# 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 EN 60335) - 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.

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**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’.

**This section of AC ducting has already been labelled**

**Sometimes, the joints are sealed with asbestos string.**

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
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.

MORE HELP

- Licensed asbestos contractors, and training providers - HSE’s Infoline
  Tel: 0845 345 0055
  Textphone: 0845 408 9577
  e-mail: hse.infoline@natbrit.com
  and at www.hse.gov.uk/asbestos/licensing/index.htm

- HSE priced and free publications -
  HSE Books Tel: 01787 881165
  and at www.hsebooks.co.uk

- Qualified hygienists - The British Occupational Hygiene Society (BOHS)
  Tel: 01332 298101
  and at www.bohs.org/ under ‘Professional > Consultants’

- Trade associations - the Asbestos Removal Contractors Association (ARCA)
  Tel: 01283 531126
  Website: www.arcaweb.org.uk, or the Asbestos Control and Abatement Division (ACAD)
  Tel: 01325 466704

- Disposal of asbestos waste -
  www.environment-agency.co.uk,
  www.sepa.org.uk/, or
  www.netregs.gov.uk/netregs.

- More asbestos pictures and help to decide if work is licensed -
  www.hse.gov.uk/asbestos/index.htm

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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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.