Replacing an asbestos cement (AC) flue or duct

What this sheet covers

This sheet describes good practice when you need to mend urgently, then replace, an asbestos cement flue or air duct.

Sometimes, the joints are sealed with asbestos string.

Preparing the work area

- Ensure safe access.
- Restrict access - minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- Mini-enclosure for nailed-on AIB - see sheet em3;
- 500- and 1000-gauge polythene sheeting and duct tape;
- warning tape and notices;
- Class H vacuum cleaner (BS 8520) - see sheet em4;
- screwdriver;
- hammer;
- non-asbestos replacement flue/duct and sealant;
- garden-type sprayer containing wetting agent;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack;
- clear polythene sack; and
- asbestos warning stickers.

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 fibres can cause lung cancer and lung diseases.

The sheet covers the points you need to follow to reduce exposure to an adequate level.

It can act as a risk assessment for asbestos if it matches what you plan to do.

Follow all the points, or use equally effective measures.

Only carry out this work if you are properly trained and have the right equipment.

This section of AC ducting has already been labelled

Sometimes, the joints are sealed with asbestos string.
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.

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
■ Dampen any AC debris with spray.
■ Pick up larger pieces of debris. Put them in the waste container.
■ Clean contaminated surfaces with damp rags, then put these in the waste container.
■ Protect surfaces from further contamination - cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

EMERGENCY REPAIR (EG 1 TO 2 DAYS ONLY)
■ Wrap the duct or flue with duct tape - replace the part as soon as possible.

REPLACEMENT
■ Turn off equipment vented by the flue or fed by the duct.
■ If hot, wait for the flue to cool.
■ Dampen the AC flue/duct and joint seals.
■ If the section can be removed intact, strengthen the damaged sections with duct tape.
■ If it cannot be removed intact, wrap the section in 1000-gauge polythene and break it into large pieces with a hammer.
■ Dampen any asbestos string seal. Ease it away with the screwdriver into the waste container.
■ Gently scrape off residues using ‘shadow vacuuming’ - see sheet em4.
■ Double-wrap the damaged flue/duct with 1000-gauge polythene sheeting and seal with duct tape. Attach asbestos warning stickers.
■ Install the replacement non-asbestos flue/duct.

Caution: Also remove asbestos fragments that fall down the flue/duct.

CLEANING AND DISPOSAL
■ Clean the area and equipment with the Class H vacuum cleaner and damp rags.
■ Put debris, 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.

PERSONAL DECONTAMINATION
■ See sheet em8.

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

Plan how to remove and handle heavy material and articles safely.

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.
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.

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
em5 Wetting asbestos materials
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

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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.