

# Drilling holes in asbestos cement (AC) and other highly bonded materials

This information sheet sets out safe work techniques for drilling into asbestos cement (AC), bitumen products, floor tiles or any other highly-bonded materials containing asbestos. These products are often found in roofing, cladding, interior linings and walls and ceilings.

Read this information sheet alongside [Working with or near asbestos - good practice guidelines](#) which sets out seven steps for doing asbestos-related work.

## Before you start

### Tools and equipment you will need

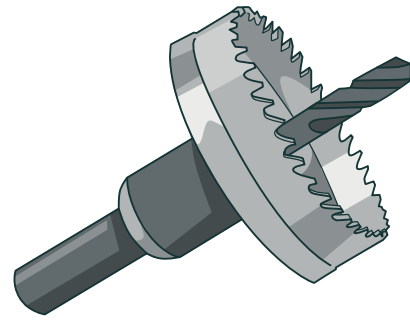
Make sure you have all the standard equipment you need for doing asbestos-related work. See [Sections 5.3 and 7.0 of Working with or near asbestos - good practice guidelines](#) for details.

You will need the following equipment:

- hand drill or power drill, set at the lowest speed
- drill bit or hole cutter for bigger holes
- something to capture the dust and debris, either:
  - H-class (high hazard) vacuum cleaner with drill shroud attachment. Do not use domestic or general-purpose vacuum cleaners, even those with high-efficiency particulate air (HEPA) filters
  - a thickened substance such as petroleum jelly, hair gel, asbestos encapsulant spray or shaving foam, and a disposable plastic cup (shroud) to contain drilling debris



- permanent sealant
- plastic or metal sleeve to protect hole edges
- wet wipes or a bucket of water (with added detergent) and clean rags
- adhesive tape
- asbestos waste bags and labels.



**FIGURE 1:** Drill bit/hole cutter

## Isolate the work area

Take steps to stop unauthorised people from entering the work area while the work is underway and until the area has been decontaminated at the end of the job:

- put barriers and signs up to keep people away from the work area
- close all access points - such as doors, windows or gates
- move items out of the way or cover and seal them with heavy-duty plastic sheeting, also use the sheeting on the ground/floor under and around the work area. This will save you having to decontaminate the items later
- set up your decontamination area.

See [Section 6.0 of Working with or near asbestos - good practice guidelines](#) for more detailed instructions.

If you will be drilling all the way through the AC there may be dust produced at the exit point on the other side. If the exit point is accessible that area must but be blocked off as well. For example, if drilling into a roof from the outside, block off the area underneath in the roof cavity.

## Put on your PPE and RPE

Make sure you are wearing the right PPE and RPE. See [Section 7.0 in Working with or near asbestos - good practice guidelines](#) for more detailed instructions.

To see more on RPE and PPE, watch these videos [How to wear a disposable respirator safely](#) and [How to wear a reusable respirator safely](#)

## Doing the job

### Safe work steps

#### Step 1

Cover the drill entry point and, if accessible, exit point with adhesive tape (to prevent the edges crumbling) and either:

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#### Step 2a

Use a drill shroud along with a thickened substance to contain drilling debris:

- cover drill entry/exit point with a generous amount of a thickened substance
- attach the shroud to the drill and also fill with the thickened substance (see Figure 1).

or

#### Step 2b

Use a drill shroud attached to an H-class vacuum cleaner to capture drilling debris:

Attach vacuum cleaner to the shroud and switch vacuum cleaner on. Place shroud over the area where drilling is to take place.

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#### Step 3

Drill using your chosen method so that it captures any dust and debris. For cable and pipework, make the hole slightly bigger than needed. If you are using a power drill, use the lowest speed setting (see Figures 2 and 3).

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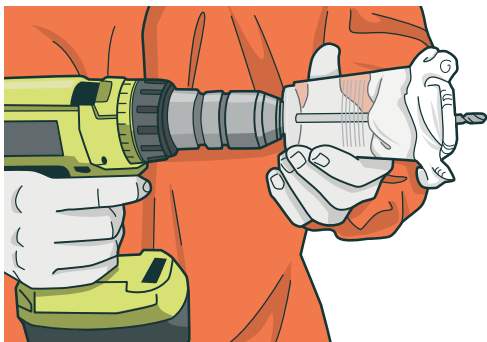
#### Step 4

Clean the exit point (if accessible). If the exit point is not accessible (such as within a wall cavity) tell the building owner that there may be asbestos dust trapped behind where the work was done.

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#### Step 5

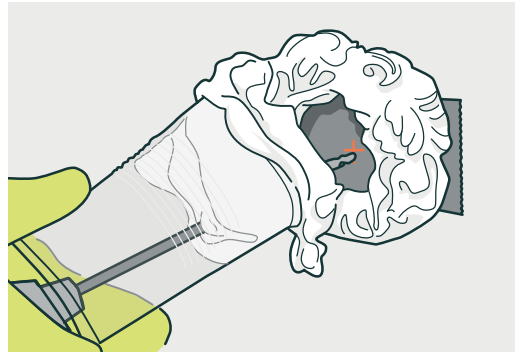
Seal the drilled edge with permanent sealant (see Figure 4). Insert a plastic or metal sleeve to protect hole edges - especially if pipework or cabling is to be inserted.



**FIGURE 1:** Power drill with plastic cup (shroud) filled shaving cream



**FIGURE 4:** Seal drilled edges with sealant



**FIGURES 2 AND 3:** Drilling hole using chosen method to capture dust

## Once you have finished

### Clean up and waste disposal

Put all disposable materials used during the work (such as polythene sheeting) in the asbestos waste bag then double bag it and tape it closed with a gooseneck tie. Clearly label it as containing asbestos.

- [Video: Disposing of asbestos waste and PPE safely](#)
- See [Section 10 of Working with or near asbestos – good practice guidelines](#) for more detailed instructions.

Thoroughly decontaminate the work area and all reusable tools and equipment used during the work.

- [Video: How to decontaminate tools safely](#)
- See [Section 9 of Working with or near asbestos – good practice guidelines](#) for more detailed instructions.

### Personal decontamination

You must thoroughly decontaminate yourself.

- [Video: Taking off your respirator and PPE safely](#)
- See [Section 9 of Working with or near asbestos – good practice guidelines](#) for more detailed written instructions.

### Final checks

- Visually inspect the area to make sure it is clean.

**Note:** These safe work techniques reflect recommended good practice. You can carry out this work using different practices, but you need to achieve or exceed the same levels of safety provided by these practices.