Drilling holes in asbestos insulating board (AIB)

What this sheet covers

This sheet describes good practice when you need to drill into AIB to attach fittings, or to pass through cables or pipework.

This sheet is not appropriate if work lasts more than one hour for one worker in a seven-day period, or exceeds two hours for two or more workers in a seven-day period; use an HSE-licensed contractor for such work.

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 general access to the rear of the AIB.
- If this 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
- Class H vacuum cleaner (BS 8520) – see sheet em4
- Drill – manual or powered, set at the lowest speed
- Drill bit, or hole cutter for holes greater than 20 mm diameter
- Drill cowl for vacuum cleaner nozzle, to extract around the drill bit
- Masking tape
- Thick paste, eg wallpaper paste or shaving foam, or a drill cowl to contain drilling debris
- Permanent sealant
- Plastic or metal sleeve to protect hole edges
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
Other hazards

Work at height: See www.hse.gov.uk/work-at-height. Take precautions to avoid falls.
There may be other hazards – you need to consider them all.
Registration at www.gassaferegister.co.uk

Drill through paste or foam or use a drill cowl and a Class H vacuum cleaner. A hand drill creates less dust. If you have to use an electric drill, put it on the slowest setting.

Personal protective equipment (PPE) – see sheet em6

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

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.

Method 1: Drilling 1 to 5 holes up to 20 mm in diameter in board less than 6 mm thick

- Cover the drill entry and, if accessible, exit points, with a generous amount of paste, foam or a drill cowl.
- Drill through the paste, foam or cowl.
- Clean off the paste, foam and debris with damp rags, or remove the cowl 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.

Method 2: Drilling 6 to 20 holes, or any hole over 20 mm in diameter, or drilling through board more than 6 mm thick

- Place the drill cowl over the drill point. Put the drill bit of cutter through the cowl opening.
- Attach the Class H vacuum cleaner hose to the cowl. Turn it on.
Drill the hole.
Vacuum the drilled hole, and the rear of the board if accessible.
Seal the drilled edge with sealant.
Insert a sleeve to protect the hole’s edges.

Control measures: shadow vacuuming and using drill cowls as local extraction
Seal the drilled edge with sealant

Cleaning and disposal
- Clean the equipment and the area with the Class H vacuum cleaner and/or damp rags.
- Put used rags, polythene sheeting and other waste in the asbestos waste bag and tape it closed.
- Put the asbestos waste bag in a clear polythene bag 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, dutyholder or client to check off the job.