Management of Asbestos

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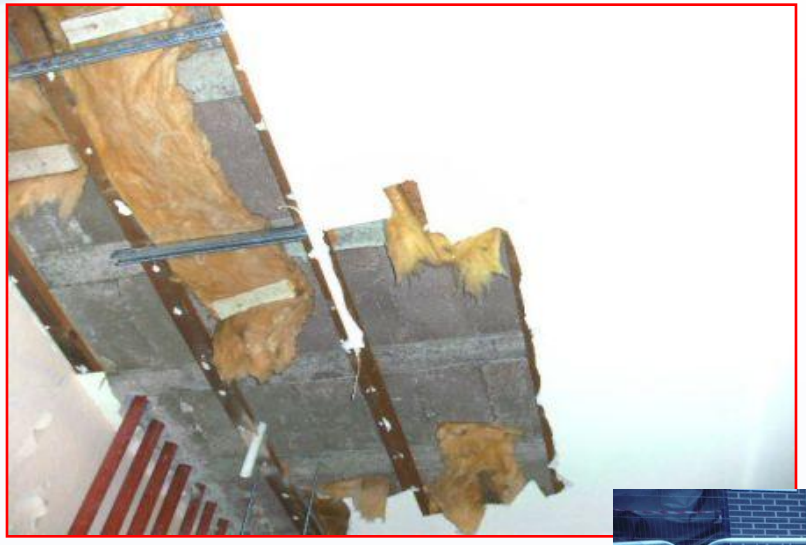
HEALTH AND SAFETY AUTHORITY

Getting it Wrong!



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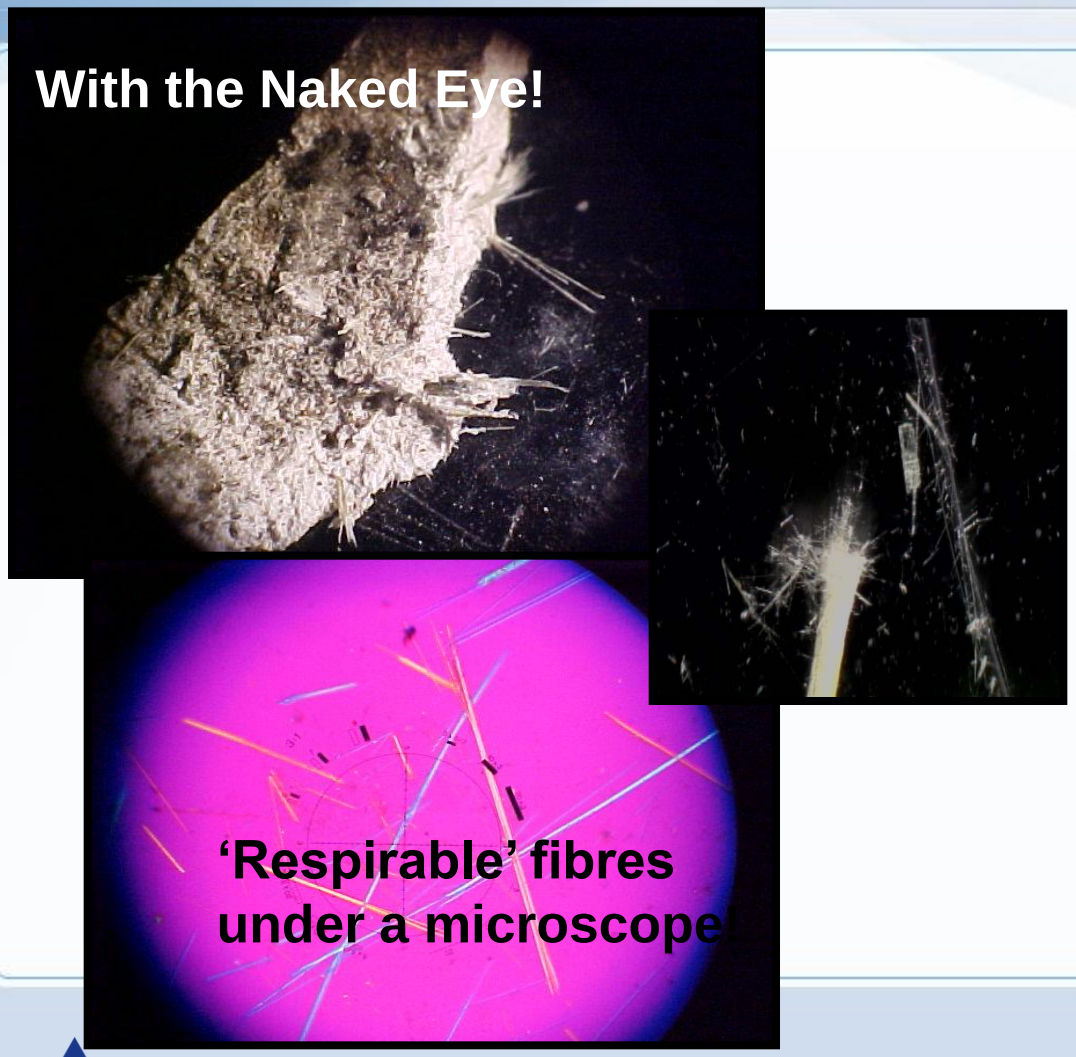
Asbestos – What is it?



- **Naturally occurring silicates**
- **Fibres**
- **3 most common types**
  - Chrysotile (white)
  - Amosite (brown)
  - Crocidolite (blue)
- **Unique Qualities**

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Asbestos – Who is at risk?

Who is likely to be exposed to asbestos fibres?

- demolition contractors;
- electricians;
- roofing contractors;
- painters and decorators;
- construction contractors;
- joiners;
- heating and ventilation engineers;
- plumbers;
- telecommunications engineers;
- gas fitters;
- fire and burglar alarm installers;
- plasterers;
- general maintenance staff;
- builders;
- computer installers;
- shop fitters;
- building surveyors.

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Asbestos–At Risk if:

- Unfamiliar building
- Building built before 2000
- Asbestos materials were not identified
- Information was not passed on
- Don’t know how to recognise and work safely with asbestos
- Know how to work safely with asbestos but choose to put yourself at risk

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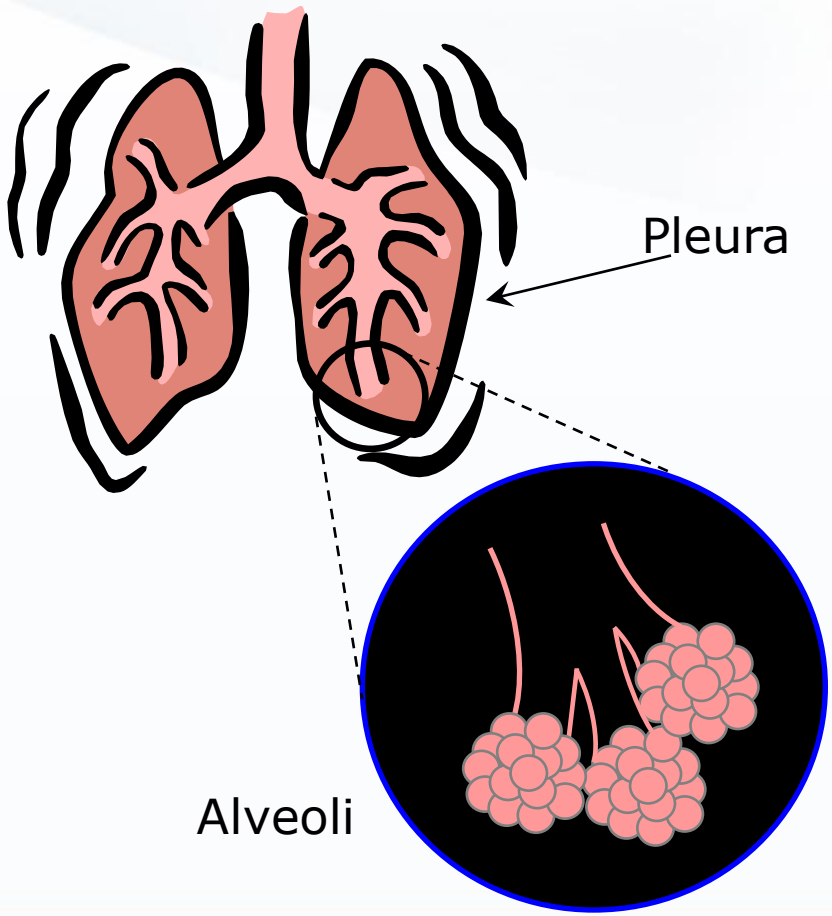
Asbestos – Health Effects

- **Asbestosis**
- **Mesothelioma**
- **Lung Cancer**
- **Other cancers**
- **Pleural plaques/ effusions**



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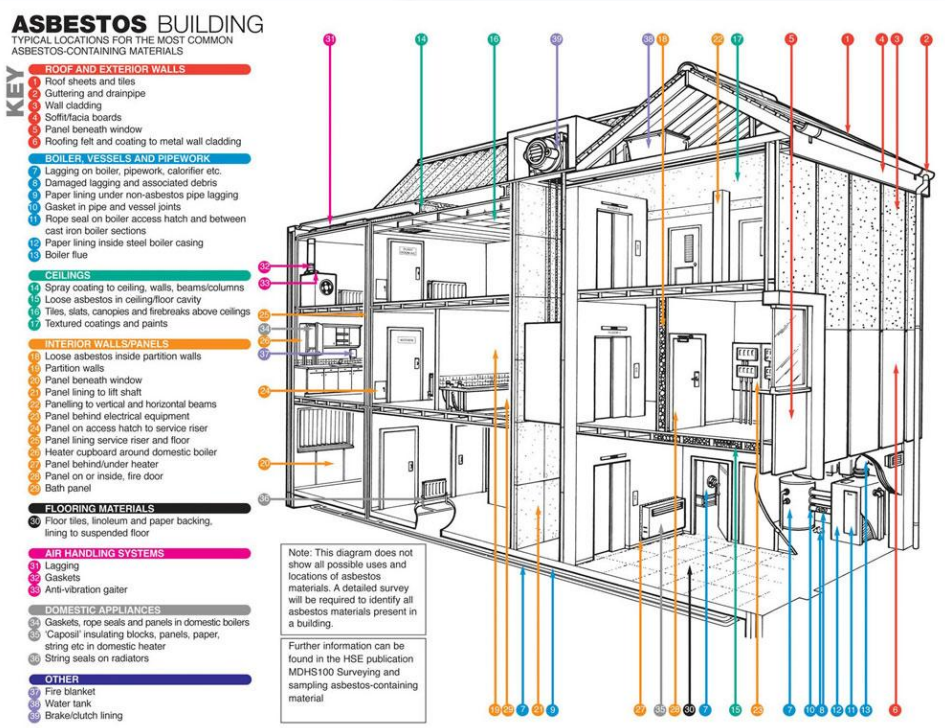
Asbestos - Where is it?

- **>3000 products**

Commercial buildings
Public buildings
Domestic buildings
Vintage cars
Ships/Boats
Lighthouses
Watermains

- **HSE (UK) asbestos building**



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Asbestos - Where is it?

- **Spray insulation**
  - Brown, White, or Blue
  - Greater than 70% asbestos fibre
  - Used for thermal and acoustic insulation as well as fire protection of steel work and concrete

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Asbestos

- **Asbestos lagging**
- Lagging on pipework, boilers, calorifiers, heat exchangers etc

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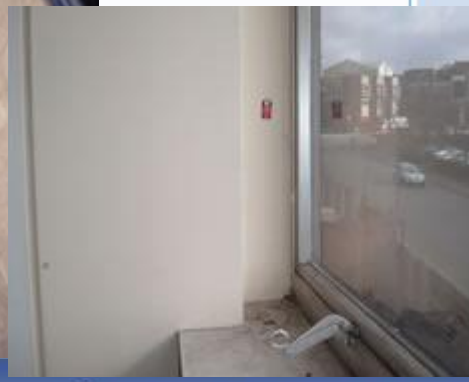
Asbestos

- **Asbestos insulating boards**
- ceiling tiles, partition walls, service duct covers, fire breaks, heater cupboards, door panels, lift shaft lining, fire surrounds, soffits



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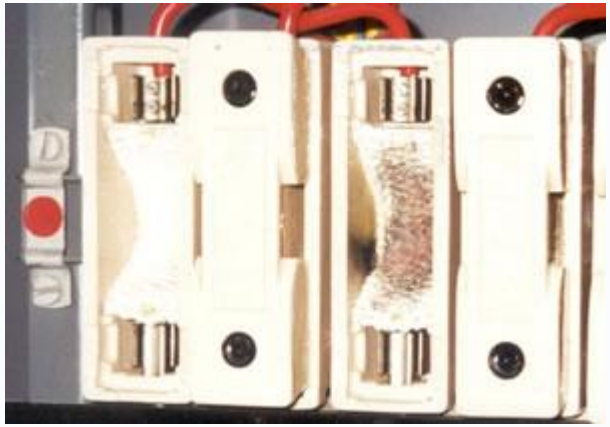
Asbestos



- **Asbestos textile products**
- Asbestos textile products were also extensively used in electrical equipment, firebreaks, rope seals in boilers & ductwork, flexible duct connectors

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Asbestos

- **Textures coatings, or decorative finishes to walls or ceilings.**
  - 3-5% white content.
  - Added until 1984.
  - Non asbestos versions available from mid 70’s.

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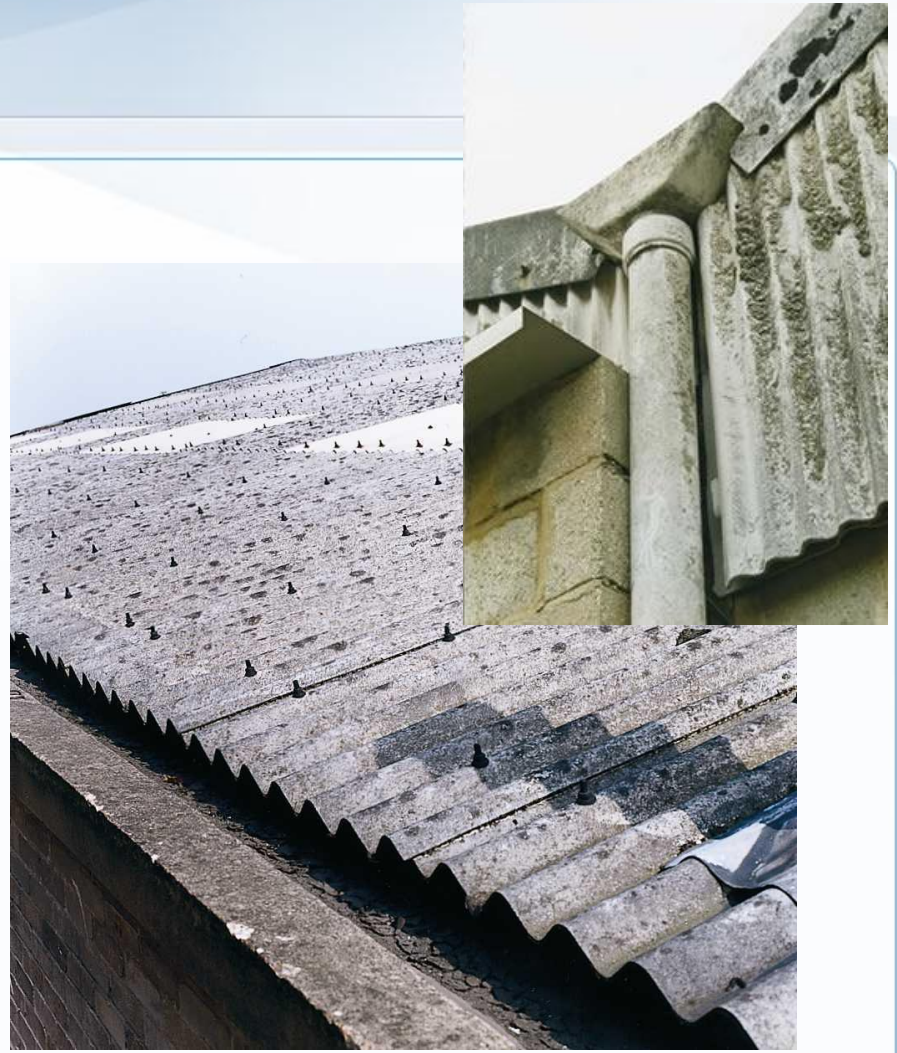
Asbestos

- **Asbestos cement products**
- roof and wall cladding, bath panels, boiler and incinerator flues, fire surrounds, gutters, rainwater pipes, water tanks etc



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Asbestos

- **Asbestos Cement Tiles**
  - mainly containing white around 15%

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Asbestos

- Reinforced plastics
  - vinyl floor tiles and black toilet cisterns
  - Floor tiles mainly contain white asbestos
  - Amosite sometimes in black ‘shires lynx’ toilet cisterns

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Asbestos

Less obvious example - Asbestos paper below man made mineral fibre pipe insulation

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Asbestos Management

- Employers **must** do risk assessment
- Ask **"Has an asbestos survey been carried out?"**
- **Plan work** to avoid disturbing ACMs
- ACMs should only be worked on if **absolutely necessary.**

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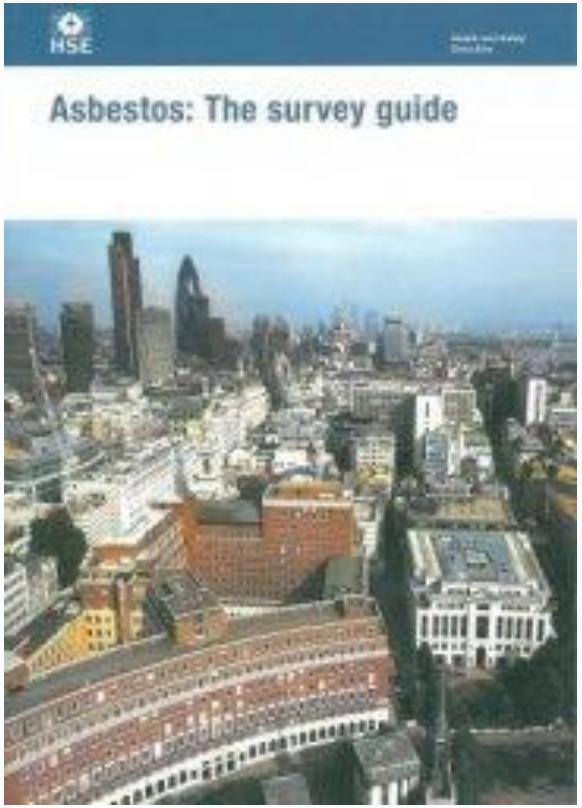
Asbestos Management

- Buildings built or refurbished before 2000.
- How do you identify it ?– Survey carried out to UK HSE ***HSG 264 The Survey Guide*** standards by a competent person with suitable insurance
  - **Management Survey**
  - **Pre-demolition/ refurbishment survey**



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Asbestos Management

- **Survey report** – contains a register with risk assessments for Asbestos Containing Materials (ACMs) identified (ACMs)

The risk assessment includes a material assessment and a priority assessment.

- The **Material Assessment** looks at the type and condition of the ACM and the ease with which it will release fibres if disturbed.
- The **Priority Assessment** looks at the likelihood of someone disturbing the ACM. (Client should be involved)

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Asbestos Management

- **Material Assessment**
  - product type;
  - location;
  - extent (or quantity);
  - asbestos type;
  - accessibility;
  - amount of damage or deterioration; and
  - surface treatment (if any).

The last three will not usually be required for a (Type 3) pre-demolition survey.

Asbestos Management

- **Priority Assessment**
  - maintenance activity;
  - occupant activity;
  - likelihood of disturbance;
  - human exposure potential.

Materials score + priority score = Risk assessment score

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Asbestos Management

Minor damage	Good condition
■ The material should be repaired and/or encapsulated ■ The condition of the material should be monitored at regular intervals. Where practical the material should be labelled ■ Inform the contractor and any other worker likely to work on or disturb the material	■ The condition of the material should be monitored at regular intervals ■ Where practical the material should be labelled ■ Inform the contractor and any other worker likely to work on or disturb the material
Poor condition	**Asbestos disturbed**
■ Asbestos in poor condition should be removed	■ Asbestos likely to be disturbed should be removed

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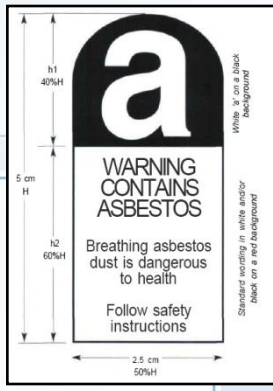
Asbestos management



- **Managing asbestos left in place**
  - Develop Asbestos Management Plan
  - Maintain the asbestos register
  - Inform those who may inadvertently disturb the ACMS e.g. use Permit to Work, Job Card, labelling etc
  - Monitor condition of material e.g. as part of maintenance inspections, 6th monthly, annually
  - Emergency arrangements e.g. specialist contractor

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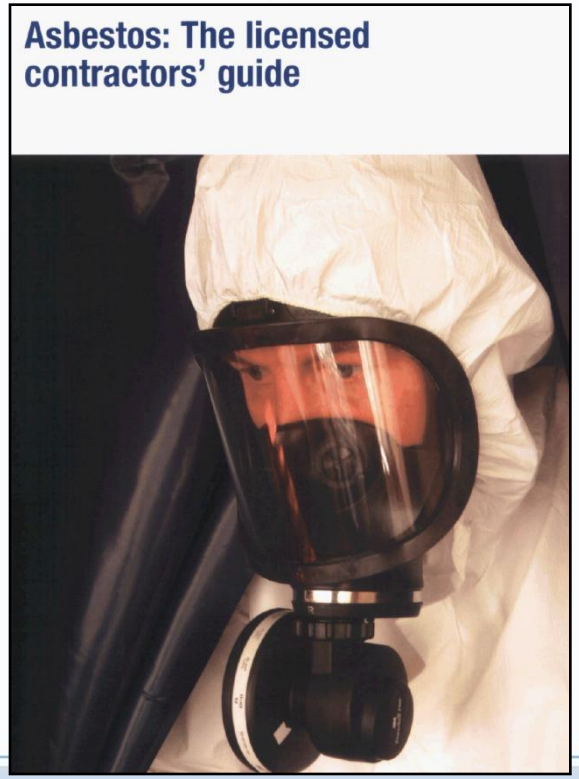
Asbestos removal

- **'Specialist' contractors** – No licensing regime for contractors in the Republic of Ireland

- **Assess ability to do work**
  - Safety statement
  - Previous experience
  - Training policy and records
  - Equipment and Face Fit records
  - Insurance*
  - Sample method statement*
  - Trade Association Membership*



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Asbestos removal

- **A specialist asbestos contactor will ensure**
  - Work is **risk assessed** for all inherent hazards
  - **Method statement** detailing work method and control measures (wet stripping, shadow vacuuming) is provided
  - Work is correctly notified to HSA
  - Correct site management – segregation and spread of contamination is eliminated by use of **enclosures** and **negative pressure units**
  - Appropriate insurances are held
  - Correct arrangements for waste disposal – Waste Transfer Forms

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Asbestos Removal

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Asbestos removal

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Asbestos Removal

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Asbestos removal ✗

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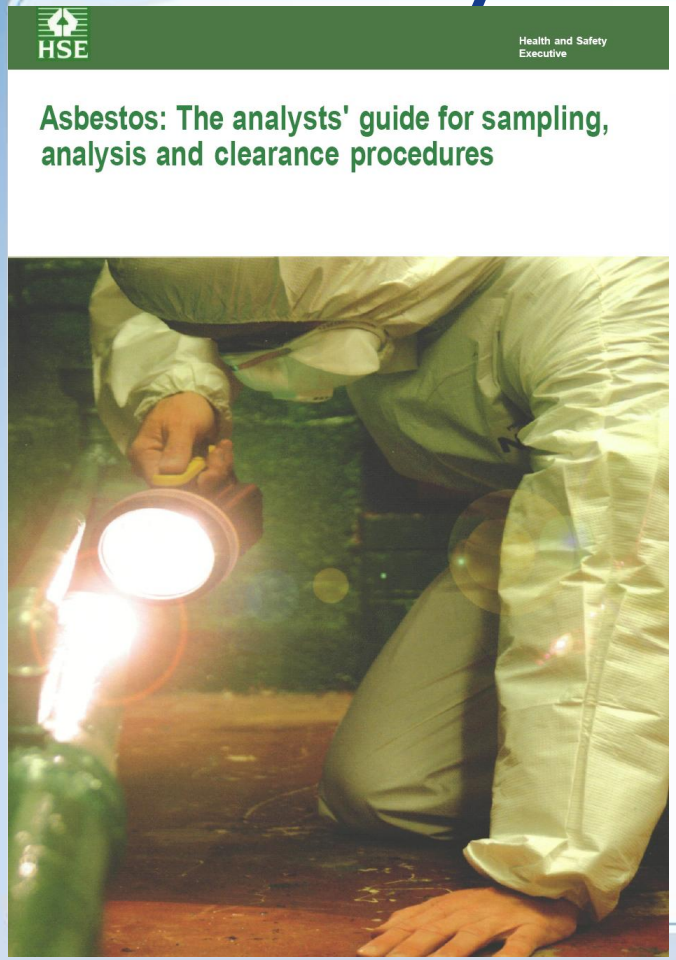
Asbestos removal – The Analyst



- Independence
- Air monitoring (WHO Rules)
- Visual Inspections
- Site clearance certification
- Qualifications – S301, P403, P404, Certificate of Competence
- ISO17025/ Quality Assurance
- HSG 248 'The Analyst Guide'

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Further Info

List of Best Practice Guidance Documents

- H.S.A (2005) Guidelines on Working with Materials Containing Asbestos Cement (ACOP)
- European Commission, Senior Labour Inspectors Committee (SLIC) (2006) *A practical guide on best practice to prevent or minimise asbestos risks in work that involves (or may involve) asbestos: for the employer, the workers and the labour inspector.*
- H.S.E (UK) (2006) HSG247 Asbestos: The Licensed Contractors' Guide
- H.S.E (UK) (2005) HSG248 Asbestos: The analysts' guide for sampling, analysis and clearance procedures.

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Further info

- http://hw.osha.europa.eu

SAFE MAINTENANCE – ASBESTOS IN BUILDING MAINTENANCE

- www.hsa.ie
- http://www.hse.gov.uk/asbestos/essentials/index.html

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Management of Asbestos

Thank You

For Queries or copy of draft guidelines please email

Chemicals@hsa.ie

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