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 per week for a worker, or two hours in total for two or more workers; 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;
- plastic enclosure for vacuum cleaner nozzle, to extract around the drill bit;
- masking tape;
- thick paste, eg wallpaper paste or shaving foam, or a proprietary device to contain drilling debris;
- permanent sealant;
- plastic or metal sleeve to protect hole edges;
- bucket of water and rags;

Drill through paste or foam or use a plastic 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.
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 reuse disposable PPE.
- Don’t smoke.
- Don’t eat or drink in the work area.

OTHER HAZARDS

Work at height - see www.hse.gov.uk/falls/index.htm. Take precautions to avoid falls. Must you work from a ladder? Where necessary, erect an access platform. There may also be other hazards - you need to consider them all.

- asbestos waste container, eg labelled polythene sack: and
- clear polythene sack.

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.

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 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.

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 plastic enclosure over the drill point. Put the drill bit or cutter through the enclosure opening.
- Attach the Class H vacuum cleaner hose to the plastic enclosure. 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.

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 container and tape it closed.
- Put the asbestos waste container in a clear polythene sack and tape it closed.
- Disposal - see sheet em9.
ESSENTIAL INFORMATION
Download and follow these advice sheets from www.hse.gov.uk/asbestos/essentials/index.htm:
em1 What to do if you uncover or damage materials that could contain asbestos
em2 Training
em4 Using a Class H vacuum cleaner for asbestos
em6 Personal protective equipment (PPE)
em7 Using damp rags to clean surfaces of minor asbestos contamination
em8 Personal decontamination
em9 Disposal of asbestos waste

This document is available at www.hse.gov.uk/asbestos/essentials/index.htm

© Crown copyright If you wish to reuse this information visit www.hse.gov.uk/copyright for details. First published as part of Asbestos Essentials Task Manual 2001.

Published by the Health and Safety Executive 04/12

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.