

Asbestos essentials

A task manual for building, maintenance and allied trades on non-licensed asbestos work



Contents









A0	Introduction to Asbestos essentials: Advice to	
	managers and sole traders on Asbestos essentials	1
	Why is asbestos a problem?	1
	Who these task sheets are for and how to use them	2
	What to do first	2
	Main points	3
	Does the work need a licence?	4
	Is it notifiable non-licensed work?	4
	Decision flow chart	5
	Where asbestos materials can be found in	
	a residential property	7
	Where asbestos materials can be found in	
	an industrial property	8
	How to notify NNLW	9
	Planning checklist	9
	Risk assessment and plan of work	10
	Further reading	10
Equip	ment and Method sheets	
EM0	Risk assessments and plans of work	12
EM1	What to do if you discover or accidentally disturb	
	asbestos during your work	15
EM2	Information, instruction and training	20
EM3	Building and dismantling a mini-enclosure	23
EM4	Using a Class H vacuum cleaner for asbestos	26
EM5	Wetting asbestos materials	30
EM6	Personal protective equipment (including RPE)	32
EM7	Using damp rags to clean surfaces of minor	
	asbestos contamination	36
EM8	Personal decontamination	38
EM9	Disposal of asbestos waste	40
EM10	Statement of cleanliness after textured	
	coating removal	43









Task sheets

A 1	Drilling holes in asbestos insulating board (AIB)	46
A2	Removing a single (screwed-in) asbestos	
	insulating board (AIB) ceiling tile	50
A3	Removing a door with asbestos insulating board	
	(AIB) fireproofing	54
A4	Removing a single asbestos insulating board (AIB)	
	panel less than 1m², fixed with nails or screws	57
A5	Cleaning light fittings attached to asbestos	
	insulating board (AIB)	62
A6	Repairing minor damage to asbestos insulating	
	board (AIB)	65
A7	Painting undamaged asbestos insulating board	
	(AIB)	68
A8	Enclosing undamaged asbestos materials to	
	prevent impact damage	71
A9	Drilling holes in asbestos cement (AC) and other	
	highly bonded materials	74
A10	Cleaning debris from guttering on an asbestos	
	cement (AC) roof	78
A11	Removing asbestos cement (AC) debris	81
A12	Cleaning weathered asbestos cement (AC)	
	roofing and cladding	84
A13	Repairing damaged asbestos cement (AC)	88
A14	Removing asbestos cement (AC) sheets, gutters,	
	etc and dismantling a small AC structure	91
A15	Removing an asbestos cement (AC) or reinforced	
	plastic product, eg tank, duct, water cistern	95
A16	Painting asbestos cement (AC) sheets	99
A17	Removing asbestos paper linings	102
A18	Removing asbestos friction linings	106
Δ19	Removing an ashestos fire blanket	100



A20

A38







	asbestos materials	112
A21	Removing asbestos-containing bituminous products	115
A22	Removing metal cladding lined with	
	asbestos-containing bitumen	119
A23	Removing asbestos-containing floor tiles and mastic	122
A24	Removing flexible asbestos textile duct connectors	
	(gaiters)	126
A25	Removing compressed asbestos fibre (CAF)	
	gaskets and asbestos rope seals	129
A26	Drilling and boring through textured coatings	132
A27	Inserting and removing screws through textured	
	coatings	136
A28	Removing textured coating from a small area,	
	for example 1m ²	139
A29	Clearing up debris following collapse of a ceiling	
	or wall covered with textured coating	142
A30	Removing an asbestos-containing 'arc shield'	
	from electrical switchgear	145
A31	Removing a single asbestos-containing gas or	4.40
	electric heater	148
A32	Replacing an asbestos-containing part in a	454
	'period' domestic appliance	151
A33	Replacing an asbestos-containing fusebox or a	154
404	single fuse assembly	154
A34	Removing pins and nails from an asbestos	158
405	insulating board (AIB) panel	
A35	Replacing an asbestos cement (AC) flue or duct	161
A36	Removing an asbestos cement (AC) panel outside, beside or beneath a window	165
407		165
A37	Removing asbestos-containing mastic, sealant,	168
	beading, filler, putty or fixing	100

How to deal with fly-tipped asbestos waste

Laying cables in areas containing undamaged





Risk assessments and plans of work

Equipment and method sheet

Non-licensed tasks

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.
- Can you do the work some other way?
- Does the risk assessment highlight the need for a licensed contractor?

What this sheet covers

Before commencing any work on asbestos-containing materials (ACMs) a risk assessment must be carried out to assess the potential risk of exposure to asbestos, and appropriate steps put in place to prevent or reduce exposure.

The guidance and appropriate task sheet can be used to form part of your risk assessment and plan of work. Where there are no asbestos risks – and tasks that differ from those in these sheets – further risk assessment will be required.

The risk assessment process is set out below.

Risk assessment

Before starting any work that is likely to disturb asbestos, a suitable and sufficient risk assessment must be arranged by the employer.

Whoever carries out the risk assessment must:

- be competent to do the risk assessment (have sufficient knowledge, training and expertise);
- carry it out before work begins and allow enough time to put appropriate precautions in place;
- make sure the assessment is job specific and consider all aspects of the work.

The risk assessment must:

- establish the potential risks (including general risks such as falls from height and electrical hazards as well as those from asbestos) and identify who may be affected;
- identify the action to be taken to remove the risk or, if that is not possible, to reduce the risk to as low as possible;
- record the findings of the risk assessment and the action to be taken – and inform employees;
- implement the actions to be taken;
- review and update the risk assessment as required.

Other hazards

Other specific hazards appear in the checklist on each Asbestos essentials task sheet. They include:

Work on fragile roofs: Fragile roofs cannot bear weight – see www.hse.gov. uk/construction

Work at height: Take precautions to avoid falls – see www.hse.gov.uk/falls

Electrical hazards: Get a competent electrician to isolate and reconnect the electricity supply – see www.hse.gov.uk/electricity

Gas safety: Check your contractor's registration at www.gassaferegister.co.uk

Manual handling: Plan how to remove and handle heavy material and articles safely – see www.hse.gov. uk/msd

Slips and trips: Floors protected with polythene become very slippery when wet – see www.hse.gov.uk/ slips

Confined spaces: You need to know that restricted workplaces are safe to enter and the air is fit to breathe – see www. hse.gov.uk/confinedspace

There may be other hazards – you need to consider them all.

Content of the risk assessment

A risk assessment should include full details of the work to be carried out and how long the work is expected to take. It should also include:

- details of the type and quantity of the asbestos;
- details of the expected level of exposure;
- details of the controls to be used to reduce exposure, eg use of controlled wetting, adequate personal protective equipment (PPE) or respiratory protective equipment (RPE), or use of enclosures;
- decontamination procedures for tools, equipment and PPE;
- details on how asbestos waste will be managed and disposed of as hazardous waste (see em9);
- emergency procedures (see em1).

The findings of the assessment should be communicated to employees and anybody else who could be affected. A copy of the risk assessment must be available on site.

Plan of work

Prepare a short plan of work (also known as a method statement). See equipment and method (em) sheets for useful advice to help you prepare this plan. If the work is notifiable, your copy of the notification may help you.

Make sure the plan includes the following:

- what the work is, and how long it is likely to last;
- the address and description of the job;
- when the work will be done;
- the procedures to follow to reduce exposure and prevent the spread of asbestos, ie by following the Asbestos essentials task sheets and the order of control methods;
- the equipment needed, including PPE;
- decontamination and waste disposal arrangements;
- emergency procedures.

Order of control methods

Where possible, avoid working on or disturbing ACMs. Where this cannot be avoided, use control methods in the following order:

- controlled wetting of ACM;
- removal of whole/intact material minimising breakages;
- shadow vacuuming to control exposure at source;
- suitable PPE including RPE.

Make sure that everyone involved is fully aware of the plan and knows:

- what they need to do;
- how to wear their PPE and RPE correctly;
- why each action is being taken;
- what to do in the case of emergencies and accidents.

Manage the work

Monitor the work to ensure it is being carried out with the appropriate controls in place and that controls are being used correctly.

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





What to do if you discover or accidentally disturb asbestos during your work

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.
- Asbestos isn't always obvious. Would you spot an asbestos gasket on an old engine, asbestos cement pipes or an asbestoscontaining fuse board? If you're not sure, the premises owner needs to get it checked out!
- There are three 'colours' of asbestos, but you can't tell just by the colour what you have found; it could be mixed with other materials which change its appearance.

What this sheet covers

This sheet tells you what you need to do if you discover or accidentally disturb and release asbestos during your work.

Unexpected discovery of asbestos

If during your work you discover materials which you believe to be asbestos stop work immediately. Put up a warning sign and ensure nobody enters the area. Report the problem to whoever is in charge and arrange to have a sample of the material analysed. If it does not contain asbestos then work can continue. If the material does contain asbestos then follow the flow chart to decide if the work needs a licensed contractor.

Alternatively, you could presume that the material contains the worst type of asbestos and apply the appropriate controls, using a licensed contractor if required.

If you are employed in-house, remember to tell your manager to update the asbestos management plan; otherwise report it to the customer.

Accidental release of asbestos

If you accidentally disturb and release asbestos during your work, it must be dealt with quickly and appropriately.

The clean-up of lower risk asbestos materials where the fibres are firmly bound in a matrix but are essentially in good condition (ie mostly intact), such as asbestos cement (AC), bitumen products, papers, textiles, small-scale release of asbestos insulating board (AIB) etc will generally not require a licensed contractor.

Caution

Check what you're working on before you start:

- Avoid using a sweeping brush as this can spread asbestos.
- Make sure no unauthorised personnel enter the area.
- The clean-up of any accidental release of higher risk materials, eg asbestos lagging, loose fill, asbestos coatings (not textured coatings) or large-scale releases of AIB, must be done by a licensed contractor.

Emergency procedures

Your emergency procedures should include managing an uncontrolled release of asbestos materials into the workplace. Steps should be taken to:

- warn anybody who may be affected;
- exclude from the area anyone not needed to deal with the release;
- identify the cause of the uncontrolled release;
- regain adequate control as soon as possible;
- make sure anyone in the work area affected who is not wearing personal protective equipment (PPE), including respiratory protective equipment (RPE), leaves the affected area immediately. Minimise the spread of asbestos by ensuring they are suitably decontaminated;
- clean up dust and debris (see em7);
- decontaminate anyone who is contaminated with dust and debris;
- ensure rags, clothing or PPE is decontaminated or disposed of as contaminated waste:
- consider lone and/or remote workers to ensure they can alert someone if necessary.









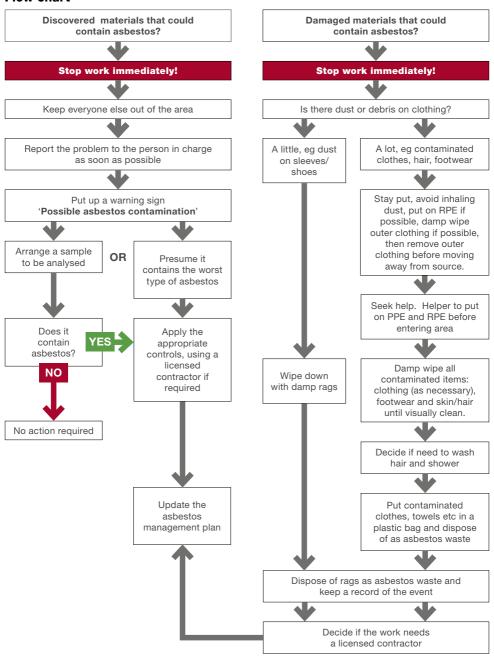




Top row: An asbestos gasket, asbestos cement pipes and an asbestos-containing fuse board

Bottom row: The asbestos cement pipes are labelled, so are the tiles, but you might not know until you start to lift them. There could be sprayed limpet under the AC sheeting

Flow chart





AIB fire surround



Don't assume there will always be warning signs. There could be undiscovered asbestos in buildings you work on

More information

For information about health and safety visit https://books.hse.gov.uk or http://www.hse.gov.uk. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops. To report inconsistencies or inaccuracies in this guidance email: commissioning@wlt.com. British Standards can be obtained in PDF or hard copy formats from BSI: http://shop.bsigroup.com or by contacting BSI Customer Services for hard copies only Tel: 0846 086 9001 email: cservices@bsigroup.com. The Stationery Office publications are available from The Stationery Office, PO Box 29, Norwich NR3 1GN Tel: 0333 202 5070 Fax: 0333 202 5080. E-mail: customer.services@tso.co.uk Website: www.tso.co.uk. They are also available from bookshops. Statutory Instruments can be viewed free of charge at www.legislation.gov.uk where you can also search for changes to legislation.

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Information, instruction and training

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.
- You need training even if you have worked with asbestos in the past.
- Young workers are especially at risk due to lack of experience.

What this sheet covers

People who carry out any work on asbestos materials must receive the correct information, instruction and training, and be supervised properly.

Information, instruction and training for non-licensed work

If a worker is to carry out work that **will** disturb asbestos, adequate information, instruction and training are required. The training should be designed around the asbestos work activities that will be carried out and should include practical training as necessary.

In addition to asbestos awareness training, training for non-licensed work should include:

- what work you are allowed to do by law;
- what the law requires you to do;
- procedures to protect yourself;
- what methods to use:
- what control measures are required;
- what equipment you need to do the job properly;
- how to choose, use and look after personal protective equipment (PPE), including respiratory protective equipment (RPE);
- recognising and dealing with other dangers, such as work at height and other potential hazards;
- decontamination of yourself, work equipment and work areas;
- emergency procedures;
- waste handling and waste disposal.

Practical training should include:

- decontamination procedures;
- use of PPE, including RPE;
- construction of mini-enclosures where necessary;
- use of control techniques such as Class H vacuum cleaners and wet spraying equipment.

The equipment and method (em) sheets used along with the task sheets will provide some of the above information.

Information for other workers

- Tell all other workers that may be nearby what you are doing, where and why.
- Tell them about other risks from the work, eg changes in fire exits.

It is important that information, instruction and training are set at the appropriate level for the task to be carried out by the worker (and supervisor) to avoid putting themselves and others at risk.

Ongoing/refresher training

Individual training needs should be assessed on an ongoing basis and training should be provided promptly when required.

Refresher training is needed every year, or more often if:

- work methods change;
- the type of equipment used changes;
- the type of work changes a lot.

Supervisors and managers should be trained at the appropriate level to help ensure employers are carrying out their work correctly.

Keeping records of employee training will help keep a track of the training provided and identify any gaps.

Certificates of training

There is no legal requirement for employees to hold a certificate of training before they can work with asbestos. A certificate is not proof of competency to do the job but, where issued, a certificate shows that training has been completed and can be kept as part of an employee's training record.

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Building and dismantling a mini-enclosure

Equipment and method sheet

Non-licensed tasks

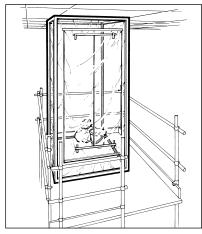
This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Plan carefully do you need an HSE licence to do this work?
- Read sheet a0.
- Read the safety checklist.
- You must be trained to work safely with asbestos materials.



mini enclosure

What this sheet covers

This sheet describes how to build a mini-enclosure. It applies to minor work with asbestos insulating board (AIB).

It does not apply to building full enclosures for work that must be carried out by an HSE-licensed contractor.

Caution: A mini-enclosure only prevents asbestos spreading. It does not prevent or control exposures while you are doing the task.

If work lasts for more than one hour for one worker in a seven-day period, or exceeds two hours for two or more workers in a sevenday period (including setting up, building enclosures and cleaning), a licensed contractor will be required to do the work.

Equipment

- A proprietary mini-enclosure, or a home-made mini-enclosure using 1000-gauge polythene sheeting, duct tape and masking tape, and timber or other materials for the frame
- Smoke tubes
- Sealant, eg polyvinyl acetate (PVA)
- Garden type sprayer
- Bucket of water
- Rags for wiping
- Class H vacuum cleaner (BS 8520) see sheet em4
- Asbestos waste bag
- Clear polythene bag

Preparing the work area

- Ensure safe access.
- Close doors. Use warning tape or notices to alert other people.

Building the enclosure

- Where possible, use a proprietary mini-enclosure as these are quicker and easier to erect.
- Alternatively, use timber or other materials to build a frame.
- Make the enclosure large enough to do the work safely.

Caution

Never use duct tape or spray adhesive on AIB. This will cause damage during dismantling.

Information for other workers

- Tell all other workers that may be nearby what you are doing, where and why.
- Tell them about other risks from the work, eg changes in fire exits.

- Attach the polythene sheeting inside the frame with duct tape.
 This minimises cleaning.
- Attach the polythene sheeting to the ceiling with suitable tape.
- Attach it to non-asbestos surfaces with duct tape.
- Make an entry slit in one wall of the enclosure and reinforce this with duct tape.
- Attach a polythene sheet above the entry slit to cover it.
- Use smoke tubes to check all enclosures for leaks.
- Release smoke at the seals inside the enclosure.
- Someone else must check for leaks outside.
- Seal all leaks.
- Put all tools for the task bucket of water, rags, sprayer, vacuum cleaner nozzle and hose etc inside the enclosure.

Enclosure dismantling

- Work carefully prevent asbestos escaping.
- Clean the enclosed area with the Class H vacuum cleaner.
- Clean the equipment and polythene sheeting with damp rags.
- Decontaminate yourself see sheet em8.
- Inspect the enclosure visually is it properly clean?
- Spray the polythene sheeting with PVA sealant.
- Remove the sheeting from the framework and put it in the asbestos waste bag.
- Remove your protective equipment and dispose of it.
- Put in a clear polythene bag and tape closed.
- If the framework is clean and was fully protected, you can re-use it.



Put the equipment you need inside the enclosure before you start



Test the enclosure for leaks with a smoke test

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Using a Class H vacuum cleaner for asbestos

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check that the vacuum cleaner is in good working order before you start.
- · Read sheet a0.
- · Read the safety checklist.
- You must be trained to work safely with asbestos materials.

What this sheet covers

This sheet describes the Class H vacuum cleaner, how to use it to minimise asbestos fibres released during a task, and how to use it to clean contaminated items.

The cleaner must comply with British Standards.

A Class H vacuum is not mandatory for non-licensed work but can be a useful piece of equipment on a number of tasks.

Never use domestic vacuum cleaners, even those fitted with highefficiency particle arrestor (HEPA) filters as these are not adequate for use with asbestos, and will allow asbestos fibres to pass straight through.





Vacuum clean carefully. It is easy to disturb asbestos fibres, make them airborne and breathe them in

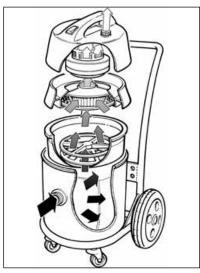
Equipment

- You can hire or purchase a Class H vacuum cleaner with a range of attachments: look up 'asbestos safety equipment hire' on the internet.
- Ensure hired cleaners are clean and in good working order on receipt.
- The hire company should thoroughly examine and test the cleaner at least once every six months and provide a valid certificate.
- If the certificate is not in date do not accept the vacuum.

Caution

You, and other people, will be exposed to high levels of asbestos fibres if you fail to take the proper precautions.

Domestic vacuum cleaners should never be used on asbestos.



Class H vacuum cleaner

British Standards

You should only hire a Class H vacuum cleaner that conforms to the following standards.

BS 8520-3:2009 Equipment used in the controlled removal of asbestoscontaining materials. Gives recommendations for the operation, cleaning and maintenance of Class H (high-hazard) vacuum cleaners containing a filter conforming to BS EN 1822 in the controlled removal of asbestos-containing materials (ACMs). It does not apply to any other types of vacuum cleaner for vacuuming up liquids or other applications.

- If the certificate is due to expire during the hire period, contact the hire company before expiry to arrange for the equipment to be re-tested or for delivery of a replacement vacuum.
- Some Class H vacuum cleaners are designed for wet and dry removal. Select this type of vacuum if water has to be removed. Normal Class H dry vacuums can be used for removal of moist or wetted material but not water.
- If you own the equipment you will need to arrange for a new examination and test on expiry of the certificate. Contact the manufacturer or supplier, or a licensed maintenance company, to arrange this or to obtain more information.

Vacuuming procedures

- Inspect the vacuum before each use to check it is in good working order, provides adequate suction and has not been damaged.
- If fitted with a low-flow indicator, check if this is activated.
- Follow the manufacturer's operating procedures.
- Pick up bigger pieces of debris and put them in a suitable waste bag.
- Vacuum clean with care; it is easy to disturb asbestos fibres, make them airborne and breathe them in.
- Normal Class H dry vacuums can be used for removal of moist or wetted material, but not water.
- Clean floors, carpets and fabrics with the adjustable floor attachment.
- Clean areas of limited access with the tapered attachment.
- Clean solid surfaces such as desk tops with the flat attachment.
- Check for damage after use.

Used as a control measure - dust extraction

- You can use the Class H vacuum cleaner to control asbestos fibres at source, eg:
 - shadow vacuuming: hold the nozzle close to the task (eg screw removal);
 - local dust extraction at the cutting point: enclose the tool (eg drill bit) with a drill cowl and attach the nozzle.







Control measures: shadow vacuuming and using a drill cowl as local extraction

Possible problems

Reduced suction:

- You have a long extension cable, resulting in low supply voltage.
- The waste container is full.
- The hose is blocked. Clearing it can release asbestos; clear it carefully or get help from the hire company.

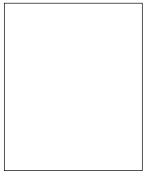
Emptying and cleaning

Never clean inside the vacuum cleaner yourself.

- Never attempt to remove or change the bag yourself; this should be done by a competent person under controlled conditions.
 Contact the supplier or a licensed organisation for assistance.
- After each use, clean the vacuum cleaner's outer casing and attachments with the vacuum and then with damp rags.
- Rags must be disposed of as asbestos waste (see em9).
- Inspect the case, hose and attachments visually.
- Keep the hose and attachments in a labelled plastic sack.
- Replace the sealing cap over the hose opening in the cleaner's casing.
- Store in a suitable sealed container until next usage.
- Return vacuum to hire company in a double asbestos bag (usually provided by the hire company).







There are many makes of Class H vacuum cleaner. Purchase or hire one from a supply company and follow all the instructions (make sure it conforms to BS 8520-3:2009 and contains a filter conforming to BS EN 1822)

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Wetting asbestos materials

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.

What this sheet covers

This sheet explains why you must wet asbestos materials before working on them, and how to do this.

The spraying technique can also be used when painting or sealing asbestos materials.

Damp asbestos materials release far fewer asbestos fibres into the air. Don't drench them and create a waste 'slurry'. Electrical equipment in the area needs to be isolated and protected.

Equipment

- Wetting agent or you could use liquid detergent as an alternative
- Sprayer, either a garden type spray or a low-pressure spraying machine less than 3.4 bar (50 psi)
- Brush or roller

Procedures

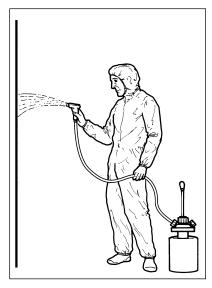
- Wet the asbestos materials before starting any work. Don't work on dry asbestos materials.
- Water on its own does not effectively wet asbestos-containing materials, wetting agents should be used.
- Some asbestos materials, eg board/sheet cannot be wetted all the way through so you need additional methods to control dust exposure, eg a Class H vacuum cleaner to shadow vacuum during screw removal.
- Normal dry Class H vacuums can be used for removal of moist or wetted material, but not water.



Spray at low pressure; high-pressure spray could disturb fibres from asbestos paper under these tiles

Caution

Some tasks will be carried out at height. Make sure that wetting does not create a slipping risk.



Spraying is the preferred wetting method

Wetting

- Spraying is the preferred wetting method.
- If you use a brush or roller, dispose of it as asbestos waste.
- Dilute the wetting agent with water according to the manufacturer's instructions. This is usually:
 - 10–15 parts water to 1 part wetting agent; or
 - 8 parts water to 1 part liquid detergent.
- Allow the spray to 'fall' onto the asbestos material not hit it as a jet.
- Spray carefully; use a slow backwards and forwards motion.
 Avoid concentrating on any one area this can disturb the asbestos material or leave dry patches.
- Over-wetting material can create a waste slurry which will be difficult to clean up.

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Personal protective equipment (including RPE)

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.

Caution

Never use laced boots; these are very difficult to clean properly.

Never take used overalls home.

Never leave the respirator lying around where it can collect dust.

Never dangle the respirator around your neck.

Make sure the correct filter is fitted.

What this sheet covers

This sheet describes what personal protective equipment (PPE) you need.

It also describes respiratory protective equipment (RPE).

PPE and RPE are your last lines of defence against asbestos fibres. Follow the methods in the task guidance sheets to avoid fibres being released into the air.

Overalls

- Disposable overalls Type 5 (BS EN ISO 13982-1+A1) are suitable.
- You may need waterproof overalls for outdoor work.
- Wear one size too big to help to prevent ripping at the seams.
- If the cuffs are loose, seal them with tape.
- Avoid wearing a long-sleeved shirt these are difficult to cover properly.
- Wear the overall legs over footwear. Tucking them in lets dust into footwear.
- Wear the hood over RPE straps.
- Dispose of used overalls as asbestos waste.

Gloves

- If you wear protective gloves, use single-use disposable gloves. If you must use latex gloves, use only 'low-protein powder-free' gloves.
- Dispose of used gloves as asbestos waste.

Footwear

- Boots are preferable to disposable overshoes which can cause a slipping risk.
- Choose boots without laces as these are easier to clean.



A 'dust mask' doubled up for more protection is useless. You need a respirator



Disposable RPE worn correctly



Disposable RPE worn correctly



Disposable RPE worn incorrectly



For some tasks, non-disposable RPE is needed

Respiratory protective equipment

- Use suitable RPE with a UK-assigned protection factor (APF) of 20 or more.
- Suitable types of RPE:
 - disposable respirator to standards EN 149 (type FFP3) or EN 1827 (type FMP3);
 - half-mask respirator (to standard EN 140) with P3 filter;
 - semi-disposable respirator (to EN 405) with P3 filter.
- This equipment should be suitable for most short-duration nonlicensed work. Workers should select a make and size that fits them.
- This equipment is not suitable for people with beards or stubble hooded respirators are required for these situations.
- The equipment is also unsuitable for long periods of continuous use; you need power-assisted equipment for such situations.

Planning and preparation

- Plan for and practise emergency procedures such as failure or damage to RPE.
- Workers need to be fit tested to make sure that the RPE fits them properly.
- Arrange fit testing and training on use and inspection of RPE before the work starts. Ask the supplier for help or contact fit2fit.org for details of accredited fit test providers.
 See More help on sheet a0.
- Workers must be medically fit to wear RPE seek medical advice if you are not sure.

Training

- Make sure that RPE users know:
 - how to check their equipment is working properly before they put it on:
 - how to check that it fits;
 - how to identify and replace worn or defective parts;
 - about the limitations of the RPE they are using.
- Instruct users to throw away disposable RPE/PPE as asbestos waste after one use.
- Tell workers to stop work and leave the area if they think their RPE is not working properly.

Using RPE

- All types of RPE restrict what the wearer can do. It is uncomfortable to wear for long periods, but it is important that you protect yourself.
- RPE has to be worn all the time and until the worker is away from the contaminated air.

- Put on and wear the respirator in accordance with your training and the manufacturer's instructions.
- Carry out a fit check in accordance with your training and the manufacturer's instructions.
- If the worker wears spectacles, they should ensure they do not create a gap between the mask and face.
- Put the overall hood over the straps.
- At the end of the shift, take off RPE last and, if it is disposable, put it in the asbestos waste.
- For non-disposable RPE, clean after use and store in a safe place away from contamination.
- With half-mask respirators, change filters regularly your supplier may be able to advise you how often. Dispose of used filters as asbestos waste.

Maintenance of non-disposable equipment

- Keep RPE clean and in good working order follow the manufacturer's instructions.
- Inspect and check RPE for damage every time. Carry out thorough checks monthly (or every three months if used infrequently). Inspect all parts including valves and seals. Replace the respirator as appropriate.

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Using damp rags to clean surfaces of minor asbestos contamination

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.



Wiping up debris with a damp rag

What this sheet covers

This sheet explains how to use rags to clean minor asbestos contamination from smooth, non-absorbent surfaces and equipment.

Equipment

- Bucket of water
- Either cotton rags that do not shed fluff onto clean surfaces, or impregnated rags (eg 'Tak' rags)
- Adhesive tape, to collect small dust deposits
- Asbestos waste bag
- Clear polythene bag

Procedures

 Pick up bigger pieces of debris and put them in a suitable waste container.

Rags

- Impregnated rags do not need soaking.
- Soak the cotton rag in water. Fold in half or quarters. Wring it out.
- Wipe the contaminated surface.
- Refold the rag to give a clean surface.
- Repeat until you have used all the clean surfaces of the rag.
- Put the used rag in a bag. Get a clean rag and repeat cleaning until all surfaces are clean.

Tape

- Tape is only useful for removing small dust deposits. Surfaces may need repeated tape applications.
- Place a strip of tape over the contaminated surface. Peel it off slowly.
- Put the used tape in a bag. Repeat with a fresh piece.

Caution

Never resoak a contaminated rag; this contaminates the water. Make sure you have enough rags for adequate clean-up.

Wastes

- Put bags of used rags and tape in a suitable asbestos waste bag.
- Tape the bag closed.
- You need to ensure you have enough rags to avoid contaminating the water.
- See sheet em9 for disposal.

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Personal decontamination

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.

What this sheet covers

This sheet describes how to decontaminate yourself after work with asbestos materials.

Personal decontamination is easier when you wear the correct personal protective equipment (PPE).

You need to decontaminate yourself properly, otherwise you may take asbestos fibres home on your clothing and expose your family and friends.

Procedures

Removing and decontaminating PPE

- Clean your boots with damp rags see sheet em7.
- Where available, clean your overalls with the brush attachment on a Class H vacuum cleaner. Vacuum off the brush.
- Otherwise, use damp rags in a gentle 'patting' action. Rubbing can disturb fibres.
- Where there are two workers, they can help to clean each other.
- Peel off disposable overalls. They should be inside out when they have been removed. Put them in a suitable asbestos waste bag.
- Bag up reusable overalls for a specialist laundry.
- Finally, remove your respiratory protective equipment (RPE) in accordance with em6.
- Tape the bag closed.



'Buddy' cleaning using a Class H vacuum cleaner



Make sure you restrict access



Cleaning with damp rag using patting action

Personal decontamination

- A suitable location for personal decontamination should be considered as part of the planning before the job commences.
- Can you use site washing facilities? If so, they must be for your use only.
- Keep other people out during personal decontamination, and until vou have cleaned the facilities.
- Wash every time you leave the work area.
- Use damp rags to clean the washing facilities at the end of the job.
- Clean the facilities daily if the job lasts more than one day.
- Inspect the facilities visually once the job is finished.
- Clearance air sampling is not normally needed for washing facilities.
- See sheet em9 for disposal of asbestos waste.

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Disposal of asbestos waste

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

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

Remember:

- · Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- · You must be trained to work safely with asbestos materials.

What this sheet covers

This sheet describes good practice when you need to dispose of asbestos waste.

Any asbestos product or material that is ready for disposal is defined as asbestos waste. Asbestos waste also includes contaminated building materials, tools that cannot be decontaminated, personal protective equipment and damp rags used for cleaning. If in doubt, always treat waste as 'Hazardous' or 'Special'. See the table for more details.

England and Wales Asbestos waste is 'Hazardous Waste' when it contains more than 0.1 % asbestos. The Hazardous Waste Regulations 2005 apply. Complete a Hazardous Waste Consignment Note. Contact the Environment Agency for more information in England. Contact Natural Resources Wales for more information in Wales.

Scotland

Asbestos waste is 'Special Waste' when it contains more than 0.1 % asbestos. The Special Waste Amendment (Scotland) Regulations 2004 apply. Complete a Hazardous Waste Consignment Note. Contact the Scottish Environment Protection Agency for more information.

England, Scotland and Wales

All asbestos waste is subject to Schedule 2 of The Control of Asbestos Regulations 2012 and most waste is subject to The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009). CDG does not apply to firmlybound asbestos - asbestos cement or articles with asbestos reinforcement which do not release hazardous or respirable fibres easily. However, the hazardous and special waste regulations still apply. CDG applies for all other asbestos waste.

Caution: Don't mix asbestos waste with other waste to get below 0.1 %.

- Waste must be packed in UN-approved packaging with a CDG hazard label and asbestos code information visible.
- Double-wrap and label asbestos waste. Standard practice is to use a red inner bag with asbestos warnings, and a clear outer bag with the CDG label, if required.

Caution

Don't overfill bags.

Beware of sharp objects that could puncture plastic.



Vehicle placard



Asbestos warning sign

- Avoid breaking up large pieces of asbestos waste. Instead double wrap in suitable polythene sheeting (1000-gauge) and label accordingly.
- To transport waste, you need a waste carriers licence.
- If you carry waste, use a sealed skip, or a vehicle with the following:
 - segregated compartment for asbestos;
 - easily cleanable;
 - lockable (it is not good enough to throw sheeting over a standard skip).
- Otherwise, arrange for transport by a registered waste carrier.
- Safe disposal make sure you use a licensed disposal site.
- Complete a Waste Consignment Note. Keep copies of these documents for three years.





All waste should be double-bagged or double-wrapped in plastic sheeting, with the correct hazard warning signs attached



Use a lockable skip for asbestos cement sheet



It is not good enough to throw sheeting over a standard skip

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Statement of cleanliness after textured coating removal

Equipment and method sheet

Non-licensed tasks

This information will help employers and the selfemployed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

What this sheet covers

This sheet is intended for trained contractors who remove textured coatings.

It sets out a model statement to issue to the client, premises owner or the occupier.

A statement of cleanliness is normally only required for large-scale removal and if an enclosure is used.

Procedures

- After removing textured coating, you need to let the client know the premises are safe to use again.
- Before you do this you need to be sure that textured coating has been removed, as agreed, and all debris cleaned up.
- The next page shows an example of a form to give to the client, premises owner or occupier.

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

Regarding the removal of textured coating from	
Location	
Address	
on	Date
The removal work consisted of (job description):	
by (name of contractor)	
(contractor's address)	
I have checked that textured coating was removed and the area was cleaned thoroughly.	
I inspected the following areas to make sure that there were no visible traces of dust or debris:	
(Areas inspected)	
I am satisfied that the area can be returned to normal use.	
Signed	
Print name (capitals)	
Date	





Introduction to Asbestos essentials

Advice to managers and sole traders

Non-licensed tasks

Workers are at risk of developing asbestos-related diseases.

Disturbing asbestos-containing material (ACM) can release invisible fibres. Once in the air, fibres can be breathed in and cause lung diseases including:

- mesothelioma a cancer of the linings to the lungs and stomach;
- lung cancer;
- other serious diseases such as asbestosis – a scarring of lung tissue.

There are no sudden changes in health after breathing in fibres – these diseases can take from 15 to 60 years to develop. They are incurable and often fatal. You need to protect yourself now to prevent contracting an asbestos-related disease in the future.

Some trades likely to disturb asbestos

- Electricians, joiners, plumbers, gas fitters, shop fitters, heating and ventilation engineers
- Labourers, roofers, plasterers, demolition workers and other workers in construction
- Phone and data engineers, alarm installers
- Surveyors, general maintenance engineers, painters and decorators

Asbestos essentials task sheets tell employers, managers and sole traders what to do when they need to work on or near ACMs. They will help you to decide what category of asbestos work it is and how to plan the work safely.

Higher-risk work with ACMs, including sprayed coatings, loose asbestos, lagging, insulation and jobs involving asbestos insulating board (AIB) – apart from some very limited-duration works to AIB – will require an HSE-licensed contractor.

The task sheets cover work that does not need a licence if carried out as the sheets describe. Each sheet describes what equipment is required for a particular task and covers the action needed to reduce exposure to an adequate level.

Why is asbestos a problem?

Large amounts of asbestos were used in new and refurbished buildings before 2000. Blue (crocidolite) and brown (amosite) asbestos were banned by law in 1985. Manufacture and supply of all asbestos was banned by the end of 1999. Existing asbestos articles can continue in use until they reach the end of their service life.

A large number of premises and older plant and equipment still contain some asbestos. Much of the asbestos will be hidden in the fabric of the building so is not immediately obvious. It is also unlikely to be recorded in the building plans but should be in the duty-to-manage plan. Workers most likely to come into contact with ACMs are those in the construction, maintenance, refurbishment and related trades. When ACMs are damaged or disturbed they can release dangerous fibres which, if breathed in, can cause serious diseases. Around 5000 people in Great Britain die every year from asbestos-related diseases as a result of past exposure, making asbestos the single greatest cause of work-related deaths.

Information, instruction and training

Any worker (including the self-employed) who is liable to disturb asbestos during their work must receive the correct level of information, instruction and training so they can work safely and without risk to others – see sheet em2.

Safety checklist

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

Caution:

- Do not sweep 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.

Who these task sheets are for and how to use them

Asbestos essentials task sheets will help small businesses, subcontractors and the self-employed to comply with the Control of Asbestos Regulations 2012. They will also help dutyholders, clients, trade union and employee safety representatives to understand how work should be done.

The task sheets provide the information you need to help you recognise asbestos and protect yourself and others. They include:

- equipment and method sheets (em0-em10). These provide guidance and advice on the right tools for the job and how to use them;
- a series of task sheets (a0-a38) with full colour images, illustrations and step-by-step guidance. It is important to follow all the actions in a task sheet, or use equally effective measures.
 Each task sheet shows a list of em sheets you should read before you start that task;
- the Decision flow chart in this sheet will help you decide if you can carry out the work or if you need to use an HSE-licensed contractor, or whether the work is notifiable non-licensed work (NNLW);
- the two detailed illustrations in this sheet showing where asbestos can be found in a typical industrial and residential property;
- a safety checklist to help you make sure you haven't forgotten anything.

Following the sheets will help reduce the risk of ill health and the spread of asbestos. The task sheets can be used to form part of your risk assessment.

What to do first

Before starting work you should check what asbestos is present as part of your planning. In non-domestic premises, including industrial and commercial buildings, there should be a location plan/register – ask to see it. (This will not usually be available in domestic premises.) Check that the plan covers the area of the building that you will be working in and, if you are doing refurbishment work, that it includes a survey listing the types of asbestos present and their condition.

If there is no register or survey – or the report is not clear – do not start work.

You could arrange for a sample to be taken by a competent person and analysed or, alternatively, you can presume that any material you need to disturb contains the most hazardous types of asbestos (crocidolite or amosite) and apply the appropriate controls, using a licensed contractor if required (see Decision flow chart). The client also needs to agree your plan of work to understand what work you are going to do, and how.

Other hazards

Other specific hazards appear in the checklist on each *Asbestos essentials* task sheet. They include:

Work on fragile roofs: Fragile roofs cannot bear weight – see www.hse.gov. uk/construction

Work at height: Take precautions to avoid falls – see www. hse.gov.uk/falls

Electrical hazards: Get a competent electrician to isolate and reconnect the electricity supply – see www.hse.gov.uk/electricity

Gas safety: Check your contractor's registration at www.gassaferegister.co.uk

Manual handling: Plan how to remove and handle heavy material and articles safely – see www.hse.gov.uk/msd

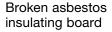
Slips and trips: Floors protected with polythene become very slippery when wet – see www.hse. gov.uk/slips

Confined spaces: You need to know that restricted workplaces are safe to enter and the air is fit to breathe – see www.hse. gov.uk/confinedspace

There may be other hazards – you need to consider them all.

Examples of licensed work - Don't touch this!







Asbestos lagging



Sprayed asbestos (limpet)

Examples of non-licensed work – You can work on these materials if you are trained



Damaged textured coating



Asbestos cement roofing



Asbestoscontaining gasket

If you have any doubts, your risk assessment should help you determine the type of work (see em0) or ask the client to employ an HSE-licensed asbestos contractor.

Main points

- Work with, or disturbance of, any type of ACM can be dangerous.
- If you work on ACMs and you smoke, you are at much greater risk of lung cancer.
- You need information, instruction and training to work safely with ACMs. See sheet em2.
- Consider those around you. Don't put your workmates in danger or take fibres home on your clothes and put your family at risk.
- Second-hand equipment may not be asbestos-free.
- Dispose of contaminated materials safely.

The Asbestos essentials task sheets **do not apply** to licensed work. You should only go ahead if you are sure the work does not require a licence.

Does the work need a licence?

Most higher-risk work with asbestos must be carried out by a licensed contractor. This includes:

- work on asbestos sprayed coating, loose fill insulation and asbestos lagging;
- work on AIB or other types of asbestos insulation where the risk assessment demonstrates that the fibre release will be high, eg the material is damaged, or the work is not short duration work.

'Short duration' means any one person doing this type of work for less than one hour – or more than one person doing the work for no more than two hours – in any seven consecutive days. The total time spent by all workers must not exceed two person hours. This includes time spent setting up, building enclosures, cleaning and clearing up.

Non-licensed work includes most work on asbestos-containing textured coatings, also known as Artex, and asbestos cement.

Is it notifiable non-licensed work?

Some non-licensed work, where the risk of fibre release is greater, is subject to three additional requirements:

- notification of work;
- marking work areas with warning notices;
- medical examinations and record keeping.

This work is known as notifiable non-licensed work (NNLW).

To decide if the work is NNLW, you will need to consider: the type of work you are going to carry out; the type of material you are going to work on; and its condition.

Decide what type of work you are doing

- Maintenance eg drilling holes to attach fittings or pass cables through, painting, cleaning etc. Maintenance includes some removal where it is incidental to the main task, eg removing an asbestos ceiling tile to allow inspection.
- Removal eg as part of a refurbishment or redesign project.
 Or
- Encapsulation eg work to enclose or seal asbestos materials in good condition.
- Air monitoring and control, and the collection and analysis of samples.

Consider the asbestos type

- Is it friable (high fibre release when disturbed)? The more friable a
 material is, the more likely it will release asbestos fibres when
 worked on and the greater the risk of exposure. Materials such as
 asbestos insulation are more friable than materials such as
 asbestos cement.
- How firmly is the asbestos bound in a matrix (for removal work only)? ACMs where the asbestos is coated, covered or contained within another material, such as cement, paint or plastic, are considered to be firmly bound in a matrix.

Consider the material's condition

- Has the material been damaged or is it in poor condition, eg badly flood- or fire-damaged?
- Will the material's matrix be destroyed when worked on, eg deteriorating textured coatings (Artex) with gel or steam?

Once you've considered these three elements, the Decision flow chart will help you to decide which category your work with asbestos is, or check the HSE website for more help before you start.

In summary, most work with firmly bound materials in good condition such as asbestos cement, bitumen, plastic, resin, rubber, roofing felt, paper linings, cardboard, textiles, gaskets, washers and rope etc will not need to be notified. Short duration maintenance work involving AIB which is in good condition, and removal of small areas of textured coatings to support installation/replacement of smoke alarms and light fittings, will not normally need to be notified.

NNLW will normally include removal of textured coatings where the material is deteriorated, eg using steaming and gelling methods, and short duration removal of AIB as part of refurbishment.

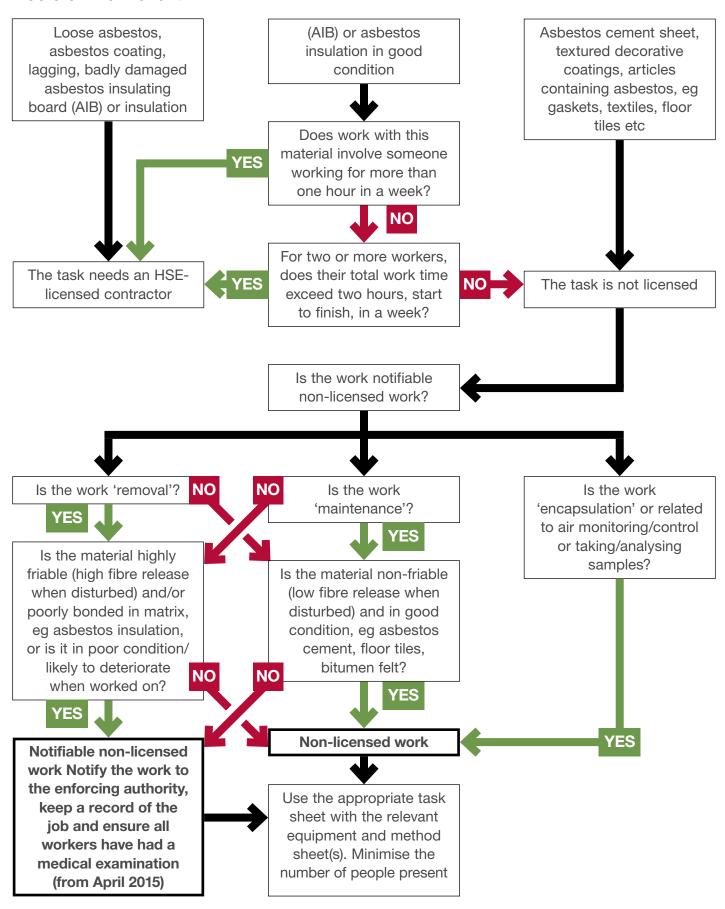
Each Asbestos essentials task sheet will give advice on whether the work is notifiable.

Decision flow chart

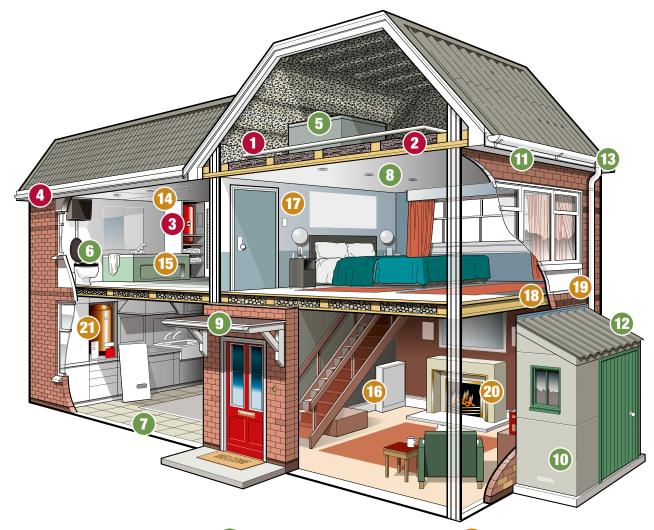
The following flow chart will help you to decide who should do the work, and to determine if it is licensed work or non-licensed work.

If you determine the work is non-licensed you will then need to decide if it is notifiable non-licensed work (NNLW).

Decision flow chart



Where asbestos materials can be found in a residential property



Usually licensed

- 1 Pipe lagging
- 2 Loose fill insulation
- 3 AIB airing cupboard and/or sprayed insulation coating on boiler and hot water tank
- 4 AIB soffits

Normally non-licensed

(If work that causes significant break up may require notification)

- 5 Asbestos cement water tank
- 6 Toilet seat and cistern
- 7 Vinyl floor tiles

- 8 Textured decorative coating on walls and ceilings eg Artex
- 9 Roofing felt
- 10 Asbetos cement panels
- 11 Asbetos cement soffits
- 12 Asbetos cement roof
- Asbetos cement gutters and downpipes

If short duration non-licensed – otherwise licensed

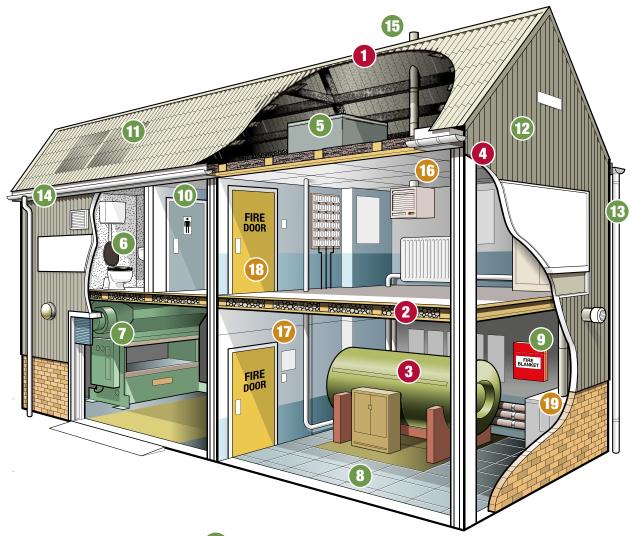
- 14 AIB ceiling tiles
- 15 AIB bath panel
- 16 AIB behind fuse box

- 17 AIB partition wall
- 18 AIB interior window panel
- 19 AIB exterior window panel
- 20 AIB behind fire
- AlB around boilers, storage heaters and warm air heating systems

Note: This diagram does not show all possible uses and locations of asbestos materials. A detailed survey will be required to identify all asbestos materials in a building.

AIB = Asbestos insulating board

Where asbestos materials can be found in an industrial property



Usually licensed

- 1 Sprayed coatings on ceilings, walls, beams and columns
- 2 Loose fill insulation
- 3 Lagging on boilers and pipes
- 4 AIB soffits

Normally non-licensed

(If work that causes significant break up may require notification)

- 5 Asbestos cement water tank
- 6 Toilet seat and cistern

- 7 Abestos rope seals, gaskets and paper
- 8 Vinyl floor tiles
- 9 Textiles eg fire blankets
- Textured decorative coating on walls and ceilings eg Artex
- 11 Asbetos cement roof
- 12 Asbetos cement panels
- Asbetos cement gutters and downpipes
- 14 Asbetos cement soffits
- 15 Asbetos cement flue

If short duration non-licensed – otherwise licensed

- 16 AIB ceiling tiles
- 17 AIB partition walls
- 18 AIB panels in fire doors
- 19 AIB around boilers, storage heaters and warm air heating systems

Note: This diagram does not show all possible uses and locations of asbestos materials. A detailed survey will be required to identify all asbestos materials in a building.

AIB = Asbestos insulating board

The following information will help in identifying the appropriate enforcing authority to notify the work to:

Type of premises/activity	Enforcing authority
Shops, offices, separate catering services, launderettes, sport, entertainment and recreational activities, exhibitions, church or religious meetings, hotels, camping and caravan sites, wholesale and retail storage	Local authority (LA)
Factories and factory offices, civil engineering, construction and demolition sites, hospitals, research and development establishments, local government services and educational establishments, fairgrounds, radio, television and film broadcasting, seagoing ships, docks, transport undertakings, domestic premises, quarries, farms (and associated activities), horticultural premises and forestries, mines/ quarries, offshore installations, operating licensed nuclear sites	Health and Safety Executive (HSE)
Railways, railway lines, signal boxes	Office of Rail Regulation (ORR)

How to notify NNLW

For NNLW you will need to fill in the online notification ASB NNLW1 at: https://extranet.hse.gov.uk/lfserver/external/asbnnlw1 and submit it electronically from your computer or device.

Work can start as soon as the electronic notification has been submitted. You do not need to wait for permission from the notified authority.

Planning checklist

Remember, before carrying out any work:

- Ask the premises owners for their records of asbestos; what was checked, what was found, and what was not checked.
- If there is no record and you have reason to suspect asbestos, ask for an asbestos survey to be done before accepting the contract (you will have to arrange this yourself in domestic properties, or alternatively, assume that it does contain asbestos and take appropriate control measures).
- Check if the work could require a licence.
- When the work does not need a licence, check if it is notifiable and, if so, submit form NNLW1 then follow the task sheets or other HSE guidance.

- If there is no task sheet for the work it may be possible to safely adapt a similar task sheet. If required, get help from a competent health and safety advisor.
- If ACM needs replacement, the replacement must be asbestos-free.

Risk assessment and plan of work

Before starting any work that is likely to disturb asbestos, a suitable and sufficient risk assessment and a plan of work must be prepared. See em0.

Further reading

Asbestos: The licensed contractors' guide HSG247 HSE 2006 www.hse.gov.uk/pubns/books/hsg247.htm

Respiratory protective equipment at work: A practical guide HSG53 (Fourth edition) HSE 2013 www.hse.gov.uk/pubns/books/hsg53.htm

Fit testing of respiratory protective equipment facepieces HSE Information Operational Circular OC 282/28 www.hse.gov.uk/foi/internalops/ocs/200-299/282_28.pdf

Health and safety in roof work HSG33 (Fourth edition) HSE 2012 www.hse.gov.uk/pubns/books/hsg33.htm

The Hazardous Waste (England and Wales) Regulations 2005 www.legislation.gov.uk

Carriage of dangerous goods www.hse.gov.uk/cdg/

Environment Agency www.gov.uk/government/organisations/environment-agency

Natural Resources Wales

https://naturalresources.wales/waste/https://www.gov.uk/government/publications/hazardous-waste-consignment-note

Scottish Environment Protection Agency www.sepa.org.uk/

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asbestos essentials

Drilling holes in asbestos insulating board (AIB)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

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.

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a2

asbestos essentials

Removing a single (screwed-in) asbestos insulating board (AIB) ceiling tile

Non-licensed tasks

Essential information

Important: You must read sheet a0 *Introduction to asbestos* essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em3 Building and dismantling a minienclosure

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove a single AIB ceiling tile.

This sheet is *not* appropriate:

- for the removal of AIB slats;
- where the tile has more than minor damage;
- where the tile is heavily painted so its removal could damage adjacent tiles;
- 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 (this includes time to set up, dismantle and clean the mini-enclosure).

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.
- Ensure adequate lighting.

Equipment

- Method 1: 500-gauge polythene sheeting and duct tape
- Method 2: Use a mini-enclosure if available if not, use timber or other framework with 1000-gauge polythene sheeting and duct tape – see sheet em3
- 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Sealant, eg polyvinyl acetate (PVA)
- Magnet
- Screwdriver
- Non-asbestos replacement ceiling tile
- Garden-type sprayer containing wetting agent
- Bucket of water and rags

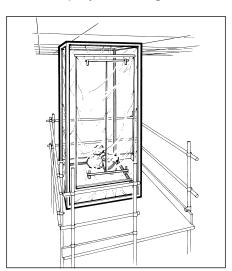
Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.

- Asbestos waste bag
- Clear polythene bag





Protect nearby areas with polythene sheeting or a mini-enclosure. Use shadow vacuuming to control dust when removing screws

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).

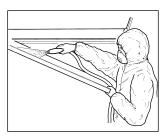
Method 1: Removing a single ceiling tile less than 0.36 m² in area (eg 60 cm x 60 cm)

Procedure

 Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

Removal

- Locate steel screws with the magnet. Locate brass screws by careful paint scraping.
- Use 'shadow vacuuming' to control dust see sheet em4.
- Unscrew put the screws in the waste bag.
- Carefully lower one end of the tile. Vacuum its upper surface.
- Spray the upper surface with PVA.
- Keep the tile flat and lower it gently.
- Place the tile in the asbestos waste bag.
- If asbestos fillets are present, seal with a sealant.
- Fix a new non-asbestos tile by attaching it to a non-asbestos surface, not to asbestos fillets.





Carefully lower one end of the tile. Vacuum its upper surface and spray with PVA. Keep the tile flat and lower it gently

Method 2: Removing a single ceiling tile more than 0.36 m² in area (eg 60 cm x 60 cm)

Procedure

• Erect a proprietary 'mini-enclosure', or build one as described in sheet em3.

Removal

- Follow the removal instructions for method 1.
- Double-wrap the tile in 1000-gauge polythene sheeting.

Cleaning and disposal

- Clean a mini-enclosure with the Class H vacuum cleaner and dismantle it as advised in sheet em3.
- Clean the area and equipment with the Class H vacuum cleaner and 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.

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asbestos essentials

Removing a door with asbestos insulating board (AIB) fireproofing

Non-licensed tasks

Essential information

Important: You must read sheet a0 *Introduction to asbestos* essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to dispose of a door backed with AlB. It is also suitable where AlB is sandwiched within the door.

This sheet is *not* appropriate:

- for the removal of an AIB panel (see sheet a4);
- for the disposal of a door with more than minor damage to the AIB;
- 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.

Please note: If the AIB starts to deteriorate on removal of the nails then the work may be notifiable non-licensed work (NNLW); see sheet a0 *Introduction to asbestos essentials*.

Preparing the work area

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

Equipment

- 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Sealant, eq polyvinyl acetate (PVA)
- Screwdriver
- Non-asbestos replacement fire door
- Garden-type sprayer containing wetting agent, eg diluted washing-up liquid
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Asbestos warning stickers

Other hazards

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.



Double-wrap the door in polythene sheeting with asbestos warning stickers

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Procedure

- If unpainted, spray the board with PVA sealant.
- If the board is within the door, spray all exposed edges.
- Allow it to dry.
- Lay enough polythene sheeting on the floor to wrap up the door.
- Unscrew the door from its hinges and lower it onto the polythene sheet.
- Double-wrap the door with polythene sheeting and secure with duct tape.
- Attach asbestos warning stickers.
- If necessary, fit a replacement door with the same fire protection properties.

Cleaning and disposal

- Clean the equipment and area with damp rags.
- Put debris, 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.

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a4 asbestos essentials

Removing a single asbestos insulation board (AIB) panel, less than 1 m², fixed with nails or screws

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em3 Building and dismantling a minienclosure

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove a single AIB sheet less than 1 m² in area.

This sheet is *not* appropriate:

- when the AIB has more than minor damage or is heavily painted so its removal could damage adjacent panels;
- when the AIB is in the form of ceiling tiles or slats;
- for removing heavily nailed or centre-nailed panels;
- for soffits;
- for a panel larger than 1 m²;
- for removing more than two small panels a week;
- 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.

Please note: If the AIB starts to deteriorate on removal of the nails then the work may be notifiable non-licensed work (NNLW); see sheet a0 *Introduction to asbestos essentials*.

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

- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Thick paste, eg wallpaper paste or shaving foam
- Sealant, eg polyvinyl acetate (PVA)
- Permanent sealant
- Magnet

Caution

If the panel has nails in the centre, the job needs an HSE-licensed contractor.

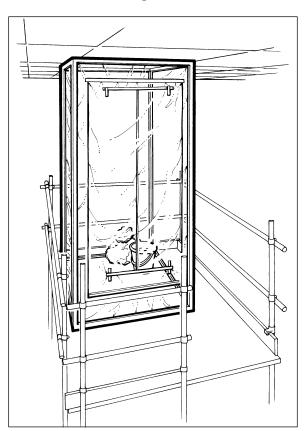
Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.

- Screwdriver
- Garden-type sprayer containing wetting agent
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Asbestos warning stickers



Use a mini-enclosure if you need to remove a panel fixed with nails

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

- Inspect carefully. If the AIB is in good condition and is unlikely to get damaged upon removal, follow this sheet.
- If the board is badly damaged or likely to get damaged, use an HSE-licensed contractor.

Panel with nails

- Erect a mini-enclosure see sheet em3.
- If you can remove nails with the claw, do so with 'shadow vacuuming' – see sheet em4.



- If this is not possible, you need to break the panel across one corner. Cover the intended break line with pastel foam.
- Deeply score the panel across one nailed corner through the paste/foam.
- Lever to break the panel at the scored line hold the vacuum nozzle near to the break to collect as much dust as possible.
- Ease the panel away to loosen other nails, and remove these with shadow vacuuming.
- Remove the panel and vacuum all newly-exposed surfaces.

Panel with screws

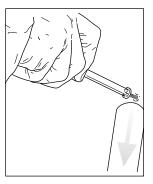
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Locate steel screws with the magnet. Locate brass screws by careful paint scraping.
- Use 'shadow vacuuming' to control dust see sheet em4.
- Unscrew put the screws in the waste bag.
- Ease the panel away. Vacuum its newly-exposed surfaces and screw holes.

All panels

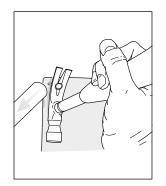
- Spray the panel with PVA.
- Double-wrap large panels with 1000-gauge polythene sheeting;
 place smaller boards in the waste bag.
- Attach asbestos warning stickers.
- Gently paint newly-exposed surfaces and screw holes with sealant paint.

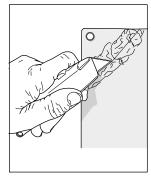
Cleaning and disposal

- Clean any newly-exposed surfaces with the Class H vacuum cleaner.
- Clean a mini-enclosure with the Class H vacuum cleaner and dismantle it as advised in sheet em3.
- Clean the area and equipment with the Class H vacuum cleaner and damp rags.
- Put debris, used rags, polythene sheeting, paintbrush 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.



Panel with screws: Use shadow vacuuming to control dust as you remove screws





Panel with nails: If possible, remove nails with a claw and shadow vacuuming. If this is difficult without damaging the board, apply paste to one corner and make a deep score line so you can lever the corner away first

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.

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asbestos essentials

Cleaning light fittings attached to asbestos insulating board (AIB)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (Including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to clean a contaminated light fitting attached to AIB, eg to change a bulb or tube.

This sheet is *not* appropriate where the AIB is damaged or may be damaged, eg by 'rocking' the screws during cleaning. Use an HSE-licensed contractor for such work.

See sheet em4 Using a Class H vacuum cleaner for asbestos when removing a screwed-in fitting, and sheet a6 for minor damage repair.

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

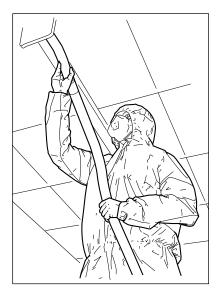
- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE) - see sheet em6



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





Cleaning inside the tube fitting with a Class H vacuum cleaner

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

There may be other hazards – you need to consider them all.

Procedure

- Isolate the power supply use a competent electrician.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Avoid removing the light fitting this may disturb the AIB.
- Clean the light-fitting exterior with the Class H vacuum cleaner.
- Place easily removable sections on the polythene sheeting, for cleaning on the floor.
- Open the light fitting carefully. Insert the Class H vacuum cleaner hose and clean inside the fitting.
- Complete the cleaning with the Class H vacuum cleaner.

Cleaning and disposal

- Clean the area with damp rags.
- Put debris, 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.

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a6 asbestos essentials

Repairing minor damage to asbestos insulating board (AIB)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to repair small areas of damaged AIB, eg a broken corner or scratches.

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;
- where the material is badly damaged.

Use an HSE-licensed contractor for such work.

If AIB is in a position where further damage is likely, see sheet a8.

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

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Liquid impact adhesive
- Permanent sealant
- Non-asbestos replacement panel for covering gaps
- Garden-type sprayer or small paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

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).



Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

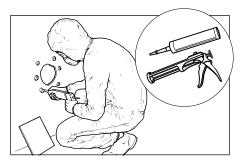
There may be other hazards – you need to consider them all.



This damaged AIB needs to be covered and protected from further damage

Procedure

- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Remove small bits of loose board use a damp rag. Put these in the asbestos waste bag.
- Paint the damaged area with sealant by brush or gentle spraying.
- After drying, cover gaps with the replacement panel.
- Attach it with adhesive.
- Wipe dusty surfaces with a damp rag.



Attach the replacement panel with adhesive



Wipe up dust and debris with a damp rag

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, used rags, paint brush, 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.

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a7 asbestos essentials

Painting undamaged asbestos insulating board (AIB)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to paint undamaged AIB for protection or for decoration.

This sheet is not appropriate where the asbestos material is badly damaged. 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.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available see sheet em4)
- Low-solvent paint
- Low-pressure sprayer, brush or roller
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE) - see sheet em6



- Provide
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Caution

Never prepare surfaces by sanding or rubbing down.

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

There may be other hazards – you need to consider them all.



Use low-pressure spraying where possible

Procedure

- Check that there is no damage before starting work; if there is, see sheet a6.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Remove dust using a Class H vacuum cleaner (if available) or damp rags.
- Apply the paint, preferably by low-pressure spraying.
- Spray using a sweeping motion.
- If painting by brush or roller, do so gently and avoid concentrating on one area to reduce surface damage.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, used rags, polythene sheeting, paintbrush/roller 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.

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a8 asbestos essentials

Enclosing undamaged asbestos materials to prevent impact damage

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to protect asbestos materials from impact damage, and you do not want to remove them. Examples include:

- asbestos insulating board (AIB) wall panels that could be damaged by trolleys;
- lagged pipework running along the bottom of a wall that could be scuffed.

For minor repairs on AIB see sheet a6. For minor repairs on asbestos cement see sheet a13.

This sheet is *not* appropriate where the asbestos material is badly damaged or where you disturb the asbestos. Use an HSE-licensed contractor for such work.

Preparing the work area

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

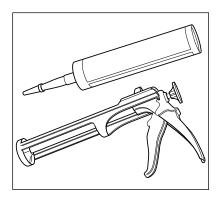
Equipment

- Warning tape and notices
- Liquid impact adhesive
- Screwdriver
- Nails or screws
- Hammer
- Non-asbestos board this may need to meet an original specification, eg fire resistant
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

There may be other hazards – you need to consider them all.



If you have to attach panels to asbestos-containing materials, use impact adhesive



Use non-asbestos boarding to protect asbestos

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Procedure

- Box-in pipework without disturbing the asbestos.
- Where possible, fix replacement panels to non-asbestos materials
 you can use nails or screws.
- Use adhesive to attach replacement panels to asbestoscontaining materials.
- Seal the cavity and provide adequate fire barriers.
- Warn the building owner about the presence of asbestoscontaining material you have enclosed so it can be managed properly.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, used rags 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.

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a9

asbestos essentials

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

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

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.



Asbestos cement tiles on a roof



Interior floor tiles



Drill cowl to contain drilling debris



Use a hole cutter for holes greater than 20 mm

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

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
- Masking tape
- Thick paste, eg wallpaper paste or shaving foam, or a drill cowl to contain drilling debris
- Mastic or sealant for gaps
- Plastic or metal sleeve to protect hole edges
- Class H vacuum cleaner (BS 8520) (if available see sheet em4)
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

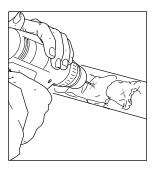
Personal protective equipment (PPE) - see sheet em6

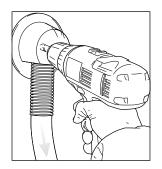


- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate);
 - respiratory protective equipment (RPE).

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.
- 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.
- Use Class H vacuum (if available) to control fibres at source see sheet em4.
- Clean off the paste, foam and debris with damp rags and remove the masking tape. Or remove the drill 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.







Drill through masking tape covered with paste or foam, or use a drill cowl connected to a Class H vacuum cleaner as local extraction. Seal drilled edges with sealant

Cleaning and disposal

- Clean the equipment and the area with Class H vacuum (if available) and/or damp rags.
- Put debris, used rags, polythene sheeting, paintbrush 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.

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a10 asbestos essentials

Cleaning debris from gutters on an asbestos cement (AC) roof

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove debris from gutters.

The gutters may be made of AC, or it may simply collect water from an AC roof.

Preparing the work area

- Ensure safe access.
- Can you do this work from ground-level?
- Restrict access minimise the number of people present.
- Use tape and notices to warn others.

Equipment

- Warning tape and notices
- Scoop, trowel or scraper
- Garden-type sprayer or watering can containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate);
 - protective gloves. Select single use gloves.
- A respirator is not normally required.

Procedure

- Sprinkle the wetting solution into the gutter. Avoid creating a slurry.
- Scoop out the debris into the waste bag.
- Wet the debris again if you find dry material.



Caution

AC roofs are always fragile and cannot bear weight.

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. Fragile roofs cannot bear weight.

There may be other hazards – you need to consider them all.



Wet the debris again if you find dry material. Avoid creating a slurry

Cleaning and disposal

- Clean the equipment with damp rags.
- Put used rags 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.

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Removing asbestos cement (AC) debris

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information,
instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to clear up AC. This includes decontamination following a fire. Clean-up after a fire will always be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

This sheet is *not* appropriate for cleaning debris from damaged asbestos lagging, insulation or insulating board. Use an HSE-licensed contractor for such work.

For fly-tipped AC waste, see sheet a38.

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

- Warning tape and notices
- Scoop, trowel or scraper
- Adhesive tape
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE) - see sheet em6



- disposable overalls fitted with a hood;
- boots without laces (laced boots are hard to decontaminate);
- A respirator is not normally required if there are only a few pieces of contamination in a small area, or the pieces are damp.
- For larger or heavily contaminated areas, a respirator is required.



Caution

AC roofs are always fragile and cannot bear weight.

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. Fragile roofs cannot bear weight.

There may be other hazards – you need to consider them all.

Caution

Make sure the debris is AC only.



AC debris is common

Procedure

- Clean up visible contamination in occupied areas, eg houses and gardens nearby. In large contaminated areas, eg following a fire, you may be unable to remove all the AC.
- Dampen the AC debris with spray.
- Pick up larger pieces of debris. Put them in the asbestos waste bag.
- For debris on rough surfaces, keep it damp and scoop or scrape it into the asbestos waste bag.
- Clean contaminated surfaces with damp rags, then put these in the asbestos waste bag.
- Press adhesive tape onto small dust deposits, then put the tape in the asbestos waste bag.
- If necessary, repair the AC see sheet a13.
- Put used rags 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.

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a12 asbestos

essentials

Cleaning weathered asbestos cement (AC) roofing and cladding

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to clean AC cladding and roofing, either to improve its appearance or to prepare it for a surface coating.

This sheet is *not* appropriate for cleaning asbestos insulating board. Use an HSE-licensed contractor for such work.

Preparing the work area

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

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Approved biocide
- Scoop or trowel
- Scraper
- Proprietary cleaning machine
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag







Moss and lichen growth on AC roofing and gutters

Caution

AC roofs are always fragile and cannot bear weight.

Caution

It is dangerous to seal over exhaust vents from gasfired equipment. Can the equipment be turned off?

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. Fragile roofs cannot bear weight.

There may be other hazards – you need to consider them all.

Personal protective equipment (PPE) - see sheet em6

- Provide:
 - disposable overalls fitted with a hood (you may need waterproof overalls);
 - boots without laces (laced boots are hard to decontaminate);
 - protective gloves. Select single use gloves;
 - a disposable particulate respirator (eg FF P3) for manual scraping and for operating the filtration system.
- A respirator is not normally needed for an operator who is well away from the cleaning machine.

Procedure

- Prevent slurry entering the building. Seal gaps into the building with polythene sheeting, secured with duct tape.
- If necessary, remove debris first see sheet a11.
- Only in exceptional circumstances is high-pressure jetting appropriate. This requires a specialist contractor.

Method 1: Cleaning cladding accessible from ground level

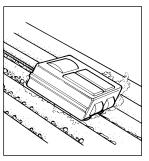
- Prepare the biocide according to the instructions on the label.
 Apply it by low-pressure sprayer.
- Allow time for the biocide to work check the product label.
- Keep the surface wet and remove growths by gentle scraping.
 Dead plant roots are hard to remove leave these in place.
- Scoop debris into the asbestos waste bag.

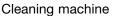
Method 2: Employ a specialist roof cleaning contractor with a cleaning machine

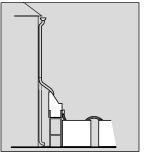
- This method creates a lot of slurry that must be collected for disposal.
- The contractor should:
 - divert the slurry through a collection and filtration system;
 - keep solid waste wet and put it in the waste bag;
 - flush out the slurry collector with clean water.

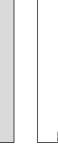
Cleaning and disposal

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









The contractor should use a collection and filter system

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.

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a13 asbestos essentials

Repairing damaged asbestos cement (AC)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to repair damaged AC. For badly damaged AC, see sheet a14 or sheet a15.

This sheet is not appropriate for repairs to asbestos insulating board – see sheet a6.

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

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Mastic or sealant for gaps
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Procedure

- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Clean up debris and loose material see sheet a11.
- Paint the damaged area see sheet a16.



Caution

AC roofs are always fragile and cannot bear weight.

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. AC roofs are fragile and cannot bear weight.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

- Alternatively, protect the area by attaching and sealing a non-asbestos panel over the damage – see sheet a8.
- Warn the building owner about the presence of asbestos-containing material you have covered so it can be managed properly.





Paint or cover the damaged area, see a8 and a16

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, 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.

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Removing asbestos cement (AC) sheets, gutters etc and dismantling a small AC structure

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove AC sheets, gutters, drains, ridge caps etc on a small scale, or dismantle a small structure (eg shed or garage) as long as AC stays intact during removal. If the AC starts to break up creating significant dust then the work will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

This sheet does not apply to large scale work or mechanical demolition – a full risk assessment and plan of work will need to be prepared.

This sheet is not appropriate if other asbestos-containing materials are present, eg lagging, limpet or insulating board. Use an HSE-licensed contractor for such work.

Preparing the work area

- Ensure safe access you may need a mobile access platform.
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Bolt cutter
- Webbing straps and rope
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Lockable skip for larger quantities of waste
- Asbestos warning stickers

Caution

AC roofs are always fragile and cannot bear weight.

Caution

It is dangerous to seal over exhaust vents from gasfired equipment. Can the equipment be turned off?



There may be AC debris on the ground. Be careful not to crush this.





AC sheets used as roofing

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

- Check with the premises owner that only AC is present.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

Overlaying AC sheets

- Can you overlay sheets with non-asbestos material instead of removing the AC?
- If so, attach the material to existing purlins. Avoid drilling through the AC. If you cannot avoid drilling, see sheet a9.

Removal

- Avoid or minimise breaking the AC.
- If fasteners hold the sheets in place, dampen and remove them and place them in the asbestos waste bag.
- If the sheets are bolted in place, dampen and cut the bolts while avoiding contact with the AC.
- Remove the bolts or fixings carefully and place them in the asbestos waste bag.
- Unbolt, or use cutters to release gutters, drain pipes, ridge caps etc. Avoid contact with the AC.
- Lower large pieces to the ground. Don't drop them or use rubble chutes. Stack sheets carefully.
- Where there are several AC sheets and other large items, place them in a lockable skip.

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. Fragile roofs cannot bear weight.

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

Confined spaces – see www.hse.gov.uk/confinedspace.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

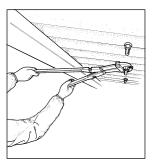
There may be other hazards – you need to consider them all.

Further reading

Health and safety in roof work HSG33 (Fourth edition) HSE Books 2012 www.hse.gov.uk/pubns/ books/hsg33.htm

- Double-wrap large pieces in 1000-gauge polythene sheeting. Seal with duct tape.
- Attach asbestos warning stickers.
- Place small pieces in the asbestos waste bag.







Cut the bolts while avoiding contact with the asbestos cement. Double-wrap large pieces in 1000-gauge polythene sheeting and seal with duct tape

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Check for debris in fasteners or bolt holes. Clean with damp rags.
- Put debris, used rags, polythene sheeting and other waste in the asbestos waste bag and tape it closed.
- Dispose of contaminated webbing and rope as 'asbestos waste'.
- 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.

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a15 asbestos essentials

Removing an asbestos cement (AC) or reinforced plastic product, eg tank, duct, water cistern

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove an AC product (eg tank) or a plastic reinforced product (eg a bakelite cistern) from an area such as a loft.

If the article is no longer needed, but doesn't interfere with any other installations or work, then note its location for the building owner and leave it in place.

See sheet a35 for AC flues and ducts and sheet a23 for plastic floor tiles.

If the product is attached to asbestos insulating board, see sheet em4 on shadow vacuuming and sheet a6 for minor damage repair.

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

- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Screwdriver and spanners
- Hammer
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Asbestos warning stickers

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.





Try to remove the product intact, or wrap it in 1000-guage polythene sheet before breaking it up

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).
- A respirator is not normally needed to remove a reinforced plastic product.

Procedure

- For lofts and similar areas, board out an area large enough to work on and to prevent asbestos contaminating loft insulation nearby.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Check that the product is not fixed to asbestos insulating board.

Removal

AC product: Removal intact

- Strengthen any damaged sections with duct tape.
- Remove fittings, plumbing etc and unscrew the product from its supports.
- Place the screws in the asbestos waste bag.
- Double-wrap the product in 1000-gauge polythene sheet.
- Attach asbestos warning stickers.
- Lower to the ground carefully.

AC product: Non-intact removal

- Dampen the product and wrap it in 1000-gauge polythene sheet.
- Carefully break the wrapped product with the hammer.
- If pieces are small enough, place them whole in asbestos waste bags.
- Lower large pieces to the ground. Don't drop them or use rubble chutes. Stack sheets carefully.

- Double-wrap large pieces in 1000-gauge polythene sheeting. Seal with duct tape.
- Attach asbestos warning stickers.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Check for debris in screw or bolt holes. Clean with damp rags.
- Put debris, 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.





See sheet a35 for AC flues and ducts and sheet a23 for plastic floor tiles

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.

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a16 asbestos essentials

Painting asbestos cement (AC) products

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to paint an AC product that is in good condition.

Caution: If done wrongly, painting can result in the product failing.

To protect from impact damage, see sheet a8.

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

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Low-solvent paint
- Low-pressure sprayer, or brush or roller
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Procedure

- Check the asbestos cement surface before starting work.
- Repair damage see sheet a13.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

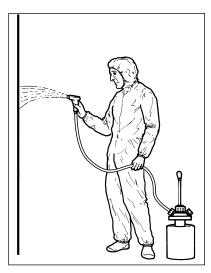


Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

There may be other hazards – you need to consider them all.

Caution

Never prepare surfaces by sanding or rubbing down.



Use low-pressure spraying

- Wipe dusty surfaces with a damp rag.
- Apply the paint, preferably by low-pressure spraying.
- Spray using a sweeping motion.
- If painting by brush or roller, do so gently and avoid concentrating on one area to reduce surface damage.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, used rags, polythene sheeting, paintbrush or roller 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.

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a17 asbestos essentials

Removing asbestos paper linings

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove asbestos paper linings (eg from a boiler casing, beneath lino, or where asbestos paper separates easily from other materials).

Due to the deterioration of the paper linings during removal the work will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

This sheet is not appropriate for removing asbestos paper lagging. Use an HSE-licensed contractor for such work.

Preparing the work area

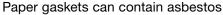
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

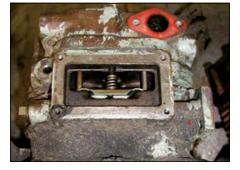




Asbestos paper linings can be found in boiler casings, under lino or tiles and many other places







Electrical hazards— see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

There may be other hazards – you need to consider them all.

Equipment

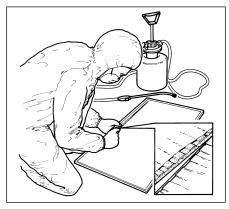
- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Permanent sealant
- Sharp knife
- Garden-type sprayer containing wetting agent
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

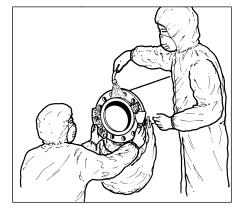
Personal protective equipment (PPE) - see sheet em6

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

Procedure

- Isolate the power supply use a competent electrician.
- Only work on a boiler that is cold.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.





If you can't remove the paper whole, cut it – don't tear – and dampen it as you go

Removal

- Carefully remove the covering dismantle metal covers on a boiler; ease back lino etc.
- Protect vulnerable parts with polythene sheeting, fixed with tape to a non-asbestos surface.
- Dampen the exposed paper.
- If possible, remove the paper whole. Otherwise, cut the paper don't tear it – and dampen as you remove it.

- Put the paper in the waste container.
- Brush any paper you can't remove with sealant.
- Brush the back surface of other material, eg lino, with sealant before disposal.

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 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.

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a18 asbestos essentials

Removing asbestos friction linings

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove a friction lining containing asbestos (eg brake assembly, clutch housing) or when the housing needs cleaning.

Preparing the work area

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

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available see sheet em4)
- Scraper
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

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.



Caution

Never use a brush or compressed air for cleaning.

Other hazards

There may be other hazards – you need to consider them all.



Disc brake on a vehicle

Removal

- Partially open the housing and vacuum the inside.
- Open the housing carefully. Use damp rags to clean inside.
- Put the worn friction lining and dirty rags in the waste bag.
- Scrape off any residues using 'shadow vacuuming' see sheet em4.

Cleaning and disposal

- Clean the equipment and the area with Class H vacuum (if available) and/or damp rags.
- Put debris, 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.

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a19 asbestos essentials

Removing an asbestos fire blanket

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove an asbestos fire blanket, or replace it with a non-asbestos blanket.

Preparing the work area

- Restrict access minimise the number of people present.
- Ensure adequate lighting.

Equipment

- Suitable non-asbestos replacement fire blanket
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE)







A respirator is not normally required.

Procedure

Removal

- Where the blanket and container are no longer needed, unscrew the box from the wall and put it, with the blanket inside, into the waste container.
- For a blanket in a box with opening base, open the front and dampen with spray.
- Slide the blanket into the asbestos waste bag.
- For a blanket in a circular cylinder, first dampen the blanket. Spray up into the container.
- Avoid over-wetting and creating a pool of water.
- Pull the blanket out, into the asbestos waste bag.



Caution

Never unravel or shake an asbestos fire blanket.

Other hazards

There may be other hazards – you need to consider them all.





Open the front, dampen, and slide the blanket into the asbestos waste bag

Cleaning and disposal

- Clean inside any container that remains, with damp rags.
- Clean the floor beneath the container with damp rags.
- Put used rags 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 inside the container and the floor beneath it to make sure that these have been cleaned properly.
- Clearance air sampling is not normally required.
- Get the premises owner, dutyholder or client to check off the job.

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Removing asbestos-containing bituminous products, such as roofing felt, gutter linings or damp-proof courses

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove asbestos-containing bituminous products such as built-up roofing, gutter linings or damp-proof courses.

This sheet is *not* appropriate for work with metal cladding lined with asbestos-containing bitumen (eg 'Galbestos') – see sheet a22.

Preparing the work area

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

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Sharp knife
- Scraper
- Shovel
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Lockable skip for larger quantities of waste
- For roof work, interlocking bucket-type rubble chute into the skip

Caution

It is dangerous to seal over exhaust vents from gasfired equipment. Can the equipment be turned off?

For roof work, check if the roof may be fragile.

Don't rip up asbestos bituminous felt; never burn the debris.





Built-up bituminous roofing and bituminous asbestos fabric over a doorway

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Work on fragile roofs – see www.hse.gov.uk/ construction. Fragile roofs cannot bear weight.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.

Procedure

 Seal access points, eg skylights, with polythene sheeting and duct tape.

Overlaying

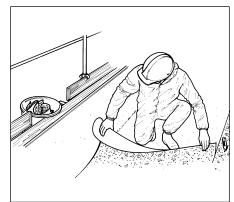
- Can you avoid removal, eg by overlaying with non-asbestos bituminous felt?
- Warn the building owner about the presence of asbestos material you have covered by overlaying so it can be managed properly.

Removal

- Can you minimise the amount for removal, cutting around the area?
- For safe handling, cut and remove manageable sections.
- Place these in the chute or the skip.
- Remove adhering material by dampening and gentle scraping.
- Collect up all debris.
- Remove large dust deposits by dampening and shovelling into the asbestos waste bag.
- Dampen dust and debris from disintegrating felt and place in the asbestos waste bag.







Cut and remove manageable sections

Cleaning and disposal

- Clean the equipment with damp rags.
- Dismantle and decontaminate the chute with damp rags.
- Put debris, 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.

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a22

asbestos essentials

Removing metal cladding lined with asbestos-containing bitumen

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information,
instruction and training

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove metal cladding lined with asbestos-containing bitumen (eg 'Galbestos').

This sheet is not appropriate for work with asbestos-containing bitumen products (eg roofing felt, damp-proof course) – see sheet a21.

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

- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Bolt cutter
- Hammer
- Chisel
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Lockable skip for larger quantities of waste
- Asbestos warning stickers

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.



Caution

It is dangerous to seal over exhaust vents from gasfired equipment. Can the equipment be turned off?

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

Procedure

 Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

Removal

- Carefully remove fixtures such as pipework.
- If the sheets are screwed in place, knock off the screw heads with the hammer and chisel.
- If the sheets are bolted in place, cut the bolts while avoiding contact with the asbestos-containing bitumen. Remove the bolts carefully.
- Pull the sheet away from its fastenings, dampening exposed surfaces.
- Lower sheets to the ground do not use a rubble chute.
- Put small items and debris in the asbestos waste bag.
- Double-wrap cladding pieces in 1000-gauge polythene sheeting.
- Attach asbestos warning stickers.
- Where there are several sheets of cladding, place them in a lockable skip.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Check for debris in screw or bolt holes. Clean with damp rags.
- Put debris, 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.

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



a23

asbestos essentials

Removing asbestos-containing floor tiles and mastic

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove floor tiles that contain asbestos.

These may also have asbestos-paper backing, or be fixed with asbestos-containing mastic.

Removal of floor tiles with an asbestos-paper backing will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

Preparing the work area

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

Equipment

- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available see sheet em4) for large areas
- Sharp knife
- Hammer
- Scraper
- Shovel
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag





Floor tiles that contain asbestos can also have asbestos-paper backing, or be fixed with asbestos-containing mastic

Caution

Never sand the floor.

Other hazards

There may be other hazards – you need to consider them all.

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

Overlaying

- Can you avoid removal, eg by overlaying with non-asbestos material?
- Warn the building owner about the presence of asbestos material you have covered by overlaying, so it can be managed properly.

Removal

- Place the scraper in the joint between the tiles. Lift the tile gently
 try to avoid breakage.
- For firmly-fixed tiles, tap the scraper with the hammer.
- For a large tiled area, lift tiles using a shovel. This speeds up the job and avoids kneeling close to the tiles.
- Spray water under the tiles as they are lifted, to suppress dust and wet any asbestos paper that may be present. See also sheet a17.
- Wet any asbestos paper tile backing as the tiles are lifted.
- Gently scrape up adhering mastic. You can soften mastic with solvent, by warming with an infra-red lamp, or embrittle it with dry ice.
- Place debris in the asbestos waste bag.





Asbestos-containing mastic





Spray water under the tiles to suppress dust as you lift them gently, avoiding breakage

Cleaning and disposal

- Where you have removed only a few tiles, use damp rags to clean the floor. Clean larger areas with the Class H vacuum cleaner (if available) and/or damp rags.
- Clean the equipment with damp rags.
- Put debris, used rags 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.

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



a24 asbestos essentials

Removing flexible asbestos textile duct connectors (gaiters)

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

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

What this sheet covers

This sheet describes good practice when you need to remove a gaiter (flexible asbestos textile connector) from metal ductwork sections or from the joint with a fan.

This sheet applies where the gaiter is riveted to the metal frame, and where it is clipped in place over the ducting.

This sheet is *not* appropriate if adjacent ducting is lagged with asbestos. 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.
- Ensure adequate lighting.

Equipment

- Warning tape and notices
- Drill manual or powered, set at the lowest speed
- Screwdriver
- Scraper
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

There may be other hazards – you need to consider them all.







Connectors may be clipped or riveted

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

Turn off and lock off the system.

Method 1: Riveted flexible gaiters (duct connectors)

- Where possible, unbolt the assembly holding the connector and remove it whole.
- Otherwise, dampen the gaiter and drill out the rivets, avoiding the gaiter material.
- Ease the metal plate away. Dampen the gaiter's inner surface.
- Remove the gaiter and place it in the asbestos waste bag.
- Dampen any debris adhering, and carefully scrape it into the asbestos waste bag.

Method 2: Clipped flexible gaiters (duct connectors)

- Dampen the gaiter.
- Remove the clips holding the gaiter in place.
- Slide the gaiter off the ducting and put it in the waste bag.
- Wipe the clips with damp rags.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Check for debris in screw or bolt holes or on the ducting.
- Clean with damp rags.
- Put debris, used rags 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.

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



a25

asbestos essentials

Removing compressed asbestos fibre (CAF) gaskets and asbestos rope seals

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove CAF gaskets and asbestos rope seals from pipework, vessels and plant, or heaters, boilers etc.

If the gasket or seals are substantially broken up or damaged during removal then the work will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

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

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available see sheet em4) to collect adhering gasket residues
- Scraper
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

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).



Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

Procedure

- Ensure the system has been made safe (pipework emptied, electrical supply isolated etc).
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Protect vulnerable components with polythene sheeting.

Removal

- Unbolt or unscrew the flange, or dismantle the equipment.
- Once accessible, dampen the asbestos. Continue dampening as it is exposed.
- Ease the gasket or rope seal away with the scraper, and place into the asbestos waste bag.
- Keep the surface damp, and ease away asbestos residues.
- Gently scrape off residues using 'shadow vacuuming' (if available – see sheet em4).

Cleaning and disposal

- Clean the equipment and the area with the Class H vacuum cleaner (if available) 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.



Gasket material left on a pipe flange



Joint packing on a flue



String gasket between metal sheets





SOURCE

Some examples of rope seals found on boilers

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.

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



a26 asbestos essentials

Drilling and boring through textured coatings

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to drill through textured coating.

If the coating is on asbestos insulating board, see sheet a1.

Preparing the work area

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

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) for cleaning (if available see sheet em4)
- 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 drill cowl to contain drilling debris
- Permanent sealant
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag





Textured coating is common on ceilings

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

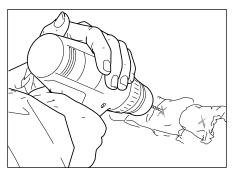
There may be other hazards – you need to consider them all.

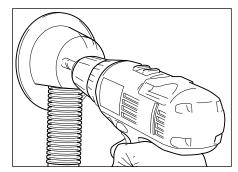






Drill through paste or foam or use a plastic cowl with a Class H vacuum cleaner (if available)





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

- Remove furniture and fittings from the area, or protect them from contamination using 500-gauge polythene sheet.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- For cable and pipework, make the hole slightly bigger than required.

Drilling and boring

- 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 drill cowl.
- 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.

Cleaning and disposal

- Clean the area and equipment with the Class H vacuum cleaner (if available) and/or damp rags.
- Put debris, used rags, paint brush, 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.

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a27 asbestos essentials

Inserting and removing screws through textured coatings

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to insert and remove screws through textured coating.

If the coating is on asbestos insulating board, see sheet a4.

Preparing the work area

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

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available see sheet em4)
- Permanent sealant
- Magnet
- Screwdriver
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

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).

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

There may be other hazards – you need to consider them all.



a26 tells you how to drill through textured coating



Paint sealant around the hole before you insert the screw. Use shadow vacuuming (if Class H vacuum available) to control dust when removing screws



Procedure

- Can you use strong adhesive instead of screws?
- Remove furniture and fittings from the area, or protect them from contamination using 500-gauge polythene sheet.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

Inserting screw

- Hole drilling see sheet a26.
- Paint sealant around the hole and fix the screw.

Removing screw

- Locate steel screws with the magnet. Locate brass screws by careful paint scraping.
- Use 'shadow vacuuming' (if Class H vacuum available) to control dust – see sheet em4.
- Unscrew put the screws in the waste bag.
- Paint sealant around the hole.

Cleaning and disposal

- Clean the area and equipment with the Class H vacuum cleaner (if available) and/or damp rags.
- Put debris, used rags, paint brush, 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.

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.

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3 of 3 pages



a28 asbestos

essentials

Removing textured coating from a small area, for example 1 m²

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove a small area of textured coating, eg around 1 m², in preparation for other maintenance work.

If steaming or gelling methods are used other than in preparation for maintenance such as fitting smoke alarms or light fittings then the work will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

This sheet is *not* appropriate for large areas. The work is still non-licensed but you need to make a full risk assessment and the work will be NNLW – see sheet a0 *Introduction to asbestos essentials*.

If the coating covers asbestos insulating board, use an HSE-licensed contractor.

Preparing the work area

- Do you need to isolate any services?
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (If available see sheet em4)
- Penetrating stripping fluid or gel, or a steam generator
- Permanent sealant
- Plastic dustpan
- Scraper
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Caution

Never scrape through or sand down textured coatings or stripped surfaces. Don't use power tools to cut through textured coatings.

Other hazards

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

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

- Remove furniture and fittings from the area, or protect them from contamination using 500-gauge polythene sheet.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.

Removal

- Dampen and pick off any loose pieces of coating and put them in the asbestos waste bag.
- Either gently brush on penetrating fluid, or dampen and loosen the coating with steam.
- When loose, gently scrape the coating into the dustpan.
- Empty this into the waste bag.
- Seal the stripped surface with sealant.



Gently brush on penetrating fluid, or dampen and loosen the coating with steam



Gently scrape the coating into the dustpan

Cleaning and disposal

- Clean the area and equipment with a Class H vacuum cleaner (if available) and/or damp rags.
- Put debris, used rags, paint brush, 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.

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.

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a29

asbestos essentials

Clearing up debris following collapse of a ceiling or wall covered with textured coating

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to clear up wall or ceiling debris with a textured coating.

This sheet does *not* apply to the removal or renovation of remaining coatings.

It is *not* appropriate if the coating covers asbestos insulating board. Use an HSE-licensed contractor for such work.

Preparing the work area

- Ensure that the area is safe to enter.
- Do you need to isolate any services?
- Restrict access minimise the number of people present.
- Ensure adequate lighting.

Equipment

- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Scoop or trowel
- Shovel
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Lockable skip for larger quantities of waste

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).

Manual handling – see www.hse.gov.uk/msd.
Plan how to remove and handle heavy material and articles safely.

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

There may be other hazards – you need to consider them all.



Old lath and plaster ceilings are often covered in textured coating to hide imperfections

Procedure

- Shovel or scoop smaller pieces into the asbestos waste bag.
- Put larger amounts in the lockable skip.

Cleaning and disposal

- Clean contaminated furniture and furnishings with the Class H vacuum cleaner.
- Wrap cleaned furniture in polythene sheeting. Remove cleaned furnishings.
- Dispose of any contaminated furniture or furnishings that cannot be cleaned.
- Clean the equipment and the area with damp rags.
- Put debris, used rags 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.

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Removing an asbestoscontaining 'arc shield' from electrical switchgear

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove an arc shield.

Preparing the work area

- Have a competent electrician isolate and lock off the electricity supply, and test to show that the system is not live.
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Screwdriver and spanners
- Non-asbestos replacement arc shield
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

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).

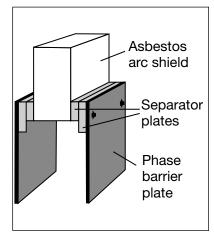
Procedure

- Pre-clean the area. Vacuum and wipe surfaces with damp rags.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.



Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

There may be other hazards – you need to consider them all.



Arc shield

Removal

- Unbolt or unscrew using 'shadow vacuuming' see sheet em4.
- Remove the bolts or fixings carefully and place them in the waste bag.
- Loosen and remove the arc shield. Put it in the waste bag.
- Gently scrape off residues using 'shadow vacuuming' see sheet em4.
- Vacuum clean and/or wipe all surfaces.
- Install the new arc shield.

Cleaning and disposal

- Clean the equipment and the area with 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.

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



a31 asbestos essentials

Removing a single asbestoscontaining gas or electric heater

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove:

- a single gas heater (catalytic, radiant, coal- or log-effect);
- an electric heater (storage, radiant etc).

This sheet is *not* appropriate if the work involves asbestos insulating board and the 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.

You must use a Gas Safe-registered engineer to disconnect and make safe gas appliances.

Preparing the work area

- Have a competent electrician to isolate the appliance from the electricity supply.
- You must have a Gas Safe-registered engineer to disconnect gas appliances and make them safe.
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Screwdriver and spanners
- Garden-type sprayer containing wetting agent
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Asbestos warning stickers

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

Gas safety – check your contractor's registration at www.gassaferegister.co.uk/.

There may be other hazards – you need to consider them all.

Caution

Some catalytic heaters contain loose asbestos mats.

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

Can you remove and dispose of the appliance intact?

Preparation

- Remove furniture and fittings from the area, or protect them from contamination using 500-gauge polythene sheet.
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Check if the appliance is attached to asbestos insulating board (AIB); sometimes this is wall-mounted behind heaters.

Removal

- Remove the cover, wipe it with damp rags and set it aside.
- Vacuum inside the appliance. Vacuuming should remove all loose material or articles.
- Dampen the parts that may contain asbestos, eg panels, board, paper, string and fire cement.
- Unscrew or unbolt fixed parts using shadow vacuuming see sheet em4. Put the fixings in the asbestos waste bag.
- Remove panels or parts intact and put them in the asbestos waste bag.
- Vacuum inside the carcass before removal. If it is attached to AIB, unscrew it using shadow vacuuming. Put the screws in the asbestos waste bag.
- If fixed to AIB, see sheet a6 for repairing minor damage.
- Double-wrap the carcass and the cover with 1000-gauge polythene sheeting. Seal with duct tape. Attach asbestos warning stickers.

Cleaning and disposal

- Clean the equipment and the area with 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.

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.

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



a32

asbestos essentials

Replacing an asbestoscontaining part in a 'period' domestic appliance

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove an asbestos-containing replaceable part in a domestic appliance.

This is most likely if the appliance is a 'heritage' or 'period' piece, eg cooker, washing machine, dryer, dishwasher, freezer, radiator, oil stove etc.

You must use a Gas Safe-registered engineer to disconnect and make safe gas appliances.

Preparing the work area

- Have a competent electrician to isolate the appliance from the electricity supply.
- You must have a Gas Safe-registered engineer to disconnect and make safe gas appliances
- Can you do the job outdoors?
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Screwdriver and spanners
- Scraper
- Non-asbestos replacement part
- Garden-type sprayer containing wetting agent, eg diluted washing-up liquid
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

Gas safety – check your contractor's registration at www.gassaferegister.co.uk/.

There may be other hazards – you need to consider them all.

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.
- Protect vulnerable components with polythene sheeting.

Removal

- Vacuum inside the appliance. Vacuuming should remove all loose material or articles.
- Unscrew or unbolt fixed parts using shadow vacuuming see sheet em4. Put the fixings in the asbestos waste bag.
- Once accessible, dampen the asbestos. Continue dampening as it is exposed.
- Ease the asbestos away, into the asbestos waste bag.
- Gently scrape off residues using 'shadow vacuuming' see sheet em4.
- Clean using damp rags and fit the replacement part.







Clean up with damp rags and the Class H vacuum cleaner. Double-bag used rags, polythene sheeting and other waste

Cleaning and disposal

- Clean the appliance, the area and equipment with the Class H vacuum cleaner and 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.

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.

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a33

asbestos essentials

Replacing an asbestoscontaining fuse box or a single fuse assembly

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove a single asbestos-containing fuse assembly or an asbestos-containing fuse box.

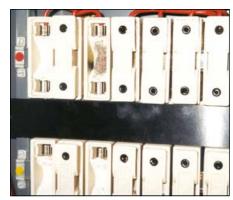
Preparing the work area

- Have a competent electrician isolate and lock off the electricity supply, and test to show that the system is not live.
- Restrict access minimise the number of people present.
- Close doors. Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Screwdriver
- Non-asbestos replacement fuse box
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag





Old-style fuse boxes contain asbestos inside the fuse assemblies and must be handled correctly

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Electrical hazards – see www.hse.gov.uk/electricity. Get a competent electrician to isolate and reconnect electricity supply.

There may be other hazards – you need to consider them all.

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

- Instead of a single fuse assembly, can you replace the whole fuse box?
- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Check if the fuse box is attached to asbestos insulating board (AIB).
- Vacuum clean around and inside the fuse box.

Removal: Fuse box

- Remove connections and carefully unscrew using 'shadow vacuuming' – see sheet em4.
- Place the screws in the waste bag.
- Loosen and remove the fuse box. Put it in the asbestos waste bag.
- Vacuum clean and/or wipe all surfaces.
- Install the new fuse box attach it to a non-asbestos surface.
- If the fuse box had been attached to AIB, see sheet a6 to repair minor damage.

Removal: Fuse assembly

- Unplug the fuse carrier and put it in the asbestos waste bag.
- Vacuum the fuse holder with the Class H vacuum cleaner.
- Unscrew the connections.
- Unscrew the fuse holder with 'shadow vacuuming' see sheet em4.
- Put screws and the fuse holder in the waste bag.
- Vacuum and wipe clean the connectors.
- Install the non-asbestos replacement assembly.

Cleaning and disposal

- Clean the area and equipment with the Class H vacuum cleaner and 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.





After cleaning, put used rags, polythene sheeting and other waste in the asbestos waste bag and tape it closed

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.

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a34 asbestos essentials

Removing pins and nails from an asbestos insulating board (AIB) panel

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove pins or nails from an AIB panel.

If the panel starts to break up or is damaged during removal of pins or nails the work will be notifiable non-licensed work (NNLW) – see sheet a0 *Introduction to asbestos essentials*.

Preparing the work area

- Can you do this work from ground level?
- Restrict access minimise the number of people present.

Equipment

- Thick paste, eg wallpaper paste or shaving foam
- Permanent sealant
- Filler
- Pliers
- Paint brush
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE) - see sheet em6



- disposable overalls fitted with a hood;
- boots without laces (laced boots are hard to decontaminate);
- protective gloves. Select single use gloves.
- A respirator is not normally required.

Procedure

- If the nail/pin is flush with the surface, removal will damage AIB.
 Either paint over it, or get an HSE-licensed contractor for removal.
- Apply a generous amount of paste/foam around the nail/ pin.
- Extract the nail/pin with pliers and put it in the Asbestos waste bag.



Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

There may be other hazards – you need to consider them all.

- Wipe off remaining paste/foam with a damp rag and put it in the asbestos bag.
- Put filler in the small hole and paint over it.

Cleaning and disposal

- Clean the area with damp rags.
- Put used rags, paint brush, gloves and other waste in the asbestos bag and tape it closed.
- Put the asbestos waste bag in a clear polythene bag and tape it closed.

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.

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



a35 asbestos essentials

Replacing an asbestos cement (AC) flue or duct

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

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 asbestos insulating board see sheet em3
- 500- and 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) (if available 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 bag
- Clear polythene bag
- Asbestos warning stickers

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).



Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.

Caution

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

Procedure

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

Emergency repair (eg one to two 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 bag.
- Gently scrape off residues using 'shadow vacuuming' (if Class H vacuum available – 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.



This section of AC ducting has already been labelled



Sometimes the joints are sealed with asbestos string

Cleaning and disposal

- Clean the area and equipment with the Class H vacuum cleaner (if available) and damp rags.
- Put debris, 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.

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a36 asbestos essentials

Removing an asbestos cement (AC) panel outside, beside or beneath a window

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove an AC panel mounted outdoors.

This sheet is *not* appropriate for an asbestos insulating board (AIB) panel or where the panel conceals asbestos insulation. Use an HSE-licensed contractor for such work.

Caution - for windows:

- Indoor panels beneath windows may be AIB see sheet a4.
- Window sills may be made of AC see sheet a15.
- Windows may have asbestos rope seals see sheet a25.
- Outdoor panels are likely to be AC. Check for loose textured coatings.
- Is concealed asbestos possible? If so, ask for a survey.

Preparing the work area

- Place barriers to restrict access and minimise the number of people present.
- Ensure safe access.
- Use tape and notices to warn others.
- Ensure adequate lighting.

Equipment

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Sharp knife
- Hammer
- Webbing straps and rope
- Non-asbestos covering panel
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Lockable skip for larger quantities of waste
- Asbestos warning stickers

Work at height – see www.hse.gov.uk/work-atheight. Take precautions to avoid falls.

Manual handling – see www.hse.gov.uk/msd. Plan how to remove and handle heavy material and articles safely.

Slips and trips – see www.hse.gov.uk/slips. Floors protected with polythene become very slippery when wet.

There may be other hazards – you need to consider them all.







A lockable skip

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.
- Can you remove the window and panel assembly intact? Or can you remove the panels intact?
- Remove beading/nails to allow clear access to the panel. Cut beading or prise out nails. Put these in the waste bag.
- If you cannot remove the panel intact, attach duct tape over the surface. Carefully break it into large pieces with the hammer.
- Lower the pieces to the ground.
- Place the sheet and debris in the lockable skip.
- Place small pieces of debris in the asbestos waste bag.
- Clean the exposed surfaces with damp rags to collect dust and debris.
- Fit a non-asbestos replacement panel.

Cleaning and disposal

- Clean the equipment and the area with damp rags.
- Put debris, 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
- Place the sack in the lockable skip if you have one.
- Disposal see sheet em9.

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.

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



a37 asbestos

Removing asbestos-containing mastic, sealant, beading, filler, putty or fixing

Non-licensed tasks

essentials

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em4 Using a Class H vacuum cleaner for asbestos

em5 Wetting asbestos materials

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you need to remove mastics etc that contain asbestos. If you also need to remove small areas of textured coating, see sheet a28.

This sheet is *not* appropriate if the material is attached to asbestos insulating board or lagging. Use an HSE-licensed contractor.

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

- 500-gauge polythene sheeting and duct tape
- Warning tape and notices
- Class H vacuum cleaner (BS 8520) see sheet em4
- Sealant, eg polyvinyl acetate (PVA)
- Scraper, trowel, hand drill, paintbrush
- Heat source (for some mastics)
- Bucket of water and rags
- Paintbrush
- Asbestos waste bag
- Clear polythene bag

Personal protective equipment (PPE)

- Provide:
 - disposable overalls fitted with a hood;
 - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required.



Caution

Don't use power tools.

Other hazards

There may be other hazards – you need to consider them all.



Tape mastic

Procedure

- Protect nearby surfaces from contamination. Cover with 500-gauge polythene sheeting and fix with duct tape to non-asbestos surfaces.
- Can you remove the part rather than scraping off the asbestoscontaining material?
- Gently scrape up adhering mastic. You can soften mastic with solvent, by warming with an infra-red lamp, or embrittle it with dry ice.
- Scrape off mastic into the asbestos waste bag.
- Dampen plaster-based materials thoroughly with water and scrape off using 'shadow vacuuming' – see sheet em4.
- For asbestos 'Rawlplugs', dampen and drill out using 'shadow vacuuming'.
- Paint newly exposed surfaces with sealant.

Cleaning and disposal

- Clean the area and equipment with the Class H vacuum cleaner and damp rags.
- Put debris, used rags, polythene sheeting, paintbrush 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.

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



a38 asbestos essentials

How to deal with fly-tipped asbestos waste

Non-licensed tasks

Essential information

Important: You must read sheet a0 Introduction to asbestos essentials

Also read the following sheets:

em0 Risk assessments and plans of work

em1 What to do if you discover or accidentally disturb asbestos during your work

em2 Information, instruction and training

em5 Wetting asbestos materials

em6 Personal protective equipment (including RPE)

em7 Using damp rags to clean surfaces of minor asbestos contamination

em8 Personal decontamination

em9 Disposal of asbestos waste

What this sheet covers

This sheet describes good practice when you recognise fly-tipped material as containing asbestos that you need to deal with.

Preparing the work area

- Restrict access minimise the number of people present.
- Use tape and notices to warn others.

Equipment

- 1000-gauge polythene sheeting and duct tape
- Warning tape and notices
- Shovel
- Tent pegs
- Garden-type sprayer containing wetting agent, eg diluted washing-up liquid
- Bucket of water and rags
- Asbestos waste bag
- Clear polythene bag
- Asbestos warning stickers

Personal protective equipment (PPE) – see sheet em6



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

Procedure

- Notify the relevant authority.
- Estimate the amount and type of asbestos waste.
- If the waste is spread around or mixed with non-asbestos material, get an HSE-licensed contractor to deal with it.
- Disposal see sheet em9.



There may be other hazards – you need to consider them all.





Asbestos waste discarded illegally

Small amount of any asbestos-containing waste

- Dampen and place pieces in an asbestos waste bag.
- Shovel damp residues into the bag.

Large amount of asbestos-containing waste

- Cover the waste securely with 1000-gauge polythene sheet. Peg it down with tent pegs. Attach asbestos warning stickers.
- Mark out an exclusion zone with warning tape.
- If the waste is in an inhabited area, make arrangements to secure the site until it is removed.

Cleaning and disposal

- Clean the equipment with damp rags.
- Put used rags 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.

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