

Asbestos In Domestic Buildings

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SEVERN
Environmental Services

Our experience...

- Asbestos license holder for 37 years
- 70% of our current turnover is local authority / social housing works
- Currently carrying out asbestos abatement works on behalf of:



Fibre types

Chrysotile



Actinolite



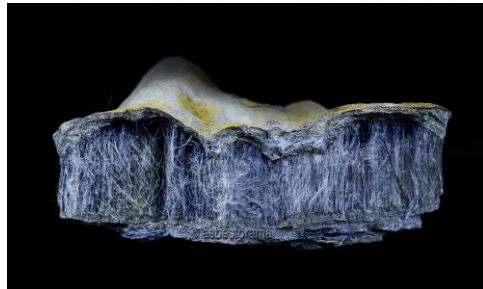
Amosite



Tremolite



Crocidolite



Anthophyllite



Amosite and Crocidolite (brown and blue)

- Amosite is a particularly strong and heat resistant fibre and can be found in insulating board (AIB) as ceiling tiles etc. and within thermal insulation products
- Amosite was used in many domestic situations as fire protection and was often mixed with chrysotile into insulation boards
- Crocidolite is recognised as the most harmful and carcinogenic of all asbestos minerals and was used as spray-on coatings, pipe insulation, plastics and cement products
- Crocidolite was not used as commonly as amosite but can show in many sample results on cement-based rainwater goods

Chrysotile (white)

- Accounts for around 95% of asbestos use worldwide
- High tensile strength allowing it to be spun into thread and woven into cloth also with excellent thermal and electrical insulators
- Used in many building products
- It is a serpentine fibre and considered less dangerous than the other 5 amphibole types
- Smaller concentration levels i.e. around 2-3% in artex, 10% in cement
- Canada only ceased mining this mineral in 2019
- The above information (readily detailed in training courses such as asbestos category A or B) can lead to trades people softening their approach to working, or setting others to work, on this product

Fibre type misconceptions

- Inhalation of any of the asbestos fibre types has the potential to cause ill health
- Exposure to asbestos, including chrysotile, causes cancer of the lung, larynx, and ovaries, and also mesothelioma
- Amphiboles have been proved to be more aggressive in causing respiratory diseases however chrysotile, with prolonged exposure, is also a serious health risk and is classed as carcinogenic to humans
- It is common to hear statements that if it is brown or blue asbestos then a license is required and, conversely, you do not need to be licensed to remove white asbestos

Confusing sample results?

- As mentioned, asbestos sample results have shown that cement products can contain blue (and some times brown) fibres. This does not automatically result in the works being licensed. Only in rare cases where the material is already degraded or will highly degrade during its removal is a license required.
- As cement is a bonded product the fibres are held in a matrix and not easily released into the air. As long as the removal process is well executed and material kept whole as possible a license is not required.
- Conversely, AIB has been known to contain only white fibres which would therefore require a license for removal works due to the higher concentration of fibre content (25-40%) and their ability to be released into the air due to the nature of the compressed layered board being friable.

Licensed works

-means that an employer must hold a license granted by HSE before undertaking higher risk work with asbestos
- where worker exposure to asbestos is not sporadic and of low intensity; or
- where the risk assessment cannot clearly demonstrate that the control limit will not be exceeded ie 0.1 asbestos fibres per cubic centimetre of air (0.1 f/cm³) (averaged over a four-hour period); or
- on asbestos coating; or
- on asbestos insulation or asbestos insulating board where the risk assessment demonstrates that the work is not short duration work, eg when work with these materials will take no more than two hours in any seven-day period, and no one person works for more than one hour in that two hour period

Short duration work or “1 hour rule”

- This description from HSE can lead to non-licensed companies undertaking tasks that would otherwise have been licensed as the control limit is rarely assessed:



- When considering the 1 hour rule, the whole task has to be considered including area set up, allowing time saturation and removal of segregation. Also the 1 hour rule is to be used once in a 7 day period

Non-licensed works

- Where a license isn't required the HSE stipulate that appropriate control measures must still be in place and a safe system of work followed
- This will include training relevant to the task (category B), suitable plant such as H-type vacuum (with dispersed oil particulate - or DOP test) and sufficient means of managing, packaging and transporting the wastes
- Works will not generally require air sampling (unless specified) therefore the contract should produce in-house certification to confirm the area(s) of work are safe to re-occupy. These certificates together with waste consignment note should be the minimum level of information used to update the asbestos register

Requirement for statement of cleanliness



Health and Safety
Executive

em10
asbestos
essentials

Statement of cleanliness after textured coating removal

Equipment and method sheet

Non-licensed tasks

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

What this sheet covers

This sheet is intended for trained contractors who remove textured coatings.

It sets out a model statement to issue to the client, premises owner or the occupier.

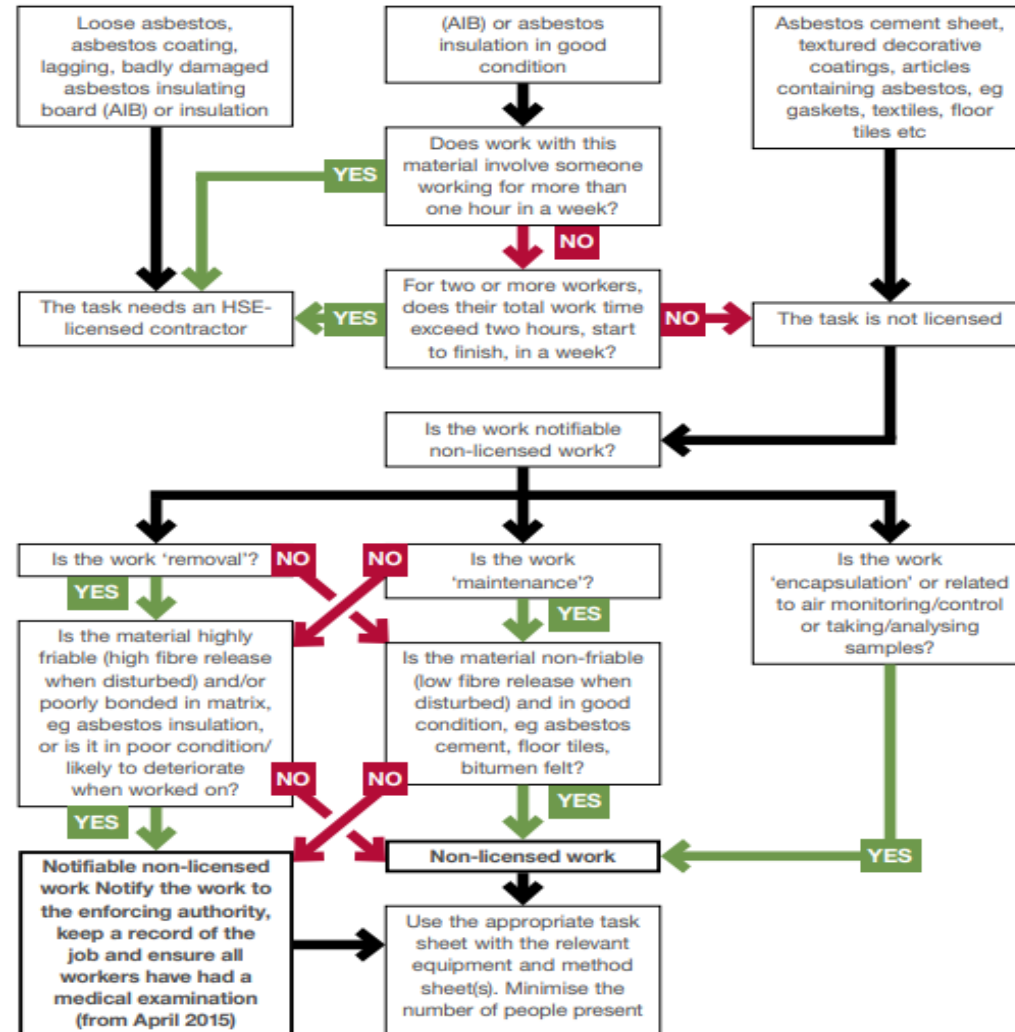
A statement of cleanliness is normally only required for large-scale removal and if an enclosure is used.

Procedures

- After removing textured coating, you need to let the client know the premises are safe to use again.
- Before you do this you need to be sure that textured coating has been removed, as agreed, and all debris cleaned up.
- The next page shows an example of a form to give to the client, premises owner or occupier.

HSE Decision flowchart

Decision flow chart



Use of non-licensed contractors

- Most clients opt to use licensed contractors for their non-licensed tasks to ensure adherence with regulations and this especially the case with textured coating removal
- Where other contractors are engaged for bonded ACMs the removal element will generally be carried out well however it is the post-works clean up where issues are encountered
- What information is being received to allow accurate updating of the asbestos register and to use where claims of poor workmanship may arise?
- Is it easier to overboard / screed over? Obviously more cost effective but masking the material will cause greater problems in later years and impact on subsequent survey re-inspections

Duty to manage

- Social Housing Landlords have a duty of care under the Control of Asbestos Regulations 2012 to manage asbestos in all communal areas within their portfolios (pre-2000 builds only). They must also carry out intrusive asbestos surveys prior to any refurbishment or maintenance work which may interfere with the fabric of a property such as kitchen and bathroom upgrades
- The Management of Health and Safety at Work Regulations 1999 requires employers to assess the health and safety risks to third parties, such as workers carrying out work in the premises and tenants, who may be affected by activities connected with their business and to make appropriate arrangements to protect them from this.
- Additionally, Social Landlords must comply with a range of other regulations such as the Defective Premises Act 1972. This has led many to carry out Management Surveys of individual domestic properties to gain a better understanding of the overall risk of asbestos to tenants, staff and contractors

Frequency of inspections

- Dependant on the size of an organization this can be cost prohibitive therefore there is reliance on in-house qualified staff
- The Control of Asbestos Regulations 2012 and associated guidance dictate that asbestos containing materials ACM's should be re-inspected every 6 – 12 months (must not exceed 12 months)
- The frequency of the asbestos inspection regime should be dictated by the nature of risk that the asbestos poses. Medium to high risk discoveries should obviously be given priority
- Re-inspections will ensure that the asbestos register is up to date and mirrors site conditions

Surveys on domestic properties

- Restriction on intrusive samples during management surveys, future maintenance work will require refurbishment survey. How far should the survey go?
- Material type not clearly identified – some surveys use scoring rather than a description. The key part of the sample assessment is the material type
- Textured coatings properly assessed? Good practice is to test four corners due to the non-homogenous nature of asbestos in artex however this is rarely carried out
- Areas placed under restriction when high risk ACMs are discovered can cause distress with tenants if not managed properly.
- No access to certain areas of properties such as loft voids and external high level soffit.

Problems with ACM soffits



Tenant interaction

- Difficulty in reaching a fine balance between ensuring awareness of the presence of asbestos (and for it not to be disturbed) and not creating anxiety
- Where ceiling removal works are required and bookings made tenants are requested to provide a clear floor area....



Other requirements from tenants / clients

- Marked plans where removal works to bedrooms are required
- Need to decant where access routes are blocked
- Missed appointments in some cases recharged
- Risk of damage to decoration through our enclosure set up
- Requirement to use power for vacuums etc. and water for DCU use
- Generators sometimes required on voids causing noise nuisance
- Welfare provision via clients as CDM
- External works: closed windows, boiler vent isolation, sky dishes

Emergency attendances

- Most popular reason for emergency callout is due to water leaks impacting ceilings with textured coating
- In the event of collapse any affected possessions will need cleaning or worst case disposal
- If tenants or trades have been contaminated is there a robust system in place for arranging for personal decontamination?
- Where survey information is not available will textured coatings be treated as positive until sampling is undertaken?

Enforcement

- Nuneaton and Bedworth Borough Council prosecuted in 2010 after sending an employee to fix an emergency water leak in a sheltered accommodation complex without warning him that asbestos was present
- North Devon Homes prosecuted by HSE in 2012 for failure to provide an asbestos survey to a boiler maintenance company in Ilfracombe.

Any questions?