

## Undertaking Renovations – Asbestos in the Home

Before continuing, it is important to acknowledge that there are no certainties when talking about asbestos and asbestos containing materials and products. This is why it is essential to have your house (indeed, any building or facility) assessed and tested for asbestos. **Sampling and testing for the presence of asbestos is the only conclusive way to rule out the presence of asbestos.**

**There are over 3000 known different products that contain asbestos.** Deliberately, we are not trying to educate you on how to determine if something contains asbestos, rather to understand it is literally everywhere and you need to involve a trained, qualified, experienced, fully insured licensed person to assess any property before work is done on it. This is particularly important if talking about a property built before 1990.

**Remember:** It is impossible to rule out the presence of asbestos by visual examination only, the only conclusive way is by sampling and testing. This information is offered with the aim of helping you **KNOW THE DANGERS OF ASBESTOS AND TO MANAGE THE RISK.**

## What is the Likelihood of a Home Containing Asbestos?

In Australia asbestos building materials and products were used prolifically in the building industry from the 1940s to the cessation of its use in the 1980s. It is therefore likely, virtually every home built before 1990, contains asbestos of some kind – unless there is evidence to the contrary it should be assumed all homes built before 1990 do contain Asbestos Containing Building Products and Materials of some kind, and all those built before 2004 (when the use of all forms of asbestos was banned) have the possibility of containing products that have been made with asbestos content. **The grounds and surrounds of any home, regardless of when it was built could feasibly contain asbestos debris.**

### Making Comparisons

It should be noted the asbestos problem in Australia, particularly in homes, is quite different to that of the UK and the USA. This does not mean it is any greater or less, purely different mainly due to the varying climate conditions dictating a greater reliance on certain products and materials.

Due to the different and prominence of use of various types of asbestos containing materials and products, it is often misleading to make direct comparisons of the asbestos problem in Australia to that in the UK or the USA. A prime example of this is that plaster board (often called Gyprock in Australia and known as drywall in the UK and the USA) commonly was manufactured containing asbestos in the UK and the USA, this was not the norm in Australia. The northern hemisphere has a far bigger problem with asbestos being used as insulation. Thus, a far greater worry with friable asbestos. Australia's most prominent problem is bonded asbestos cement sheet, roofing and fencing and to a lesser degree, acoustic and insulation ceiling tiles.

## **Where is Asbestos Likely to be Found in Homes?**

Given the sheer number of asbestos containing building products and materials produced, it is almost inevitable asbestos containing products or material may be present in any area of a house or its surrounds. Particular attention should be paid to the following areas:

### **Ceilings**

Asbestos cement sheet was regularly used as ceiling lining, particularly in wet areas, but it can be found in any room or area. If it is in sound condition and painted it poses no inherent risk to health, however, procedures should be put in place to restrict activities that could lead to damage resulting.

Asbestos containing textured finishes are common in any area. A trap with these are that they are quite often painted over, so they give a modern day appearance. Sampling and testing is the only way to know if asbestos is present.

Acoustic ceiling tiles are not commonly found in residential properties, but they can be. If ceilings are constructed of acoustic tiles, they may contain asbestos. Whilst they are considered bonded if intact, they can easily become brittle and friable if broken, or even squeezed by hand. Asbestos containing ceilings of this kind should be replaced as a matter of urgency, until this can take place they should be sealed, and procedures put in place to ensure they cannot inadvertently be damaged.

Areas with damaged or degrading asbestos containing ceilings of any kind, should not be used!

### **Ceiling Cavities**

Ceiling cavities or roof spaces can hide many different forms of asbestos, or asbestos containing materials and products. Heaters, hot water services, air-conditioners, insulation (various forms), flues, cement sheet, compressed cement board and electrical wiring are just a few possibilities.

Warning: Ceiling cavities of all types of buildings should not be entered unless they have been assessed, and it is determined they are free from all forms of friable asbestos, and if there is bonded

asbestos material or product in situ, it is in a sound safe condition. Ceiling cavities should never be entered if there is friable asbestos present!

## **Doors**

Occasionally houses may have fireproof doors installed – particularly if part of a commercial type housing complex or apartment block. Most fire-proof doors will have an identification plaque fixed to either of the vertical ends. But they may not identify asbestos being present. If the door is a fire-proof door, often the corresponding door jams will also contain asbestos.

## **Eaves and Verandahs**

The eave, also known as the soffit, is the underpart of a roof between the wall and fascia (gutter) section. It is common in Australia for eaves and verandahs to be lined with fibro cement sheeting or other forms of material that may or may not contain small to large amounts of asbestos fibres. Houses built prior to the ready availability of asbestos cement sheeting after WW2, used flooring type strip timber to line eaves and verandahs – this is easily recognisable. It is essential if the building was constructed prior to 1990 the eave and verandah lining material be sampled and tested for asbestos to identify the exact risk it presents.

## **Fencing**

Super 6 Corrugated Asbestos Cement Sheeting was used throughout Australia (particularly in coastal areas) to construct fencing. If still standing, and not in good condition, they present a hazard and should be removed.

**Caution:** The danger of Super 6 fences is often unseen, and below ground – often when people demolish a Super 6 fence, they will break it off just below ground level, leaving up to 2 feet or 60 centimetres of material underground. This is something everyone should be wary of when digging along old fence lines.

## **Flooring**

Flooring areas are often overlooked, with asbestos cement sheet typically used to give a waterproof flat backing to lay floor coverings over. The floor covering themselves often contained asbestos. The main culprit in this was vinyl floor tiles and the adhesive mastic used to glue them down. Some ceramic floor tiles also contained asbestos netting backing, as did carpet underlay. Asbestos cement sheeting was often used under free standing heaters to give an insulated barrier between the heater and floor – it was particularly used under brick hearths. Compressed Asbestos Cement Board, which is thicker and stronger than normal asbestos cement sheet can also be found used as flooring (particularly in wet areas), steps and decking on patios and verandahs.

## **Heaters – Hot Water Services/Boilers**

Heaters and hot water service/boilers (of all descriptions) are often associated with asbestos. They can have asbestos insulation and asbestos seals, which are often of a friable nature. Asbestos cement sheet or asbestos insulation board was often placed underneath or beside the heaters and hot water services to insulate the surrounding area. If the heater is sitting on a brick hearth, don't be surprised to find asbestos cement sheet under the bricks. Gas wall heaters are not immune and will often drop visible residue of asbestos insulation board.

## **Kitchens – Laundries – Bathrooms**

Always be on the lookout for asbestos containing products and materials in these areas of any house. It was common to use asbestos cement sheet on the walls behind and above stoves, sinks, vanities, baths, shower recesses. These areas were either tiled over or painted. Often the laundry was fully clad using asbestos cement sheet. Wet areas more often than not will have asbestos cement sheet on the floor, put down as a waterproof flat base to lay vinyl, ceramic or quarry tiles on. A popular product used in the 50s to 70s was Tilux, a smooth waterproof decorative board that looked a lot like modern day Laminex, was used as splash backs above sinks, bench tops, vanities and baths. It was also used as wall cladding in shower recesses.

## **Roofing**

Super 6 and shallow profile Asbestos Cement Corrugated Sheet was often used as roofing. Due to its age it is dangerous and should be replaced as a matter of priority. But the roofing itself is only the start, flues, ridging, capping, gutters and downpipes are just some of the asbestos containing products you are likely to find on a roof. Note: There is also a product mainly used in the 1970s and 1980s known as Decramastic Roof Sheets – made of various kinds of metal, they are metal sheets pressed to form the look of traditional ceramic or concrete roof tiles and painted with a bitumen based paint of various colours, with grit applied to give a textured look. The danger here is the bitumen paint often contained asbestos.

## **Walls**

Both interior and exterior walls may contain asbestos, if made of cement sheet construction, original and installed before 1984, they will contain asbestos. If painted and in good condition they pose no risk, but procedures should be put in place to eliminate any chance they can be damaged by children, workmen or nature. If your house has asbestos cement sheet walls, you should have training and equipment available to carry out Asbestos Emergency Procedures to minimise the risk of exposure should damage occur.

Compressed Asbestos Cement Board whilst more commonly used as flooring, was also used as wall sheeting and infill material under verandah, balcony and stairway railings or balustrades.

Asbestos Cement Sheet was commonly used to line outside walls and wet area walls indoors, so you would expect to find it in common areas such toilet blocks, bathrooms, laundries, first aid rooms, kitchen/cafeterias, science, trade and sports areas such as gyms and swimming pools – but be aware, it may be found being used as cladding on the walls of any room!

Whilst not commonly used, occasionally asbestos insulation board may be found on walls, particularly behind heaters and such like. If in situ it should not be touched but removed as a matter of priority. Asbestos insulation board is more fragile than asbestos cement sheet and can more readily be turned into a friable product.

As with ceilings, asbestos containing textured finishes were also commonly used on walls. Note – these finishes are often painted over!

**Caution:** There have been reports of legally imported plasterboard containing asbestos being imported into Australia from the UK prior to the 1980s, reports place the amounts as extremely minimal and restricted to Queensland (but it could literally be anywhere in Australia). Since asbestos was banned at the end of 2003, and imports of cheap building materials from China reaching epidemic proportions, it is possible plasterboard and other materials and products illegally containing asbestos have been installed. It is another clear reason why every house or building should be inspected and tested for asbestos!

## **Window Areas**

Many people are surprised to learn the innocent looking putty used to hold windowpanes in place may contain asbestos.

## **Outside Areas, Gardens and Grounds**

Due to the prolific use of bonded Asbestos Cement Products and Material in Australia, debris containing broken up asbestos cement; flat sheet (fibro) and corrugated asbestos cement sheet roofing; pipe, pits, gutters and downpipes etc. is of a real concern. The problem with ground area surface asbestos containing material is becoming greater by the day, as more and more old dumping areas are used for housing estates, schools and playing fields. A solution to prevent the debris from gravitating to the surface in these areas (particularly in gardens and paddocks) can be to cover the area in special purpose ground netting material and resurface with clean soil. Debris however is not the only concern, what is hidden below ground in situ, is perhaps a bigger concern for unsuspecting tradesmen, or anybody digging. Often pipes and pits, and broken off fencing will lay dormant for years, either forgotten about or unknown. If there is potential for this to be the case. Warning signs should be clearly displayed.

Undisturbed broken up pieces of Asbestos Cement Product or Material are regarded as being safe if not disturbed. But how does debris not become disturbed if laying on the top of the ground? Nature itself will move it around, in the process releasing fibres. Areas containing asbestos cement debris should be wet down and covered to prevent airborne asbestos exposure. The area should be cordoned off and re-mediated immediately as discussed above.

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## **Recommendation**

**All owners of a house that has, or has the possibility of asbestos cement products or materials being present, should be trained, or have responsible people trained, and have equipment available that will allow the safe carrying out of Asbestos Emergency Procedures to minimise the risk of exposure, should damage occur or asbestos cement debris be found.**

## **House Owner Obligations**

Homeowners have a moral, and in some cases, a legal obligation to provide a safe environment to anyone who lives in, and/or enters or works in or on their home.