

## Asbestos Surveys and Bulk Sampling

### Introduction



Asbestos-related diseases are currently killing an estimated 3,000 people each year in the UK. This figure is continuing to rise and there is no cure for such diseases.

There is usually a long delay between the first exposure to asbestos and the onset of disease, varying between 15 and 60 years. The majority of people currently dying were exposed to asbestos in the 1950s and 1960s when the use of asbestos was widespread. Even so exposure is still occurring resulting in a slow death for many employees.

The name asbestos is a generic term for various forms of fibrous metallic silicates. It is a natural mineral, which can be broken down into very fine fibres. When these fine fibres are released into the air they can bypass the body's defences, move into the lungs and then attach themselves to the lung wall, causing in time lung cancer, scarring and damage to lung tissue (asbestosis), plural plaques and mesothelioma. All asbestos is now banned for general commercial use in the UK.

Six types of asbestos were used commercially. The most common types are Chrysotile (White), Amosite (Brown) and Crocidolite (Blue). Asbestos was widely used because of its heat resisting properties, high tensile strength and resistance to chemicals. It can therefore be found in many materials including:

Sprayed asbestos mixed with hydrated asbestos cement generally used as fire protection in ducts, panels, partitions, soffit boards, ceiling panels and around structural steel.

Pre-cast sections, felts, blankets, tapes, ropes and corrugated papers were often used as thermal insulation of pipes, boilers and heat exchangers.

PVC or vinyl floor tiles were manufactured with added asbestos (5-7% chrysotile) as well as sheet floor coverings and some underfelts for carpets and linoleum.

Millboard paper and paper products used for insulating of electrical equipment.





## Asbestos Surveys

Regulation 4 of the Control of Asbestos at Work Regulations 2002 (CAW) places a legal duty on those parties responsible for maintaining and repairing the premises, (owners, managing agents, employers, self-employed), to manage the risk from asbestos. The first step in managing the risk from asbestos is to determine the location of materials likely to contain asbestos and to assess their condition. There are 3 main elements to an asbestos survey:

- It must locate and record the location, extent and product type of any presumed or known asbestos containing materials (ACMs).
- Secondly inspect and record information on the accessibility, condition and surface treatment of any presumed or known ACMs.
- Finally, it should determine and record the asbestos type, either by collecting representative samples of suspect materials or by making a presumption based on the product type.

## Material assessment

The purpose of the material assessment is to establish the ability of ACMs to release asbestos fibres into the air should they be disturbed. There are 3 types of asbestos survey recommended by MDHS 100. The type of survey used is determined by individual circumstances. Sometime in larger buildings a mixture of the 3 surveys are implemented.

### Type 1: Location and Assessment Survey (presumptive survey)

This type of survey will identify so far as reasonably practicable the presence and extent of any ACMs. The survey defers the need to take samples until a later time (i.e. pre-demolition or refurbishment). Any material that can be reasonably expected to contain asbestos must be **presumed** to contain asbestos and be treated accordingly. The duty holder therefore bears potential additional management costs for the materials that may not contain asbestos.

### Type 2: Standard Sampling

The procedures for sampling are same as in Type 1 surveys with the addition that representative samples are collected and analysed for the presence of asbestos. If materials are found to contain asbestos then other homogeneous materials used in the same way in the building can be strongly presumed to contain asbestos.





### Type 3: Full Access Sampling and Identification Survey (pre-demolition/major refurbishment)

This type of survey is used to locate and describe, so far as reasonably practicable, all ACMs. This may involve destructive inspection, as necessary to gain access to all areas. The survey is designed to be used as a basis for tendering the removal of ACMs prior to the demolition or major refurbishment. The survey as such does not assess the condition of the asbestos other than to note areas of damage.

## **HBI Asbestos Services**

1. Production of an Asbestos Management Plan consisting of;
  - Asbestos policy and procedures document and
  - [www.RecordsForBuildings.com](http://www.RecordsForBuildings.com) - HBI's secure web-based asbestos register
2. Surveying and Bulk Sampling
  - Type 1 – Location & assessment survey (presumptive survey)
  - Type 2 - Standard sampling, identification and assessment survey
  - Type 3 – Full access sampling and identification survey (pre-demolition)
3. Condition reports
4. Risk management programmes

[See HBI datasheet 'Management of Asbestos']

