

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.

Air Handling Systems have been identified as potentially **Medium risk**

The Technical Authority (TA) has completed an assessment of all our assets and identified Air Handling Systems 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

Air handling systems can contain a variety of asbestos containing materials (ACMs) made out of varying product types including textiles, rope, cloth, mastic and thermal insulation. Air handling systems can be attached to walls, ceilings or free standing. They can be internal within buildings or to the external.

Typically, some of the ACMs locations to an air handling systems include:

- Gaskets,
- Seals between metal sections,
- Access hatch seals,
- Anti-vibration gaiters
- Lagging.

These systems generally can be found in a variety of different locations, most commonly areas that are populated on a daily basis. ACMs in the area may have a low disturbance from occupants in the area. Maintenance activity is expected to also cause low disturbance to any 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 action is to be taken.

Maintenance

Air handling systems are subject to annual maintenance checks. This maintenance will require the system to be opened and the plant/equipment inside to be worked upon. There is a potential that by accessing the equipment ACMs may be disturbed. It is not likely that the systems will be disturbed during day to day operations but over time the asbestos materials can deteriorate.

Example Photos



Gaskets/Seals

Asbestos Guide

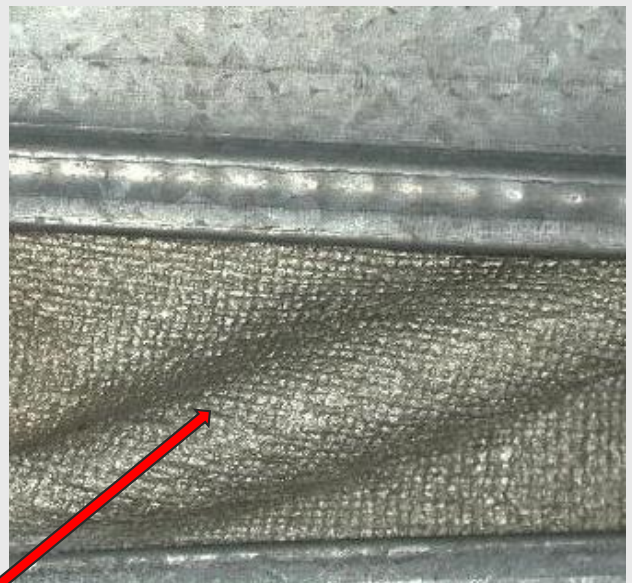
Air Handling Systems

Maintenance continued

Example Photos



Gaskets/Seals



Anti-vibration gaiters

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/isitlicenced.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

- Maintenance of ductwork
- Maintenance of fan motors to Air Handling units
- Disturbance of inspection door/duct seals during maintenance that are unsealed or sealed with signs of damage.
- Disturbance of ropes or gaskets, depending on condition, if poor condition or degraded during work NNLW, if kept virtually intact non-licensed.

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

- Maintenance works that requires 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

Air Handling Systems



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 Regional Asbestos Management Plan (ORAMP) / Regional Property Asbestos Management Plan (RPAMP) |
| Number Site Specific | Operational Site Specific Asbestos Management Plan (OSSAMP) |
| 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 |