

Asbestos Exposure

Exposure to asbestos fibres causes mesothelioma, lung cancer and asbestosis, all of which can be fatal. Worst of all, it's not instant and you won't see it coming, these diseases may not develop for ten to fifty years.



- Asbestos kills around 5000 workers each year, this is more than the number of people killed on the road.
- Around 20 tradespeople die each week as a result of past exposure
- Asbestos can be present today in any building built or refurbished before the year 2000

Purpose of this guide

Who is this for?

This guide has been created to assist anyone who may disturb Asbestos Containing Materials (ACMs) when working on our infrastructure. It will also assist responsible managers and those who control site safety and access, by showing where ACMs are likely to be.

Appliances have been identified as potentially **Medium risk**

Safety, Technical and Engineering (STE) has completed an assessment of all our assets and identified Appliances as potentially medium risk. Lots of information was used to complete the assessment, including; previous survey information, location, asbestos type, accessibility etc.

This guide highlights the most significant risks, but there may be others

This guide provides a list of locations where we believe ACMs might exist, but there may be others. You should always assume that an asset will contain asbestos unless it has been inspected/surveyed and recorded on Network Rail's Asbestos Risk Management System (ARMS <https://arms.networkrail.co.uk>).

This guide must not be used in place of an asbestos survey.

This guide provides a list of locations where it is believed that asbestos containing materials (ACMs) may exist, but there may be others.

It must always be presumed that an asset contains asbestos unless Network Rail's Asbestos Risk Management System (ARMS) can confirm that no accessible asbestos is present.

Prior to any works starting on an asset a risk assessment is to be completed which shall identify whether the proposed works are liable to disturb ACMs and shall include a review of the current asbestos information held in ARMS. On most occasions, a UKAS accredited Asbestos Consultant will need to be engaged to complete an asbestos refurbishment and/or demolition survey prior to any intrusive works, including intrusive maintenance works.

The consultant can then advise how the maintenance/works can be undertaken without the risk of asbestos fibres being released into the air and being inhaled.

Asset Information

Appliances can contain a wide variety of asbestos containing materials (ACMs) made out of varying product types including reinforced composites (plastics, resins, mastics, asbestos cement etc.), insulating boards, textiles, gaskets, ropes and woven textiles, paper and felt.

Typically, some of the asbestos locations in appliances include:

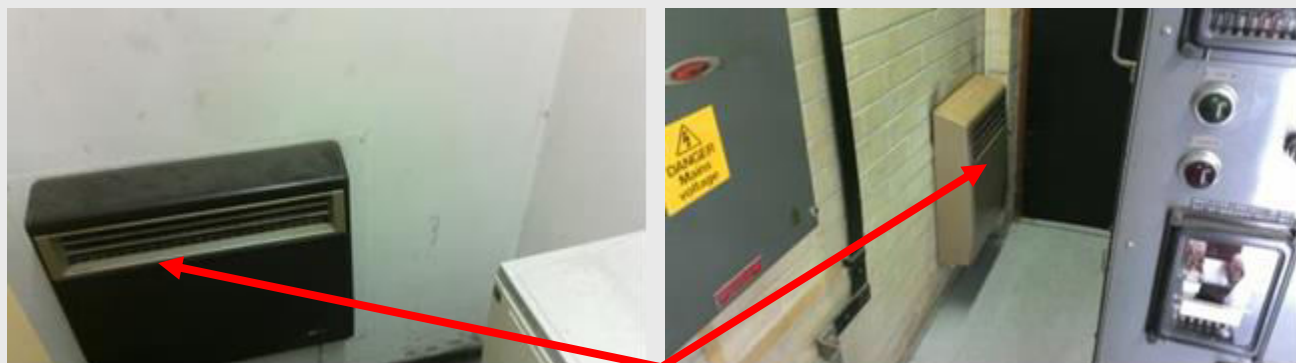
- Gaskets, rope seals and panels in domestic boilers
- Access hatch and gaskets on boiler pipework as well as panels around them
- Caposil insulating blocks found in storage heaters
- String seals in radiators and heaters and bakerlite valves found on older radiators
- Rope seals and linings in ovens
- Heat/fire-resistant boiler
- Oven and flue sealing
- Waste burners
- Portable heaters and
- Electrical wire insulation
- Insulation materials for thermal or electrical insulation (including hand dryers, oven seals, simmering plates etc.)
- Older gas and electric fires

Appliances are typically found within buildings and can be in areas occupied daily, The accessibility of the ACM means that they are occasionally likely to be disturbed by the occupants. The type of maintenance activity completed would allow for a low disturbance of the ACMs.

If any suspected asbestos elements could be disturbed or are damaged it should be reported to the duty holder (NR/TOC/FOC/DFO or other) who will determine what works are to be undertaken.

Maintenance

There are various types of maintenance tasks that are undertaken that may interact with the asbestos materials within appliances. The tasks could include electrical testing and servicing of ovens, radiators and other heating/cooling appliances.



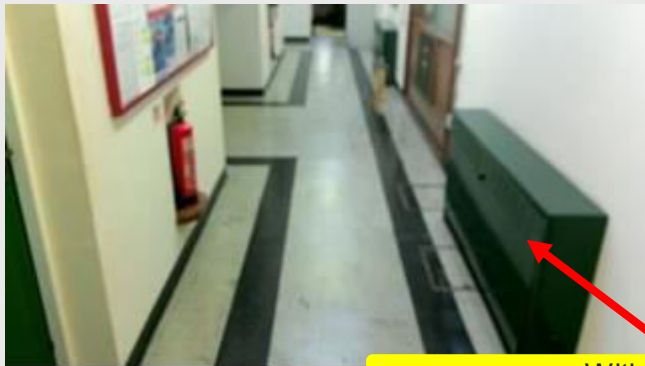
Internal components to old heaters

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Appliances

Maintenance continued

Example Photos



Within heaters



Oven door rope gasket



Panels behind heaters



Door panel



Flu & internal components

Work with Asbestos

There are three types of work with asbestos:

1. Non-Licensed Works - Work with asbestos that does not require a licence from the HSE. Further information on non-licensed works can be found at <http://www.hse.gov.uk/asbestos/licensing/non-licensed-work.htm>

2. Notifiable Non-Licensed Works (NNLW) - Work with asbestos that does not require a licence from the HSE but is required to be notified to the appropriate enforcing authority (HSE/ORR). Further information on NNLW can be found at <http://www.hse.gov.uk/asbestos/licensing/notifiable-non-licensed-work.htm>

3. Licensed works - Work with asbestos that requires the contractor to hold a license from the HSE and usually requires notification to the appropriate enforcing authority (HSE) 14 days prior to the work starting. Further information on licensed works can be found at <http://www.hse.gov.uk/asbestos/licensing/licensed-contractor.htm>

There are some tasks Network Rail Operatives undertake which bring them into contact with asbestos. Most maintenance tasks deemed as work with asbestos will not be licensed works. With the correct level of information, instruction and training, and if the works are deemed as **Non-Licensed Works** or **Notifiable Non-Licensed Works (NNLW)**, Network Rail Operatives can undertake these tasks. Network Rail Operatives must never undertake **Licensed Works** – a Licensed Asbestos Removal Contractor (LARC) must be used.

There is a guide on the HSE website to assist in deciding if the work requires a Licensed Asbestos Removal Contractor <http://www.hse.gov.uk/asbestos/managing/flashtools/isitlicensed.htm>
If the work falls under notifiable non-licensed work the notification form can be found at <https://extranet.hse.gov.uk/lfservlet/external/asbnnlw1>

Work with Asbestos continued

Some examples of maintenance work which **does not usually require a licence from the HSE** are listed below:

- Clearance of asbestos cement guttering
- Repairing cracks within roof sheets
- Maintenance work involving asbestos cement products
- Encapsulation and sealing-in work on ACMs that are in good condition
- Maintenance work involving asbestos-containing thermoplastic and vinyl floor tiles, bitumen roof felt, shingles, damp-proofing coatings, and mastics

Some examples of maintenance work which **requires a license from the HSE** are listed below:

- Maintenance works that require the removal or disturbance of pipe lagging
- Work on asbestos insulating board, where the risk assessment indicates that it will not be of short duration.

If there is asbestos dust/debris present works may need to be completed by a Licensed Asbestos Removal Contractor.

All non-licensed and notifiable non-licensed work with asbestos requires:

- Risk Assessment <http://www.hse.gov.uk/asbestos/risk-assessments.htm>
- Appropriate Controls <http://www.hse.gov.uk/asbestos/essentials/index.htm>
- Information, Instruction & Training <http://www.hse.gov.uk/asbestos/training.htm>
 - Asbestos awareness training (NR training catalogue course code S&SD/OH&S/AM RME)
 - Task-specific information, instruction & training (Cat B Training industry standard, delivered by NR approved framework asbestos contractor)

In summary - for all work with asbestos, staff will require adequate PPE (including a face fit test), training, appropriate equipment and medical surveillance (for>NNLW). Records must be kept in relation to works completed including exposure and health records. Arrangements need to be made for the disposal of asbestos waste including storage location, waste carriers license and waste consignment notices. Without all of the above in place, staff must not start work on asbestos. **If in doubt, do not start work.**

Asbestos Guide

Appliances

Further Information

Document Reference	Document Title
NR/L2/CIV/168	Asbestos Management
NR/L2/OHS/157	Health surveillance for silica and asbestos and the management of diagnosed occupational respiratory conditions.
Number Route Specific	Operational Route Asbestos Management Plan (ORAMP) / Property Asbestos Management Plan (PAMP)
Number Site Specific	Site Specific Asbestos Management Plan (SSAMP)
SI No.632	Control of Asbestos Regulations 2012
L143	Managing and Working with Asbestos. Control of Asbestos Regulations
HSG210	Asbestos Essentials (including task sheets for Equipment and method sheets EM1-EM10 and work with asbestos A1-A37)
HSG 264	Asbestos: The Survey Guide
HSG 248	The Analysts Guide
HSG247	The Licensed Contractors' Guide
GE/RT8047	Reporting of Safety Related Information
INDG453	The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
NR/L2/INV/002	Accident and Incident Reporting and Investigation
NR/L2/OHS/00103	Specialist Risk Assessment - COSHH
NR/L2/OHS/00112	Worksafe Procedure
NR/L2/OHS/00124	Competence specific medical fitness requirements and supplier requirements for medical assessments
NR/L2/OHS/0047	Application of the Common Safety Method for Risk Evaluation and Assessment
NR/L2/RSE/100/02	Application of the Common Safety Method for Risk Evaluation and Assessment
NR/L3/INV/3001	Reporting and Investigation Manual
NR/L3/INV/3001/RIM101	Reporting of accidents, incidents and occupational ill health
NR/L3/INV/3001/RIM113	Statutory reporting of accidents, incidents and occupational ill health
NR/SP/OHS/00102	Work Activity Risk Assessment
NR2072P	Preliminary report investigation form