
	Are there suspended ceiling tiles?	<input type="checkbox"/>	<input type="checkbox"/>
INTERIOR LININGS	Are walls sprayed/textured?	<input type="checkbox"/>	<input type="checkbox"/>
FLOORING	Is flooring vinyl sheet or tiles?	<input type="checkbox"/>	<input type="checkbox"/>
INSULATION	Is there insulation in the walls or ceiling that may contain asbestos?	<input type="checkbox"/>	<input type="checkbox"/>
HEATING	Does the wood burner or flue have seals that may be asbestos?	<input type="checkbox"/>	<input type="checkbox"/>
	Is there a night-store heater?	<input type="checkbox"/>	<input type="checkbox"/>
	Is there a gas heater with suspected asbestos-containing lining board behind?	<input type="checkbox"/>	<input type="checkbox"/>
FUSE/METER BOARD	Is there a fuse board with suspected asbestos-containing lining board behind?	<input type="checkbox"/>	<input type="checkbox"/>
ROOF	Is the roofing corrugated asbestos-cement?	<input type="checkbox"/>	<input type="checkbox"/>
	Do gutters/downpipes/rainwater heads appear to be asbestos-based?	<input type="checkbox"/>	<input type="checkbox"/>
SOFFITS	Are the soffits a sheet cement-fibreboard material?	<input type="checkbox"/>	<input type="checkbox"/>
EXTERIOR CLADDING	Is the cladding a sheet or shingle cement board?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the cladding imitation brick/stone?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the cladding stucco over asbestos-cement sheet?	<input type="checkbox"/>	<input type="checkbox"/>

and 1990?' and 'Is there any other evidence of asbestos?', no further assessment is required and repair or demolition work can begin.

If the answer is 'yes' to either question, a more detailed survey should be carried out.

Carry out a more detailed survey

A more detailed survey should include:

- drawing a simple floor plan
- identifying all rooms and spaces on the plan
- working through a checklist to identify locations in the house where there may be asbestos
- recording all locations where asbestos might be present on the floor plan.

Be systematic when carrying out the building survey and document all results on the checklist (see Table 1).

Take a sample for testing

The only way to positively know whether a material contains asbestos is to have samples

tested at an IANZ-accredited asbestos-testing laboratory.

Samples must be taken by a person competent to work in asbestos-hazard conditions without risk to their own or others' health and safety.

They should know the:

- types and applications of ACMs
- hazards of asbestos exposure
- correct use, maintenance and storage of personal protective equipment (PPE)
- safe use of plant and equipment to be used.

When taking samples, it's important to:

- be methodical
- take several samples in each location
- identify and record the location of each sample
- store samples from different locations separately.

By carrying out a survey and treating any suspected material as if it contains asbestos, the contractor minimises any exposure risk to themselves and to others. ◀

Key points for asbestos

- If you think asbestos is present, act as if it is.
- Do not assume that a material does not contain asbestos.
- If asbestos is found in one part of a building, it is likely to be in similar materials in other parts of the building.