

# Asbestos

# A home renovator's guide

Get up to scratch with the facts about asbestos. Find out how to handle, remove and dispose of it safely and legally in Queensland.

### Now it's a whole new ball game



### Acknowledgments

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#### Disclaimer

The advice in this booklet is designed as a guide only. While following this advice will minimise the risks of exposure to asbestos in the home, we cannot guarantee all risks will be eliminated. This is because circumstances will vary depending on the type and condition of the materials containing asbestos and other factors. If you are uncertain about any of the advice in this booklet, please call 1300 QH info (1300 744 636) before starting work.

References in this booklet to 'law', 'laws', 'specific laws' and similar refer to the *Public Health and Other Legislation Amendment Regulation 2007*.

The information in this booklet has been adapted from the 2005 enHealth Council publication *Management of asbestos in the non-occupational environment*, the *Public Health and Other Legislation Amendment Regulation 2007*, the 2005 NOHSC *Code of Practice for the Management and Control of Asbestos in Workplaces*, the 2005 NOHSC *Code of Practice for the Safe Removal of Asbestos in Workplaces 2nd Edition* and the Health and Safety Executive (HSE), United Kingdom.

# Asbestos

### How to play it safe

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### What is asbestos?

Asbestos is a naturally occurring mineral found in the surface of the earth. It contains strong fibres that have excellent durability, fire resistance and insulating properties. Asbestos fibres are 50 to 200 times thinner than a human hair, can float in the air for a long time, can be invisible to the naked eye and can be breathed into the lungs.

In the past, asbestos was mined from the ground and manufactured into many different materials. Materials containing asbestos were very common in the Australian residential building industry between the 1940s and late 1980s before their production stopped.

The use of all forms of asbestos has been banned nationally since 31 December 2003. The ban does not apply to asbestos installed prior to this date (e.g. asbestos materials in houses).

# What are the possible health effects of asbestos?

Asbestos can cause health effects if fibres are breathed into the lungs. Most fibres are removed from your lungs by your body's natural defences (e.g. by being coughed up and then swallowed), however some fibres can remain in the lungs.

The possible health effects of asbestos are:

- Asbestosis (progressive and irreversible scarring of lung tissue that impairs breathing)
- Lung cancer
- Mesothelioma is a cancer of the linings around the lungs and abdomen
- Non-cancerous diseases that affect the linings around the lungs and abdomen (commonly called 'benign pleural diseases').

These diseases can sometimes take up to 50 years to develop. There may be some treatments for asbestos related diseases, but there are currently no known cures. Further general information on asbestos related diseases is available from the Queensland Health web site (www.health.qld.gov.au).

### Is it dangerous?

Current scientific and medical evidence supports the fact that simply living or working in a building that contains asbestos is not dangerous so long as the asbestos is in good condition (i.e. undamaged, undisturbed).

If asbestos is in good condition, leave it alone – let sleeping dogs lie!

It is when asbestos is worked with or disturbed and asbestos fibres are released that the risk of developing an asbestos related disease is increased.

While most cases of asbestos related diseases result from sustained workplace exposure, some asbestos related diseases, particularly mesothelioma, can result from brief periods of breathing in asbestos fibres.

To minimise the chance of anyone being exposed to asbestos, it is **very important** that DIY home renovators prevent the release of asbestos fibres into the air.

Play it safe with asbestos. Before working with or removing a material that contains asbestos, consider:

- If it is in good condition (e.g. undamaged), can you leave it alone?
- Do you know the alternatives to removing the material containing asbestos (e.g. painting or sealing, covering with a non-asbestos product)?
- Can you comply with the laws and safety procedures for working with asbestos (see page 7)?
- Should you use a licensed person?

### The two types of material containing asbestos

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

#### 1. Bonded (Tightly Bound) Asbestos

Bonded materials containing asbestos are the most common in domestic houses. They are mainly made up of a bonding compound (such as cement), with up to 15% asbestos. Bonded materials containing asbestos are solid, quite rigid and the asbestos fibres are tightly bound in the material. They are commonly called 'fibro', 'asbestos cement' and 'AC sheeting'.



Asbestos cement sheeting on the wall and roof of a shed.

#### 2. Loosely Bound (Friable) Asbestos

Loosely bound materials containing asbestos are not commonly found in domestic houses. They were primarily used in commercial and industrial settings for fire proofing, sound proofing and insulation. However, they can be found in some old domestic heaters, stoves, hot water systems and associated pipe lagging and in the backing of vinyl and linoleum floor coverings.

These materials can be made of up to 100% asbestos. They are quite loose and can be turned to dust with very light pressure, such as crushing with your hand. Loosely bound materials containing asbestos are very dangerous as the asbestos fibres can get into the air very easily. They must only be handled and removed by an asbestos removalist with an 'A' Class certificate (see page 7 for more information on certificates).

Do I have materials containing asbestos in my house?

It can be difficult to tell whether your home has materials containing





Underside of asbestos cement roof sheeting.

As a general rule, if your house was built:

- Before the mid 1980s, it is highly likely that it would have materials containing asbestos.
- Between the mid 1980s and 1990, it is likely that it would have materials containing asbestos.
- After 1990, it is highly unlikely it would have materials containing asbestos.

If you are not sure that a material contains asbestos, play it safe and assume that it does. Alternatively, you can get advice from an asbestos consultant or get the material tested by a laboratory (see page 5).

# Where could I find materials containing asbestos inside my house?

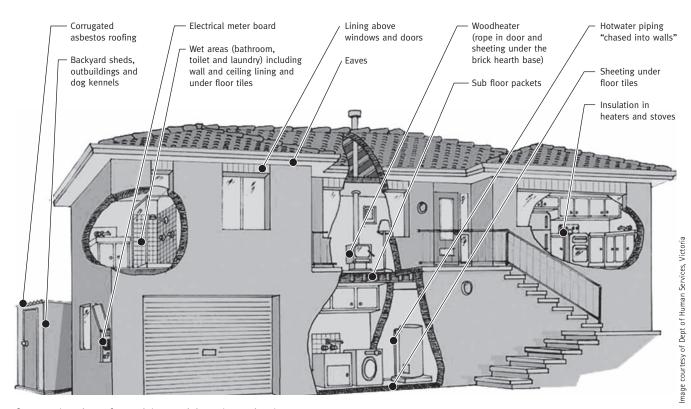
Bonded materials containing asbestos were often used inside houses for wall sheeting, particularly in 'wet' areas such as the kitchen, bathroom and laundry (e.g. the glazed patterned panels around showers and baths that are held in with screws). They were also used as ceiling sheeting. Asbestos might also be found bonded in plaster patching compounds and textured paint.

Loosely bound materials containing asbestos might be found in a few older forms of insulation used in domestic heaters and stoves. Asbestos-felt was used as a backing for many vinyl and linoleum sheet floorings and does not pose a health risk while it remains undisturbed. However, these materials become loose when the floor covering is damaged or removed.

If you are planning to remove these materials and you are unsure if it is asbestos-free, consider leaving it alone, seeking advice from an asbestos consultant or getting it **tested by a laboratory** (see page 5).

Asbestos insulation was not routinely used in residential buildings, although there have been isolated cases in New South Wales and the ACT. Loosely-bound asbestos was generally used in commercial buildings and industrial workplaces.

Asbestos-felt vinyl flooring and other forms of loose asbestos must only be removed by an asbestos removal business that holds an 'A' Class certificate.



Common locations of materials containing asbestos in a house.

# Where could I find materials containing asbestos outside my house?

Externally, bonded materials containing asbestos were commonly used for roof sheeting and capping, guttering, gables, eaves/soffits, water pipes and flues, wall sheeting, flexible building boards and imitation brick cladding. They have also been used for fencing and building car ports and sheds.

Loosely bound materials containing asbestos were not designed for use on the outside of houses.

As mentioned before, bonded materials containing asbestos are the most common asbestos materials in domestic houses. They are not dangerous if they are in good condition (i.e. undamaged, undisturbed). Loosely bound asbestos materials are not common in domestic houses.



External cladding containing 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.

# What should I do if I find asbestos in my home?

If materials containing asbestos are in your home and are in good condition (i.e. undamaged, undisturbed), the safest option is to leave them alone. In other words, let sleeping dogs lie! If left alone and in good condition, these materials are not dangerous as the asbestos fibres are tightly bound and very few escape into the air over time. Visually inspect the materials from time to time for deterioration and damage.

If you are thinking about working with or removing a material that contains asbestos, consider:

- If it is in good condition (e.g. undamaged), can you leave it alone?
- Do you know the alternatives to removing the material containing asbestos (e.g. painting or sealing, covering with a non-asbestos product)?
- Can you comply with the laws and safety procedures for working with asbestos (see page 7)?
- Should you use a licensed asbestos removalist?

## Can I get materials tested for asbestos?

Yes. Laboratories that analyse building materials for asbestos can be found by contacting the National Association of Testing Authorities (Ph. 07 3870 3844, www.nata.asn.au). The laboratories can also give you advice on how to correctly take and send a sample. There will be fees involved.

You can also contact an asbestos consultant for advice. They can be found in the Yellow Pages under "Asbestos".



Microscope for identifying asbestos.

# What if I accidentally break asbestos?

If you accidentally break a material containing asbestos, the safest way to manage any health risks is to wipe up any dust with a damp cloth or paper towel, put the cloth/towel into two plastic bags, tie them up individually and put them in your rubbish bin.

Do not use a normal vacuum cleaner as it cannot filter out all particles and can release more asbestos fibres into the air.

**Do not** use a normal vacuum cleaner as it cannot filter out all particles and can release more asbestos fibres into the air.

If the material containing asbestos is cracked, you should seal the crack with a product like PVA glue or paint. If it is more significant damage, the entire sheet should be replaced and the old sheet disposed of correctly. More information on removing a material containing asbestos is on page 16.

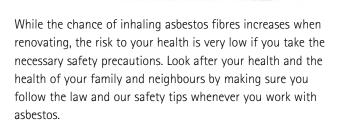
# What if I need to put a hole in a bonded material containing asbestos?

If it is necessary to put a hole in a bonded material containing asbestos (e.g. for a chimney), it is safer to remove the whole sheet following the safety precautions in this book, replace it with non-asbestos sheeting (e.g. plywood, plasterboard, fibre cement sheeting) and cut the hole in the new sheeting. More information on removing a material containing asbestos is on page 16.

Doing it yourself: a home renovator's guide to working with

asbestos

This section provides you with information about how to legally and safely work with asbestos in your home.



Remember, before starting a DIY job with asbestos consider:

- If it is in good condition (e.g. undamaged), can you leave it alone?
- Do you know the alternatives to removing the material containing asbestos (e.g. painting or sealing, covering with a non-asbestos product)?
- Can you comply with the laws and safety procedures for working with asbestos (see page 7)?
- Should you use a licensed asbestos removalist?



Asbestos cement sheeting used on an exterior wall.



# Things you need to know before every job

In Queensland, there are a number of laws relating to building and renovating. There are also specific laws designed to protect the health of homeowners, their families and the general community by ensuring asbestos is handled, removed and disposed of safely.

There are nine particular things you need to know before every job you plan to do with asbestos:

- Check with your local Council to see if you need any approvals for your work
- 2. Decide how you will dispose of the asbestos waste
- 3. Determine whether you need an asbestos removal certificate
- 4. Think of your family and neighbours
- 5. Avoid prohibited activities
- 6. Plan your job and purchase your equipment
- 7. Protect yourself
- 8. Dispose of asbestos waste quickly and correctly
- 9. It is illegal to sell or give away asbestos

More information on these points is provided below.

#### Check with your local Council to see if you need approvals for your work

Some renovation activities may require approvals from your local Council, such as planning permits and building approvals. Please contact them before starting any work.

### 2. Decide how you will dispose of the asbestos waste

Your choices are to dispose of the waste yourself or employ a waste contractor. If disposing of asbestos waste yourself, it is important to contact your local Council to find out their requirements (e.g. where to take the waste, how much it will cost). You will also need to package the waste to minimise the chance of asbestos fibres getting into the air. More information on waste disposal is in Disposing of Asbestos Waste on page 19.

### 3. Determine whether you need an asbestos removal certificate

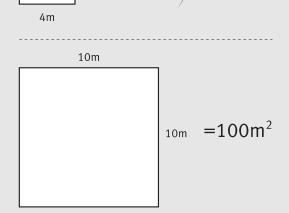
If you are planning to remove up to 10 square metres of bonded materials containing asbestos, you do not require an asbestos removal certificate. However, you will still need to take safety precautions to minimise asbestos fibres getting into the air. Suggested safety precautions for some tasks are on page 10.

If you are planning to remove 10 square metres or more of bonded materials containing asbestos, you are required to:

- use a business with a current 'A' or 'B' Class asbestos removal certificate to do the work, or
- obtain your own 'B' Class asbestos removal certificate ('A' Class certificates are not available to homeowners).

Anyone can apply for a 'B' Class asbestos removal certificate. You will need to attend training and have your knowledge and skills assessed before you are considered competent in the safe removal of bonded asbestos. For more information on certificates, training and fees, contact the Department of Employment and Industrial Relations by calling 1300 369 915 or visit www.deir.qld.gov.au.

IMPORTANT: 10 square metres equals  $5m \times 2m$ ,  $4m \times 2.5m$  or  $10m \times 1m$ , but not  $10m \times 10m$  (this equals 100 square metres!).  $\begin{array}{c}
5m \\
2m
\end{array}$   $10m \\
2.5m$ 



As a guide, 10 square metres is equivalent to approximately four sheets of asbestos cement wall sheeting or approximately one wall of a typical bedroom.

Loosely bound materials containing asbestos **must only be** removed by an asbestos removal business with an 'A' Class certificate. Businesses that remove these materials can be found in the Yellow Pages under "Asbestos Removal and/or Disposal". You will need to make sure they hold a current 'A' Class removal certificate issued by the Department of Employment and Industrial Relations.

If you are doing work other than removal (e.g. preparing an asbestos wall for painting, drilling a hole), you do not require a certificate. You will still need to take safety precautions to minimise asbestos fibres getting into the air. Suggested safety precautions are on page 10.

#### 4. Think of your family and your neighbours

When planning your work, don't forget your family and neighbours. Under public health laws, you have a responsibility to make sure that you protect their health by not releasing asbestos fibres



You should also speak to your neighbours about the work you are about to do. It is particularly important to explain the safety precautions you will be taking to minimise the chance of asbestos fibres getting into the air.

#### 5. Avoid prohibited activities

There are three particular activities you must **never** do when working with or removing a bonded material containing asbestos:

- 1. Never use power tools, such as angle grinders, circular saws and electric sanders
- 2. Never use high pressure water blasters
- 3. Never use compressed air.

All of these activities are very dangerous because they can release large numbers of asbestos fibres in to the air. They are illegal. **Substantial on-the-spot fines apply**.

#### 6. Plan your job and purchase your equipment

Before starting your work, you will need to plan how you will carry out the job. You will also need to purchase an amount of equipment specific to working with asbestos. Each of the tasks listed later in this booklet detail the minimum equipment you will need. The equipment is available from a variety of stores, including hardware and safety equipment suppliers.

#### 7. Protect yourself

Wearing the right personal protective equipment is essential to protecting your health when working with asbestos. Personal protective equipment is available from most hardware or safety equipment suppliers.

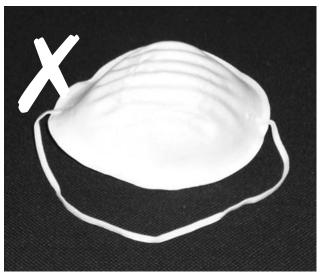
#### · Wear the proper respirator

Ordinary dust masks are not effective in preventing the inhalation of asbestos fibres and dust. Cheap masks may save dollars but they do not provide adequate protection against airborne asbestos fibres.

You will need to purchase and use a specific respirator designed specifically for working with asbestos. Wear a half-face filter respirator fitted with a class P1 or P2 filter cartridge, or a class P1 or P2 disposable respirator appropriate for asbestos.



Example of a respirator for working with asbestos.



This type of mask does not stop asbestos fibres.

Respirators should comply with Australian Standard AS1716. This number should be displayed somewhere on the mask.

Males should be clean-shaven to make sure there is a clean seal between their face and the mask. The respirator should have an airtight fit. Read and follow the manufacturer's instructions on how to check the fit of the respirator.

Keep your respirator on until all work and clean up is done and your contaminated clothing is removed, bagged and sealed.

#### · Wear disposable clothing

Disposable coveralls should be used to prevent the contamination of any clothing, including your shoes/boots. A disposable hat and disposable gloves should also be worn.

Do not keep the clothing, reuse them or shake the dust out of them. After your work is complete, spray your clothing with a light mist of water and remove them.

Keep your respirator on when doing this. Seal all of these in your asbestos waste bags for disposal (contaminated clothing can be disposed of with other asbestos waste). Go to Disposing of Asbestos Waste on



Example of acceptable personal protective equipment for working with bonded asbestos.

Have a shower afterwards

page 19 for more information on disposal.

To remove any dust and asbestos that may be on your body, have a thorough shower after finishing your work. Make sure you wash your hair as well.

### 8. Dispose of asbestos waste quickly and correctly

You must clean up, package and dispose of all asbestos waste (including scraps and surplus asbestos) as soon as possible after you produce it. No asbestos can be stored or kept for another use. This is to minimise the chance of asbestos fibres being released into the environment and the risk of you, your family and your neighbours breathing in the fibres. More information is available on page 19.

#### 9. It is illegal to sell or give away asbestos

Under Queensland law, you cannot sell or give away asbestos. Substantial penalties apply.

### In Queensland, there are laws to protect people's health from asbestos.

- Legal action can be taken against you for working<sup>1</sup> unsafely with asbestos.
- Officers will investigate complaints and issue notices, on-the-spot-fines or prosecute.
- You could also have legal action taken against you by other people, such as a neighbour.

<sup>1 &#</sup>x27;Working' includes breaking, cleaning, cutting, maintaining, removing, repairing, storing and using. It also includes separating asbestos waste from other waste. Removing includes moving a material containing asbestos from the position where it was installed immediately before 18 June 2007.

## Working safely with asbestos

The following pages provide information on how to safely work with **bonded** materials containing asbestos for the following tasks:

- drilling
- painting or sealing
- · removing ceramic tiles from asbestos sheeting
- · removing up to 10 square metres of asbestos sheeting

#### Remember!

- A 'B' Class certificate is required for the removal of 10m<sup>2</sup> or more of bonded asbestos materials.
- Loosely bound asbestos materials must only be removed by an asbestos removalist with an 'A' Class certificate only.
- More information on certificates is on page 7.

## Drilling into bonded materials containing asbestos

Caution must be taken when drilling into bonded materials containing asbestos as asbestos fibres can be released into the air. Follow the safety procedures below when drilling vertical and horizontal surfaces:

#### **Important Information:**

- Asbestos is a hazardous substance.
- It is a risk to your health and the health of those around you if asbestos fibres become airborne.
- Plan ahead to avoid disturbing materials containing asbestos.
- · Always prevent creating any dust.
- Follow the correct safety procedures.

#### STEP 1. Get your equipment together

- A hand drill is preferred, but a low-speed batterypowered drill can be used
- Disposable cleaning rags (e.g. paper, cloth)
- Bucket of water and/or a misting spray bottle
- Duct tape
- Sealant (e.g. PVA glue)
- A paste or gel like substance (e.g. wallpaper paste, shaving cream or hair gel)
- Two 0.2mm plastic bags for asbestos waste
- A disposable plastic drop sheet to cover the floor under where you are drilling
- A sturdy, disposable cup (e.g. plastic, styrofoam) if working overhead
- Personal protective equipment P1 or P2 respirator, disposable coveralls, safety goggles and disposal gloves

Never use a high-speed drill on a material containing asbestos. The high speed of the drill can release asbestos fibres into the air. Only use a hand drill or a low-speed battery powered drill.

#### STEP 2. Prepare the work area

- Remove all loose and unnecessary items from the work area.
- Restrict entry to the asbestos work areas (e.g. close door).
- Use plastic sheeting secured with duct tape to cover any surface of the work area and use as drop sheets.
- Put on your personal protective equipment.
- Check the fit of your respirator as per the manufacturer's instructions.

Check for electrical hazards
where you are working and
particularly where you are drilling or using water.
Ideally, turn off electricity in the area you are
working to prevent electrocution.

#### STEP 3. Drilling

#### To drill vertical surfaces (e.g. a wall):

- 1. Tape the point to be drilled and the exit point (if possible).
- Cover the drill entry and exit points (if accessible) on the asbestos sheet with a generous amount of thickened substance.
- 3. Drill through the paste.
- 4. If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.

#### To drill overhead horizontal surfaces (e.g. a ceiling):

- 1. Mark the point to be drilled.
- 2. Cover the drill entry and exit points (if accessible) on the asbestos sheet with a generous amount of thickened substance.
- 3. Drill a hole through the bottom of the disposable cup.
- 4. Fill or line the inside of the cup with the thickened substance.
- 5. Put the drill bit through the hole in the cup and make sure the drill bit extends beyond the lip of the cup.
- 6. Align the drill bit with the marked point.
- 7. Ensure cup is firmly held against the surface to be drilled.
- 8. Drill through the surface.
- 9. Remove the cup from the surface.
- 10. If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.

#### STEP 4. Clean up

#### Important!

Keep your respirator on until all clean up is finished and you have removed your work clothing.

- Use damp rags to clean off the paste and debris from the wall and drill bit.
- Seal the cut edges with sealant.
- Carefully roll or fold plastic sheeting from the floor, so any collected dust or debris does not spill.

Domestic vacuum cleaners are unsuitable and should never be used, even if they have a HEPA filter.

- If necessary, use damp rags and/or an approved asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the work area. Do not resoak used rags in the bucket, as this will contaminate the water. Either fold the rag and use the clean surface or use a new rag.
- Place asbestos debris, used rags, plastic sheeting and other asbestos waste in disposal bags (only half fill the bag – this is to reduce the chance of the bag splitting).
- After the work area is clean, wet down your personal protective equipment and clothing with a light spray of water and place them and all used damp cloths into a disposable bag.
- Before removing the bags from the work area, wipe external surfaces with damp rags to remove any dust and put the used rags in one of the bags.
- Seal all disposal bags with duct tape, place into a second disposal bag and seal again.
- Label all bags with an appropriate warning such as:

CAUTION – ASBESTOS DO NOT DAMAGE OR OPEN BAG DO NOT INHALE DUST CANCER AND LUNG DISEASE HAZARD

• Dispose of asbestos waste at the appropriate waste facility (contact your local Council for more information). See page 19.

### Painting or sealing bonded materials containing asbestos

While it's not necessary to seal, paint or clean bonded materials containing asbestos for health reasons, this is sometimes done to extend structural life and improve appearance.

#### Important Information:

- · Asbestos is a hazardous substance.
- It is a risk to your health and the health of those around you if asbestos fibres become airborne.
- Plan ahead to avoid disturbing materials containing asbestos.
- Always prevent creating any dust.
- Follow the correct safety procedures.

#### Tip:

Sealing or painting should only be carried out on materials that are in good condition. If the material is significantly weathered, damaged or broken, the material should be removed and replaced with a non-asbestos material (e.g. plywood, plasterboard, fibre cement sheeting).

**Under no circumstances** are materials containing asbestos to be water blasted or dry sanded. Power tools must not be used. All are illegal and **substantial on-the-spot fines apply**.

It is very dangerous to work on an asbestos roof. Asbestos roofs become very brittle with age and are very slippery when wet. Working at a height also presents a risk of falling. Consider using a business that specialises in sealing asbestos roofs.

#### STEP 1. Get your equipment together

- Paint brushes, paint rollers or airless spray gun and equipment
- Sealant/paint
- Duct tape
- 0.2mm thick plastic bags no more than 1200mm long and 900mm wide for disposing of asbestos waste
- 0.2mm plastic sheeting as drop sheets
- Disposable cleaning rags (e.g. paper, cloth)
- Bucket of water and spray bottle for misting
- Personal protective equipment P1 or P2 respirator, disposable coveralls, safety goggles and disposal gloves
- You may also need a specific respirator for the sealant or paint to protect you from any harmful vapours (read the safety directions on the container)

#### Choosing the right sealant

Sealants should be used on external surfaces such as roofs, as they penetrate the surface and bind into the material.

Choose a sealant specifically designed for use on asbestos materials that has a life of 10 years or more and can be reapplied over the top of the existing coat if required.

Try to avoid products that require the asbestos material to be vigorously cleaned beforehand as this can release asbestos fibres into air.

#### STEP 2. Prepare the work area

- Advise your neighbours of what you are planning to do.
- Remove all loose and unnecessary items from the work area.
- Restrict entry to the asbestos work area/s (e.g. by closing a door).
- Cover the floor of the work area with the plastic sheeting and secure with duct tape (this will help contain any runoff from wet sanding methods).
- Make sure all asbestos waste, including dust and contaminated personal protective equipment, is kept separate to all other waste.
- Put on your personal protective equipment.
- Check the fit of your respirator as per the manufacturer's instructions.

#### **Environmental Tip:**

If you need to clean an asbestos roof with chemicals before sealing, consider how you will manage the runoff. In some cases, the chemicals used for cleaning may be harmful to the environment.

It is important that runoff from the roof is **not** washed into downpipes as these lead to the roadside gutter and local creeks and waterways. On-the-spot fines apply if this happens. Protect the environment by collecting the runoff and disposing of it in accordance with the directions on the chemical container.

#### STEP 3. Surface preparation and painting

#### Do's

- ✓ Wipe dusty surfaces with a damp cloth.
- ✓ Wash with sugar soap or another cleaning chemical.
- If needed, sand the surface using light wet sanding methods (hand sanding with water; no power tools).
- Use a chemical paint stripper and a scraper but only on wet surfaces and taking care not to damage the asbestos material.
- ✓ Use a wallpaper steamer if you need to keep a spray water bottle handy to ensure the surface remains damp.
- ✓ Paint over existing paint, if it's in good condition.
- If spray painting, use airless equipment as the low air pressure reduces overspray compared to normal high pressure equipment.
- ✓ If using a paint brush or roller, use it lightly to avoid abrasion or other damage.

#### Dont's

- Do not use high-pressure water or compressed air cleaning equipment.
- X Do not dry sand.
- X Do not use a dry broom or paint scraper on uncoated asbestos materials.

Never use electric sanders or other power tools when preparing a surface for painting/sealing. These actions can release asbestos fibres into the air and are illegal.

#### STEP 4. Clean up

- **Never** use dusting, sweeping or brushing methods as they will circulate asbestos fibres into the air.
- Wear suitable personal protective equipment such as a half face respirator with a Class P1 or P2 filter (dust masks are not adequate).

Domestic vacuum cleaners are unsuitable and should never be used, even if they have a HEPA filter.

- Use damp rags to wipe down all surfaces and equipment.
  If necessary, use damp rags and/or an approved asbestos
  vacuum cleaner to clean any remaining visibly
  contaminated sections of work area. Do not resoak used
  rags in the bucket, as this will contaminate the water.
  Instead, either fold the rag so a clean surface is exposed
  or use a new rag.
- While still wearing your protective equipment, carefully roll or fold plastic sheeting from the floor, so any collected dust or debris does not spill. Lightly spray the dust or debris with water or PVA glue before rolling or folding the plastic for extra safety.
- Place asbestos debris, used rags, plastic sheeting and other waste in disposal bags (only half fill the bag – this is to reduce the chance of the bag splitting).
- After the work area is clean, wet down your personal protective equipment and clothing with a light spray of water and place them and all used damp cloths into a disposal bag.
- Before removing the disposal bags from the work area, wipe external surfaces with damp rags to remove any dust and put the used rags in one of the bags.
- Seal all disposal bags with duct tape, place into a second disposal bag and seal again.
- Label all bags with an appropriate warning such as:

CAUTION – ASBESTOS DO NOT DAMAGE OR OPEN BAG DO NOT INHALE DUST CANCER AND LUNG DISEASE HAZARD

 Dispose of asbestos waste at the appropriate waste facility (contact your local Council for more information).
 See page 19.

# Removing ceramic tiles from asbestos sheeting

#### Important Information:

- Asbestos is a hazardous substance.
- It is a risk to your health and the health of those around you if asbestos fibres become airborne.
- Plan ahead to avoid disturbing materials containing asbestos.
- · Always prevent creating any dust.
- · Follow the correct safety procedures.

#### STEP 1. Get your equipment together

- 0.2mm thick plastic bags no more than 1200mm long and 900mm wide for collection of asbestos waste
- 0.2mm thick plastic sheeting as a drop sheet
- Duct tape
- Bucket of water and spray bottle filled with detergent and water
- Wide scraper, hammer and chisel
- Disposable cleaning rags (e.g. paper, cloth)
- Personal protective equipment P1 or P2 respirator, disposable coveralls, safety goggles and disposal gloves

#### STEP 2. Prepare the work area

- Remove all loose and unnecessary items from the work area.
- Close doors and restrict entry.
- Cover the floor with plastic sheeting and secure with duct tape.
- Keep asbestos waste separate to all other waste.
- Put on your personal protective equipment.
- Check the fit of your respirator as per the manufacturer's instructions.

Check for electrical hazards.

As you will be using water in this task, it is safest to turn off all electricity where you are working to prevent electrocution.

#### STEP 3. Remove wall tiles

- Use the chisel to gently tap between the top of the tile and the backing sheet to release the tile (do not dig the chisel into the backing sheet).
- As the tile is released, spray detergent water lightly behind the tile to prevent release of fibres.
- Try to prevent the tile from falling onto the plastic.
- Place tiles in disposal bags (only fill the bag half full).
- Remove tile adhesive and grout residue from backing sheet to achieve a relatively flat and clean surface before laying new tiles. Treat all waste as asbestos waste.

If the backing sheet is damaged or broken before or during the removal of the tiles, you'll need to remove the entire sheet. You'll also need to remove the entire sheet if you can't remove the tiles without damaging the backing sheet. Arrange for the sheet to be removed by a professional or remove it yourself using the "Removing Bonded Materials Containing Asbestos" procedure (see page 16). Replace the asbestos sheeting with an alternative wall lining (e.g. plywood, plasterboard, fibre cement sheeting).

#### STEP 4. Clean up

- Use a cloth and detergent water to gently wipe down the wall. Keep the surface damp with the detergent spray. Use a scraper to gently remove all residues and do not dig into the surface of the sheet.
- With the wall sheeting now clean and level, wipe down again with a damp detergent-water cloth.
- Remove larger scraps from ground plastic sheet and place in a disposal bag.
- Carefully roll or fold plastic sheeting from the floor, so any collected dust or debris does not spill.

Domestic vacuum cleaners are unsuitable and should never be used, even if they have a HEPA filter.

- If necessary, use damp rags and/or an approved asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the work area.
- Do not resoak used rags in the bucket, as this will contaminate the water. Either fold the rag and use the clean surface or use a new rag.
- Place asbestos debris, used rags, plastic sheeting and other asbestos waste in disposal bags (only half fill the bag – this is to reduce the chance of the bag splitting).
- After the work area is clean, wet down your personal protective equipment and clothing with a light spray of water and place them and all used damp cloths into a disposal bag.
- Before removing the disposal bags from the work area, wipe external surfaces with damp rags to remove any dust and put the used rags in one of the bags.
- Seal all disposal bags with duct tape, place into a second disposal bag and seal again.
- Label all bags with an appropriate warning such as:

CAUTION – ASBESTOS DO NOT DAMAGE OR OPEN BAG DO NOT INHALE DUST CANCER AND LUNG DISEASE HAZARD

 Dispose of asbestos waste at the appropriate waste facility (contact your local Council for more information).
 See page 19.

## Removing bonded materials containing asbestos

Bonded materials containing asbestos are the most common asbestos materials in Queensland homes. The products include flat wall and ceiling sheeting ("fibro"), corrugated roofing ("Super 6") and ridge capping, eaves/soffits, fencing, water, drainage and flue pipes, roofing shingles and flexible building boards (e.g. *Villaboard, Hardiflex, Wunderboard and Flexiboard*). More information on where you can find bonded materials containing asbestos is on page 4.

Follow the safety procedures below when removing up to 10 square metres of asbestos sheeting.

#### Remember!

If you are planning to remove 10 square metres or more of asbestos sheeting, you will need to get an asbestos removal certificate. More information is on page 7.

It is very dangerous to work on an asbestos roof. Asbestos roofs become very brittle with age and are very slippery when wet. Working at a height also presents a risk of falling. Consider using a business that specialises in sealing asbestos roofs.

#### **Important Information:**

- Asbestos is a hazardous substance.
- It is a risk to your health and the health of those around you if asbestos fibres become airborne.
- Plan ahead to avoid disturbing materials containing asbestos.
- · Always prevent creating any dust.
- · Follow the correct safety procedures.

#### STEP 1. Get your equipment together

- Suitable asbestos waste containers for the asbestos sheets (e.g. a skip lined with two layers 0.2mm plastic sheeting)
- 0.2mm thick plastic sheeting for double wrapping asbestos sheets and as drop sheets
- 0.2mm thick plastic bags no more than 1200mm long and 900mm wide for double bagging asbestos waste
- Spray bottle filled with detergent and water
- Manually controlled, consistent low pressure, coarse spray of water, e.g. garden hose with adjustable pistol-grip fitting on the end
- PVA sealant and low pressure spray equipment (for roof sheeting)
- Hammer and punch or chisel (for removal of screws, bolts or similar fittings)
- Oxy-acetylene torch or other suitable device for removing anchoring screws/bolts
- Disposable cleaning rags (e.g. paper, cloth)
- Asbestos vacuum cleaner complying with Australian Standard AS3544
- Personal protective equipment P1 or P2 respirator, disposable coveralls, safety goggles and disposal gloves

Never use angle grinders or other power tools to remove screws or bolts from asbestos roofing. These actions can release asbestos fibres into the air and are illegal.

#### STEP 2. Prepare the work area

- Advise your neighbours of what you are planning to do.
- Remove all loose and unnecessary items from the work area.
- Cover the floor or ground of the work area with plastic sheeting and secure with duct tape or stakes/tent pegs.
- Restrict entry to the asbestos work area/s (e.g. close doors, put up a barrier).
- Always keep the work area clean, tidy and free from bonded asbestos debris.
- Keep asbestos waste separate from all other waste.
- Put on your personal protective equipment.
- Check the fit of your respirator as per the manufacturer's instructions.

#### STEP 3. Removing the bonded asbestos

- Avoid working in windy environments.
- Asbestos-cement can become brittle with age, so any removal work on roofs must address the risk of falling.
- **Do not** break up the sheeting.
- **Do not** use angle grinders or other power tools because of the potential for damage to the asbestos-cement sheeting and subsequent fibre release.
- If there is lichen or moss on roof sheeting, be cautious when using water as wet sheeting is very slippery.
   Roofing should be sprayed with PVA glue and let dry before sheet removal begins.
- Turn off all electricity in the house to prevent electrocution.

#### To remove bonded asbestos walls and fencing:

- If the asbestos-cement is behind ceramic tiles, remove enough tiles to get access to the fixings of the sheet, taking care not to damage the sheet. Use the chisel to gently tap between the top of the tile and the backing sheet to release the tile. Do not dig the chisel into the backing sheet.
- 2. As the tile is released, spray detergent water lightly behind the tile to prevent release of fibres.
- 3. Cut fixings with a cold chisel under the edge of the sheet, or cut around the head using a punch, again minimising damage to the sheet.
- 4. After spraying with detergent and water, punch any nails through the sheeting to help with removal.
- 5. Remove all nails and asbestos waste from the timber.

  Remember: keep the asbestos waste wet to control any asbestos fibres getting into the air.
- 6. Remove sheets with as little breakage as possible.

**Never** drop the asbestos-cement sheeting. **Never** use ramps, chutes or similar gravity-dependent devices.

#### To remove bonded asbestos roofing:

- 1. Spray asbestos-cement roofing with PVA. The PVA must be dry before sheet removal begins to avoid slipping.
- 2. Remove anchoring screws/bolts from the roofing sheets using an oxy-acetylene torch or another suitable method or device that will not damage the sheet.
- 3. Lower roof sheeting to the ground using slings and/or lifting equipment.

**Do not** throw sheeting to the ground or use chutes. **Never** break the sheets up into smaller pieces.

**Do not** slide sheeting across other sheets as they may release asbestos fibres.

Continued overleaf...

#### STEP 4. Clean up

- Wet all asbestos sheets using a fine water spray (including the backs of the sheets once removed).
- Wrap all asbestos sheets in plastic sheeting, seal with duct tape and place in the plastic-lined asbestos waste container or double wrap in plastic sheeting and seal.
- Label the packaged waste with an appropriate warning such as:

CAUTION – ASBESTOS DO NOT DAMAGE OR OPEN BAG DO NOT INHALE DUST CANCER AND LUNG DISEASE HAZARD

- Remove larger scraps from floor/ground plastic sheet by hand and place in a disposal bag (only half fill the bag this is to reduce the chance of the bag splitting).
- Carefully roll or fold plastic sheeting from the floor, so any collected dust or debris does not spill. Lightly spray with water or PVA glue for extra safety.

Domestic vacuum cleaners are unsuitable and should never be used, even if they have a HEPA filter.

- Use damp rags and/or an approved asbestos
  vacuum cleaner to clean your equipment and any
  remaining visibly contaminated sections of the
  work area (e.g. the framework, ceiling spaces and
  exposed wall cavities). Note: Rough sawn timber
  and insulation materials cannot be wet wiped
  or vacuumed. They should be sealed with
  pigmented/coloured PVA glue using
  low-pressure spray.
- Do not resoak used rags in the bucket, as this will contaminate the water. Either fold the rag and use the clean surface or use a new rag.
- Place asbestos debris, used rags, plastic sheeting and other asbestos waste in disposal bags.
- After the work area is clean, wet down your personal protective equipment and clothing with a light spray of water and place them and all used damp cloths into a disposal bag.
- Before removing the disposal bags from the work area, wipe external surfaces with damp rags to remove any dust and put the used rags in one of the bags.
- Seal all disposal bags with duct tape, place into a second disposal bag and seal again.
- Label all bags with an appropriate warning such as:

CAUTION – ASBESTOS DO NOT DAMAGE OR OPEN BAG DO NOT INHALE DUST CANCER AND LUNG DISEASE HAZARD

• Dispose of asbestos waste at the appropriate waste facility (contact your local Council for more information). See page 19.

### Disposing of asbestos waste

#### **Important Information:**

- · Asbestos is a hazardous substance.
- It is a risk to your health and the health of those around you if asbestos fibres become airborne.
- Plan ahead to avoid disturbing materials containing asbestos.
- · Always prevent creating any dust.
- Follow the correct safety procedures.

Asbestos waste needs to be disposed of at site approved by your local Council as soon as possible. Each Council sets its own rules on if and how it receives asbestos waste. Contact your local Council to find out where you can dispose of asbestos waste, any conditions for disposal (e.g. time of day, maximum amount at one time) and how much it will cost.

You can also use a licensed waste removal company to collect and remove asbestos waste for you. They can provide different bins and containers, including drums and skips, for asbestos waste. Waste removalists can be found in the Yellow Pages under "asbestos" or "rubbish removal".

If you are taking the asbestos waste to your Council's approved site, place the double wrapped/bagged asbestos waste in a trailer or in the back of a utility or truck. Secure the load to make sure it doesn't bounce or fly out, tear the plastic wrapping/bags or break the asbestos. Follow the Council's directions when you arrive at the site.

#### **Environmental Tips:**

- Play it safe with asbestos.
- Don't store or reuse any asbestos materials you have removed.
- Don't dispose of asbestos waste in a normal rubbish bin or skip or during Council bulk waste collections.
- **Don't** dump asbestos waste in the environment. Fines apply.

# Still got questions about asbestos in the home?

Visit www.health.qld.gov.au or call 1300 QH info (1300 744 636) for further information.

For information about asbestos in the workplace, contact the Workplace Health and Safety Infoline 1300 369 915 or visit www.deir.qld.gov.au/workplace.

For information about disposal of asbestos waste, contact your local Council.

Remember, if you are thinking about working with or removing a material that contains asbestos, consider:

- If it is in good condition (e.g. undamaged), can you leave it alone?
- Do you know the alternatives to removing the material containing asbestos (e.g. painting or sealing, covering with a non-asbestos product)?
- Can you comply with the laws and safety procedures for working with asbestos (see page 7)?
- Should you use a licensed asbestos removalist?





Play it safe with asbestos

