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

What this sheet covers

This sheet describes good practice when you need to drill holes in asbestos cement, bitumen products, floor tiles or other highly-bonded materials containing asbestos.

For asbestos insulating board, see sheet a1. For textured coatings, see sheet a26.

Preparing the work area

- Ensure safe access.
- Restrict access - minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- If feasible, also restrict access to the rear of asbestos material. If drilling a roof from outside, segregate the area beneath.
- If access to the rear is not possible, warn the building owner that this area is contaminated.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape;
- warning tape and notices;
- drill - manual or powered, set at the lowest speed;
- drill bit, or hole cutter for holes greater than 20 mm diameter;
- thick paste, eg wallpaper paste or shaving foam, or a proprietary device to contain drilling debris;
- mastic or sealant for gaps;
- plastic or metal sleeve to protect hole edges;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack; and
- clear polythene sack.

Main points

- Asbestos fibres can kill.
- Keep exposures low using all the controls in this sheet.
- Also follow sheet a0 and equipment and method (em) sheets; see ‘Essential information’.

Asbestos cement tiles on a roof

Interior floor tiles
Health and Safety Executive

SAFETY CHECKLIST

✓ Can you avoid disturbing asbestos by doing the job in some other way?
✓ Do you need a licence for the work?
✓ Always follow all legal requirements.
✓ Follow the task guidance sheet.
✓ Use an asbestos waste container.
✓ Dispose at a licensed disposal site.

Caution:
■ Don’t sweep up dust or debris - use a Class H vacuum cleaner or damp rags.
■ Don’t take used overalls home.
■ Don’t re-use disposable PPE.
■ Don’t smoke.
■ Don’t eat or drink in the work area.

OTHER HAZARDS

Take precautions to avoid falls. Must you work from a ladder? Where necessary, erect an access platform.

Slips and trips - see www.hse.gov.uk/slips/index.htm.
Floors protected with polythene become very slippery when wet.
There may also be other hazards - you need to consider them all.

Drill through paste, foam or a cowl connected to a Class H vacuum cleaner.

Personal protective equipment (PPE) - see sheet em6

■ Provide:
  - disposable overalls fitted with a hood;
  - boots without laces (laced boots are hard to decontaminate); and
  - respiratory protective equipment.

Procedure

■ Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
■ Cover the drilling point and the rear (if accessible) with masking tape to prevent the edges crumbling.
■ For cable and pipework, make the hole slightly bigger than required.
■ Cover the drill entry and if accessible, exit points, with a generous amount of paste, foam or a proprietary device.
■ Drill through the paste, foam or device.
■ Clean off the paste, foam and debris with damp rags. Or remove the device and clean the surface. Clean the back surface with damp rags, if accessible.
■ Rags and paste or foam contain dust and fibres. Dispose of as asbestos waste.
■ Seal the drilled edge with sealant.
■ Insert a sleeve to protect the hole’s edges from cabling, etc.

Cleaning and disposal

■ Clean the equipment and the area with damp rags.
■ Put debris, used rags, polythene sheeting, paintbrush and other waste in the asbestos waste container and tape it closed.
■ Put the asbestos waste container in a clear polythene sack and tape it closed.
■ Disposal - see sheet em9.

Personal decontamination

■ See sheet em8
Clearance and checking off

- Visually inspect the area to make sure that it has been cleaned properly.
- Clearance air sampling is not normally required.
- Get the premises owner, duty-holder or client to check off the job.