



Shaping and sharing good practice in design and construction health and safety risk management

FACT SHEET

ASBESTOS & CONSTRUCTION

APS Fact Sheets address a range of key issues for construction risk management. For each topic, we provide a concise, simplified overview: please refer to the provided sources of further information for full legal provisions and additional technical detail.





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THE NATURE OF THE PROBLEM

1

Fibres are extremely small and durable.

Invisible to the naked eye, fibres reach the deepest parts of the lung. Cumulative asbestos exposures can cause mesothelioma, asbestos-related lung cancer, asbestosis and pleural thickening (thickening of the lining of the lungs).

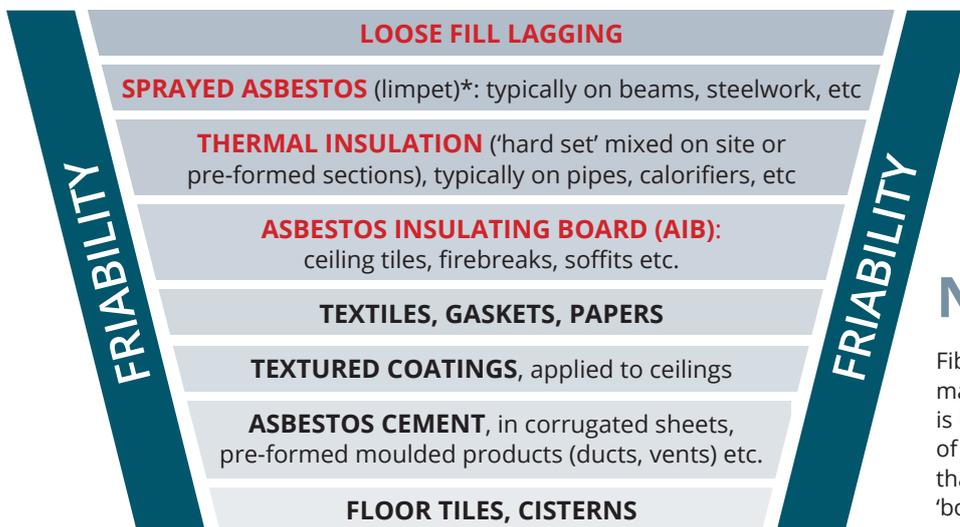
| | | |
|---|--|--|
| THESE DISEASES HAVE A VERY LONG LATENCY PERIOD UP TO 40 YEARS | 5000 APPROX WORKER DEATHS PER YEAR FROM ASBESTOS | 20 TRADESMEN DIE EACH WEEK (APPROX) AS A RESULT OF PAST EXPOSURE  |
|---|--|--|

ASBESTOS CONTAINING MATERIALS (ACMS) REMAIN COMMON IN BUILDINGS BUILT/REFURBISHED BEFORE 2000.

2

Risk is associated with the ease of fibre release (friability)...

and exposure is via inhalation. Undisturbed asbestos products in good condition present no risk. ACMs vary in (a) the proportion and type of asbestos used and (b) the other materials used in the mix and how they are bonded together. The following table lists some common ACMs in approximate order of friability (a thorough assessment will take into account location, condition, surface treatments etc.).



NB.

Fibre release associated with materials **marked in red** is likely to be many orders of magnitude greater than that generated by the more 'bonded products'.

3

It's "everywhere".

It is a naturally occurring mineral and was used on a massive scale because it was so effective as insulation. An "asbestos-free" environment is not a realistic or useful specification as 'wipe tests' can locate asbestos fibres even in 'clean' environments (see note on "clearance" below).

4

Asbestos is an emotive subject...

but the perception that 'one fibre kills' is misleading and unhelpful. In most urban environments, we will be breathing in asbestos fibres. There is no 'safe' limit of exposure but diseases are associated with cumulative, high-level exposures (such as those that arise where construction employees work without appropriate controls).



KEY LEGISLATION: CONTROL OF ASBESTOS REGULATIONS 2012 (CAR 2012)

The 'duty to manage'

Good quality asbestos data is a critical component of pre-construction information. The client will typically have a "duty to manage" asbestos and an asbestos survey is the starting point for effective management arrangements. Fit-for-purpose information must reach those needing it and this information must be kept up to date: this helps ensure inadvertent exposure is prevented.

Prior to any works liable to disturb the fabric of a building, a 'demolition/refurbishment' survey should thoroughly investigate the area. This will typically involve intrusion into voids, partitions etc. and the analysis of a carefully selected range of sample materials.



SURVEY
A survey needs to gather accurate information (relevant to the task / location / premises at hand) to inform management plans / project designs.



SURVEYOR(S)
The surveyor(s) should have experience of surveying premises of similar types and complexity.



ORGANISATION
The surveying organisation will have robust quality control arrangements.

Working with asbestos

The key legal provisions of CAR 2012 apply to ALL work with asbestos:

- Assess risk prior to undertaking any work;
- Plan the work. Written plans are required: concise, practical instructions that site teams can follow / be measured against. (The Asbestos Essentials task manual illustrates a reasonable level of detail for simple, non-licensed work.)
- Adequate training for the specific role ('awareness' for those liable to come into contact; practical training in controls / methods for anyone working with asbestos);
- Prevent (or reduce) exposure and spread, so far as reasonably practicable.

A distinction is made between licensed work (LW) and non-licensed work (NLW). LW can only be done by organisations holding a HSE licence and has a statutory 14-day (minimum) notification process. It may be useful to assume that any work with asbestos requires the services of a specialised, licensed contractor unless an assessment demonstrates otherwise (Asbestos Essentials illustrates the kinds of simple activities where a licence is NOT required). Before LW is notified, a written plan of work must be prepared. Making amendments after notification may not be straightforward. Liaison between relevant parties at the planning stage will avoid costly delays.

PRACTICAL CONTROLS FOR WORK WITH ASBESTOS

| | |
|-------------------------------|---|
| Minimise disturbance | Work areas clean. Gentle removal, as far as reasonably practicable, with minimal breakage. |
| Control at source | E.g. 'Wet' removal, H-class vacs with cowls |
| RPE & PPE and decontamination | FFP3 filters. Half-masks for setting up and non-licensed work and full-face air-fed respirators for licensed work. Clearly defined decontamination procedures (incorporating purpose built decontamination units for licensed work). |
| Segregation and containment | Full enclosures (under negative pressure) are standard for licensed work. In all cases: enclosures, semi-enclosures, sheeting where reasonably practical. |
| 'Clearance' | LW receives independent verification that areas can be reoccupied ('clearance'). In 'difficult to clean' situations (e.g. lathe and plaster in voids, asbestos sprayed onto porous surfaces etc), it is particularly important for parties to define the standards of cleanliness at the planning stage to avoid disputes and delays. |

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LINKS AND FURTHER INFORMATION

1. L143 Managing and Working With Asbestos: Control of Asbestos Regulations 2012, Approved Code of Practice and Guidance: www.hse.gov.uk/pubns/priced/l143.pdf
2. HSE's "Asbestos: where it hides": www.hse.gov.uk/Asbestos/building.htm
3. HSE's Asbestos Portal: www.hse.gov.uk/asbestos
4. Asbestos Essentials: www.hse.gov.uk/asbestos/essentials
5. Trade Associations:
 - a. Asbestos Removal Contractor's Association (ARCA): www.arca.org.uk
 - b. Thermal Insulation Contractors Association: Asbestos Containment and Abatement Division (ACAD): www.tica-acad.co.uk
 - c. Asbestos Testing and Consultancy Association (ATaC): www.atac.org.uk
 - d. UK Asbestos Training Providers Association: www.ukata.org.uk