Asbestos in your home - what you need to know

Which homes are at risk?

In Australia, it is estimated that over 60% of all production and 90% of all consumption of asbestos fibre occurred in the asbestos cement manufacturing industry with many of these building materials still in use today.

These materials were cheap, durable and were used extensively in the building industry. After World War II until 1954, in New South Wales alone, 70,000 houses were built using asbestos cement (52% of all houses built). Up till the 1960s, 25% of all new housing was clad in asbestos cement in Australia. In Victoria, it is estimated that 98% of homes constructed before 1976 contained asbestos products (most likely asbestos sheeting) and that 20% of all domestic roofs of that period contained asbestos.

Asbestos has not been used in domestic building materials since the 1980s but it was not until 31 December, 2003 that asbestos and all products containing asbestos were banned throughout Australia. It is illegal to import, store, supply, sell, install, use or re-use these materials. The ban does not apply to asbestos installed prior to this date (e.g. asbestos in houses).

It is therefore held that if your home was built or renovated before 1990, it is likely that it contains some form of asbestos building product - most likely asbestos cement sheeting.

How can I tell if it is asbestos?

It is very difficult to identify the presence of asbestos just by looking at it. As a general rule, certain building materials installed before the late 1980s may contain asbestos. However, the only way to be certain is to have a sample of the material analysed by a laboratory.

Confirmation should be carried out before any general maintenance, renovation or demolition activities proceed.

If you do not want to go to the expense of testing to determine if asbestos is present, then the material should be treated as though it contains asbestos.

Do new building materials contain asbestos?

No. Since 31 December, 2003, asbestos and all products containing asbestos have been banned throughout Australia. It is illegal to import, store, supply, sell, install, use or re-use these materials. The ban does not apply to asbestos installed prior to this date (e.g. asbestos in houses).

Asbestos has not been used in domestic building materials since the 1980s. Cellulose fibres are now used instead of asbestos in building materials and non-asbestos fibres, such as glass, are now used in insulation products. However, manufacturers warn that other health effects, such as skin and throat irritation, can still result from the inhalation of dust created when cutting these fibrous building products.

Types of asbestos products

There are two types of materials that were used in housing construction that contain asbestos:

- ***Bonded (tightly-bound) asbestos*** or ***non-friable asbestos***
- ***Loosely-bound asbestos*** or ***friable asbestos***

Bonded (tightly-bound) asbestos

Bonded asbestos materials contain a percentage of asbestos fibres embedded in a hardened cement matrix and are the most common asbestos materials used in residential housing. These materials are commonly called ‘fibro’, ‘asbestos cement’ or ‘AC sheeting’ and can contain 10-15% of asbestos but this figure can sometimes reach up to 40%. [6] Today, cellulose fibres have replaced asbestos in fibre cement products.

Bonded asbestos materials are considered to be less of a risk in comparison to loosely-bound asbestos and can be handled more easily, however if the firmly-bound materials are degrading, becoming loose or falling apart, they need to be handled with extra care to prevent dust-containing asbestos fibres.

Another example of firmly-bound asbestos materials that is most commonly found in commercial, industrial and residential properties is insulating boards used for fire protection, heat and sound insulation and they are generally found in circuit boards, electrical panels, ceiling tiles, wall linings and partitions with an asbestos content of approximately 20-45%.

Loosely-bound asbestos

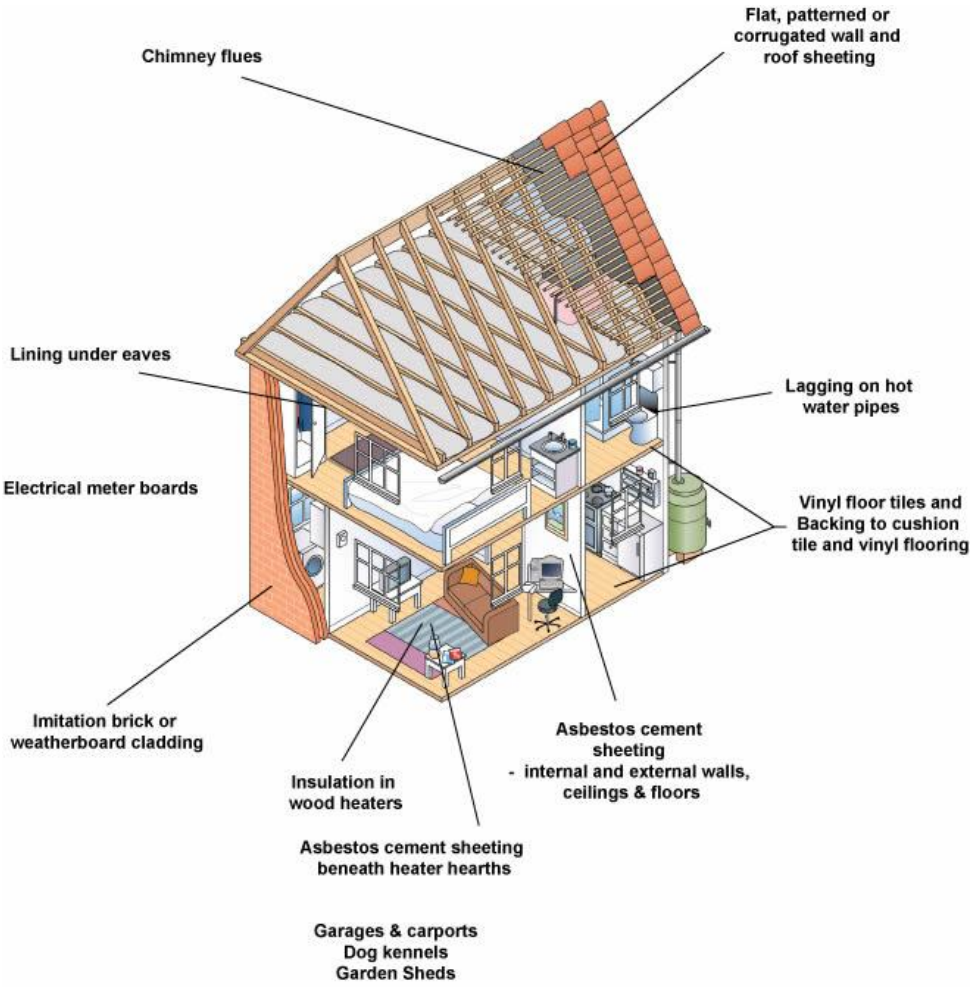
Loosely-bound asbestos materials are not commonly found in residential properties and were primarily used in commercial and industrial settings for fire proofing, sound proofing and insulation. In most cases, glass fibres have replaced asbestos in today's insulation products.

However, in some residential settings the loose form of asbestos fibres may be found in old domestic heaters, stoves, and hot water systems and associated hot water pipe lagging along with ceiling insulation products and in the backing of vinyl and linoleum floor coverings. This form of asbestos material can contain up to 100% asbestos and is very loose - turning to dust with light pressure.

This material is considered highly dangerous as fibres become easily airborne and should only ever be handled and removed by a licensed asbestos removalist.

Where in the home?

It is hard to identify asbestos products in the home just by looking at them. Below is a diagram and a table that show the potential locations of asbestos products in the home if your home was built or renovated before 1990.



Places you might find asbestos products in your home

Location	Materials
Bathroom, toilet and laundry	Asbestos cement sheeting used in walls, ceilings and floors
	Hot water pipes set into masonry walls
	Lagging on hot water pipes
Living areas	Insulation in wood heaters
	Asbestos cement sheeting beneath heater hearths
Kitchen	Vinyl floor tiles
	Backing to cushion vinyl flooring
	Hot water pipes set into masonry walls
Exterior	Flat, patterned and corrugated wall and roof sheeting
	Imitation brick cladding
	Lining under eaves
Backyard	Garden sheds
	Garages and carports
	Dog kennels
Vehicles	Brake linings
	Clutch linings
	Adhesive products
Commercial or industrial buildings	Coating sprayed on beams for fireproofing
	Wrap on pipes and boilers
	Sheeting in roofs and walls
Other	Electrical meter boards
	Ironing board covers
	Heatproof mats

Trade names applied to asbestos cement products

Below is a list of trade names for *James Hardie & Co. Pty Ltd.* asbestos products in Australia and the approximate year when they stopped being manufactured with asbestos fibre. Asbestos was slowly phased out and around these dates some products manufactured may have contained 3-5% asbestos. [11]

- Hardiflex 1981
- Hardiplank 1981
- Villaboard 1981
- Versilux 1982
- Harditherm 1984
- Compressed 1984
- Drain Pipe 1984
- Super Six 1985
- Highline 1985
- Shadowline 1985
- Coverline 1985
- Roofing Accessories 1985
- Pressure Pipe 1987