



ACM Surveying & Consultancy
Asbestos Solutions

Refurbishment & Demolition survey
for asbestos materials at:

**Sir Roberts Farm- Three Garages
Goose Green Lane
Pulborough
West Sussex
RH20 2LW**

On behalf of:

Peter Isherwood



DATE: 16TH OF JUNE 2022

REFERENCE: 01/16062022/DAS

SURVEYOR: DEREK STUBLEY



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INTRODUCTION

1. INTRODUCTION

- 1.1 This report contains the findings of an HSG 264 refurbishment/demolition survey for asbestos materials carried out at Sir Roberts Farm, Three garages, Goose Green Lane, Pulborough, West Sussex, RH20 2LW on the 16th of June 2022.
- 1.2 ACM Surveying & Consultancy Ltd. was instructed to undertake the survey by Peter Isherwood.

SCOPE OF SURVEY

- 1.3.01 It is our understanding that the purpose of the survey was to comply with the Control of Asbestos Regulations 2012 and to determine, within the scope of the survey, the extent and location of asbestos materials present.
- 1.4 The property comprises of a workshop and former chicken shed.
- 1.5 The following rooms were inspected, as detailed below and on the floor plan contained within appendix B:
 - Three Garages
- 1.6 Where possible, each functional space or room within these areas has been inspected. Areas where access was not possible are listed in section 1.9.
- 1.7 Areas outside the scope of the survey and therefore not accessed are detailed within the limitations/restrictions section within this report. Care should be taken to identify the various survey limitations applicable.
- 1.8 Representative samples of materials, which upon visual inspection are suspected to contain asbestos have been taken, analysed and reported upon.

1.9 The following areas, although within the scope of the survey, were not inspected due to problems with access at the time of the survey: -

- **Centre and right hand garages locked at the time of the survey.**

It should also be noted that inspection was limited/not possible in the following areas: -

- **This survey was limited to areas noted in section 1.5, all other areas were outside the scope of this survey.**

Any suspect materials found in the areas detailed above should be treated as asbestos until proven otherwise from sampling and analysis by competent persons.

1.10 Please note that all reasonably practicable attempts have been made to identify all asbestos materials within the scope of the survey. However, it should be noted that asbestos applications are known to exist in parts of any given building that are inaccessible without demolition and as such are not possible to identify within any survey.

2.

EXECUTIVE SUMMARY

2. EXECUTIVE SUMMARY

2.1 View of the asbestos cement panels to the roofs of the three garages.



2.2 Views of the asbestos cement cladding to the three garages.



3.

CONCLUSION AND ACTIONS

3. CONCLUSION AND ACTIONS

- 3.1 The conclusions and actions contained within this section should be included within your Asbestos Management Plan.
- 3.2 To help comply with the legal requirements and to ensure that ACMs in the property are properly managed, dutyholders should identify a person (or persons) within their organisation who will be responsible for their ongoing management.
- 3.3 Specific Recommendations

- The asbestos cement roof and the asbestos cement cladding panels to the three garages (mentioned in sections 2.1 & 2.2 and on the asbestos register and floor plan) can be managed and monitored if left in situ. If the asbestos cement is going to be removed this should be carried out by a licensed asbestos removal contractor.

Reference should be made to sections 4.22 – 4.36 for detailed information regarding the training and competency required by personnel carrying out removal and other works involving asbestos materials.

4.

GENERAL RECOMMENDATIONS

4. GENERAL RECOMMENDATIONS

- 4.1 This section of the report gives advice on how to manage the asbestos-containing materials detailed within this report. Recommendations made are based on current legislative requirements and best practice issued by the Health & Safety Executive.
- 4.2 No recommendations are made in this section regarding to any organisation's specific management plan, policy or procedure, these are outside the scope of this survey report.

Legislative Background

- 4.3 Regulation 4 of the Control of Asbestos Regulations 2012 requires dutyholders to:
 - a. take reasonable steps to find materials in premises likely to contain asbestos and to check their condition;
 - b. presume that materials contain asbestos unless there is strong evidence to suppose they do not;
 - c. make a written record of the location and condition of asbestos and presumed asbestos-containing materials (ACMs) and keep the record up to date;
 - d. assess the risk of the likelihood of anyone being exposed to these materials; and
 - e. prepare a plan to manage that risk and put it into effect to ensure that:
 - i. any material known or presumed to contain asbestos is kept in a good state of repair;
 - ii. any material that contains or is presumed to contain asbestos is, because of the risks associated with its location or condition, repaired or if necessary removed; and
 - iii. information on the location and condition of the material is given to anyone potentially at risk.
- 4.4 The dutyholder in this context is the person in control of maintenance activities, whether that be the occupier or landlord, sub-lessor or managing agent. Where no such obligation exists, eg where there is no tenancy agreement or contract, or where the premises are unoccupied, then the regulations place the duty on the person in control of the premises to comply with this regulation.
- 4.5 This survey report will help you conform to sections a, b, c and part of d above.

Dutyholder's Responsibilities

- 4.6 We have undertaken a quantifiable assessment of the risk of fibre release using the material assessment algorithm as detailed in HSG264 which takes into account important factors relating to the item. The detail of this material assessment is detailed in Appendix A.
- 4.7 We have also undertaken priority assessment which considers the likelihood of the ACM actually being disturbed and exposing your employees or others.
- 4.8 The material assessment score for each ACM is added to its corresponding priority assessment score which will provide the risk assessment score for each ACM. The risk assessment scores are then ranked (see section 5 for further details).

4.9 Risk ratings and recommended actions provided by ACM Surveying & Consultancy Ltd are based on information available at the time of the survey. Where details alter after the inspection has taken place, for example changing the use of a room, affected ACMs must be reassessed.

4.10 Further details on the material and priority assessments are given in the Appendices under 'Method of Risk Assessment'.

Management Options

4.11 Once the ACMs have been prioritised using the assessments above, some may require immediate action. This is not the full management plan, but options for dealing with the ACMs. The paragraphs below presents measures which will be needed in all cases where ACMs are present, and further options for managing the condition of your ACMs. The following advice is provided from HSG227 'A comprehensive guide to Managing Asbestos in premises'.

4.12 Measures needed in all cases where ACMs are present

- communicate with employees, contractors and others
- monitor the condition of the ACM
- put a safe system of work in place

Communicating with employees, contractors and others

4.13 It is important to communicate with employees throughout the asbestos management process, from inspection of the premises through to the decision-making about management of your ACMs. Employees and others should be made aware of the location of any ACMs in the buildings they work in if they are liable to disturb them. This is particularly important for maintenance workers who may directly disturb ACMs while working. Means of communicating with contractors who come on site to carry out work must also be set up to prevent them from disturbing ACMs without taking proper precautions.

Monitor the ACMs

4.14 ACMs which are in good condition, sealed and/or repaired, and are unlikely to be disturbed, may be left in place. If they are left in place, the condition of the ACMs will have to be monitored regularly and the results recorded. When the condition of the ACM starts to deteriorate, remedial action can be taken. The time period between monitoring will vary depending on the type of ACM, its location and the activities in the area concerned, but would not be expected to be more than 12 months in most cases. ACMs in remote locations, with little or no routine activity, can be inspected infrequently. Monitoring would involve a visual inspection, looking for signs of disturbance, scratches, broken edges, cracked or peeling paint and debris. Where deterioration has occurred, a recommendation on what remedial action to take would need to be made.

Safe System of Work

4.15 You need to have a system in place to control any maintenance or building work on the fabric of your building. This may take one of several forms, depending on the size and complexity of the organisation, for example:

- a. in a small organisation, one person can be nominated to control all work carried out by in-house maintenance workers and all contractors;

- b. limit the number of contractors who work on your premises to one or two who are familiar with the buildings and procedures in use in your organisation;
- c. the maintenance or safety department may be charged with ensuring that information regarding the presence of ACMs or presumed ACMs is passed on to contractors who come onto your premises;
- d. a formal, written safe system of work incorporating permits-to-work may be used to control maintenance workers and contractors alike. This is most likely to be necessary in larger organisations where it is difficult for one person to maintain control over the number of contractors on site. It provides a framework for those controlling the contractors.

4.16 In this report we have provided with our recommendations based on experience and best practice, these will normally involve one of the following.

Options for managing the condition of your ACMs

- protect/enclose the ACM
- seal/encapsulate the ACM
- repair the ACM
- remove the ACM
- Protect or enclose the ACM

Protecting / enclose the ACM

4.17 Protecting ACMs means the construction or placing of a physical barrier of some sort to prevent accidental disturbance of the ACM. Enclosing the ACM involves the erection of a barrier around it, which should be as airtight as possible to prevent the migration of asbestos fibres from the original material. This will involve sealing the edges and corners of the barrier. Enclosing the ACM is a good option if it is in reasonable condition, but it may still be vulnerable to damage. Potential problems for the future should be borne in mind when choosing this option.

Seal or encapsulate the ACM

4.18 There are two types of encapsulants: bridging encapsulants which form a durable layer adhering to the surface of the ACM (not suitable for use on friable ACMs such as insulation or sprayed coatings) and penetrating encapsulants which are designed to penetrate into the ACM before hardening and locking the material together to give the ACM additional strength. Encapsulation of an ACM is only suitable if the ACM is in sound condition and can take the additional weight of the encapsulant without delamination.

Repairing the ACM

4.19 To be readily repairable, the damage must be slight, therefore repair should be restricted to patching/sealing small areas and making good slight damage to enclosures which are protecting ACMs. If the ACM is to be repaired, there are a number of methods that can be employed depending upon the type of material.

Removing the ACM

4.20 Where ACMs have been identified and are not in good condition, or are in a vulnerable position and liable to damage, the options discussed in the above paragraphs should be explored first. Where it is not practical to repair, enclose or encapsulate the ACMs, they will need to be removed. ACMs will also need to be removed if the area is due to undergo refurbishment which will disturb the ACM, or where a building is going to be demolished. This work will generally have to be undertaken by licensed asbestos removal contractors, unless of course the

ACM is asbestos cement or other highly bonded materials not covered by the scope licensing requirements of CAR 2012.

4.21 Where remedial action is required for ACMs, such action should be taken at the earliest opportunity so as to minimise potential health risks. It should also form part of a structured Asbestos Management Plan. These items will be either damaged or liable (by virtue of location or material type) to be damaged in normal occupation or maintenance of the premises and therefore will pose a significant health risk to any persons in the vicinity.

Work with ACMs

4.22 Removal, repair or disturbance of asbestos falls into three categories - Licensable, Non-Licensable and new to the Control of Asbestos 2012 Regulations, Notifiable Non-Licensable Work.

Licensable Work

4.23 Work within the scope of licensing includes work with asbestos insulation, asbestos coatings (excluding most work with textured decorative coatings containing asbestos) and asbestos insulating board.

4.24 All licensable work is notifiable to the enforcing authority on form ASB5 (the enforcing authority is the HSE or Local Authority depending on type of property being worked in) and will attract a 14-day notification period where none of the planned work with asbestos can be undertaken within this period. This gives the enforcing authority the opportunity to assess the proposals for carrying out work and to inspect the site either before or during the work.

4.25 Prior to work, all licensed asbestos removal contractors have to complete a risk assessment (Regulation 6) and produce a plan of work or method statement (Regulation 7). These must be provided to the enforcing authority when asked for without delay. They do not have to be deposited with them at the time of notification.

4.26 The HSE are unlikely to provide waivers to this notification period but will when the public health is at risk. All waiver requests have to be written by the client, not the licensed asbestos contractor, be on headed paper, addressed to the local HSE office and must provide details why the waiver is required. Waivers will not be granted if it was due to a lack of planning on the clients / planners / developers part.

Non-Licensable Work

4.27 Works on or removal of asbestos cement/floor tiles/formed gaskets/textured coatings (with some exceptions) should be carried out using precautions in accordance with the guidelines contained within HSG210 'Asbestos Essentials'. For the removal of non-licensed asbestos products, a risk assessment has to be carried out beforehand (Regulation 6) and a plan of work written (Regulation 7) for the task. HSG210 outlines basic precautions that should be used to prevent fibre release during works such as:

- i. Wetting of the materials before removal
- ii. Preventing unauthorised persons from entering the work area

4.28 Using these guidelines, it is expected that asbestos fibre levels would be low. Whilst there is no requirement for these works to be undertaken by a licensed

contractor, in practice it is unlikely that a non-licensed contractor will possess the necessary expertise, equipment or insurances to undertake such works properly.

4.29 There is no requirement to notify the work detailed above to the relevant enforcing authority, carry out medical examinations, maintain registers of work (health records), hold a licence, have arrangements to deal with accidents, incidents and emergencies and designate asbestos areas.

Notifiable Non-Licensed Work (NNLW)

4.30 Some of the work detailed in HSG210 now falls into this category introduced by the Control of Asbestos Regulations 2012.

4.31 NNLW will normally include, (assuming in all cases exposure is sporadic and of low intensity and will not exceed the control limit):-

- a. minor maintenance work involving asbestos insulation where the work to be done meets the definition of 'short duration work', ie. work which does not require a licence. For example, repairing minor damage to a small section of pipe insulation where the exterior coating has been broken or damaged. 'Short duration work' means work carried out by any one person for less than one hour in a seven-day period. The total time spent by all workers on the work in a seven-day period should not exceed a total of two hours.
- b. minor removal work involving AIB where the work to be done meets the definition of 'short duration work', ie. work which does not require a licence. For example, removing AIB panels fixed with nails or screws. (Note: the definition 'short duration work' will only apply to asbestos insulation and AIB).
- c. removal work involving textured decorative coatings where the method of removal requires deterioration of the material. For example, where the material is treated by steam, hydrating gel etc and scraped off the underlying surface.
- d. removal of asbestos paper and cardboard products if not firmly bonded in a matrix.
- e. maintenance work on asbestos cement (AC) which cannot be described as short and non-continuous, but which does not require a licence because exposure is sporadic and of low intensity and will not exceed the control limit.
- f. removal of AC which is substantially degraded eg. badly fire damaged material, or where significant breakage (deterioration) is unavoidable to achieve removal, but which does not require a licence because exposure is sporadic and of low intensity and will not exceed the control limit.

4.32 Contractors who fall into this new group require the work to be notified to the relevant enforcing authority before work is commenced, carry out medical examinations and maintain registers of work (health records).

Asbestos Waste

4.33 All waste generated by asbestos remedial works must be disposed of as Hazardous Waste in accordance with the Hazardous Waste Regulations 2005 (as amended) and the Waste Consignment Note retained for a period of 3 years.

Asbestos Supervision / Air Monitoring

- 4.34 It is a requirement that all licensable asbestos works should be inspected and tested by an independent UKAS accredited company, appointed by the client or his representative.
- 4.35 Any air monitoring or supervision works undertaken must issue certificates or documentation to comply with current HSE guidance.

Larger Scale Projects

- 4.36 The client must check if the planned work with asbestos falls under the Construction (Design and Management) Regulations 2007. For works lasting longer than 30 days or involving 500 person days, the client must employ a CDM Co-ordinator and notify the work to the nearest Health and Safety Executive office using project notification form F10, with the exception for domestic clients.

5.

METHOD OF RISK ASSESSMENT

5. METHOD OF RISK ASSESSMENT

5.1 The system of risk assessment adopted in this report is that laid out in HSE publications HSG 264 (Asbestos: The survey Guide) and HSG 227 (Managing Asbestos in Premises).

5.2 Material Assessment

The four main parameters, which will determine the amount of fibre release from an asbestos containing material (ACM) when subjected to a standard disturbance are: -

- Product type (**PT**)
- Extent of damage or deterioration (**EoD**)
- Surface treatment (**ST**)
- Asbestos type (**AT**)

5.3 Each above parameter is assigned a score as follows, the sum of these scores is known as the material assessment.

Sample variable	Score	Examples
Product type (PT)	1	Composites (Artex, floor tiles, bitumen, asbestos cement)
	2	AIB, Mill Board, textiles, gaskets, ropes, paper, felt
	3	Thermal insulation, sprayed asbestos, loose asbestos
Extent of damage or deterioration (EoD)	0	Good condition – no visible damage
	1	Low damage: a few scratches, surface marks, broken edges on boards
	2	Medium: Significant breakage of materials or several small areas where material reveals loose fibres
	3	High damage to sprays and thermal insulation. Visible debris
Surface treatment (ST)	0	Composite materials containing asbestos
	1	Enclosed sprays and lagging, Sealed AIB, Asbestos cement
	2	Unsealed AIB, encapsulated lagging and sprays
	3	Unsealed lagging and sprays
Asbestos type	1	Chrysotile (white asbestos)
	2	Amosite (brown asbestos) & amphibole asbestos excluding Crocidolite
	3	Crocidolite (blue asbestos)

Non-asbestos materials are not scored.

5.4 Priority Assessment

The priority assessment takes account of the human risk factors, which may affect the materials and includes the following variables: -

- Normal occupant activity (**NOA**)
- Likelihood of disturbance (**LOD**)
- Human exposure potential (**HEP**)
- Maintenance activity (**MA**)

Assessment Factor	Score	Examples of score variables
Normal Occupant Activity Main type of activity in area	0 1 2 3 As above	Rare disturbance activity (eg little used store room) Low disturbance activities (eg office type activity) Periodic disturbance (eg industrial or vehicular activity which may contact ACMs) High levels of disturbance, (eg fire door with asbestos insulating board sheet in constant use) As above
Likelihood of disturbance Location	0 1 2 3	Outdoors Large rooms or well-ventilated areas Rooms up to 100m ² Confined spaces
Accessibility	0 1 2 3	Usually inaccessible or unlikely to be disturbed Occasionally likely to be disturbed Easily disturbed Routinely disturbed
Extent/amount	0 1 2 3	Small amounts or items (eg strings, gaskets) $\leq 10\text{ m}^2$ or $\leq 10\text{ m}$ pipe run. $>10\text{ m}^2$ to $\leq 50\text{ m}^2$ or $>10\text{ m}$ to $\leq 50\text{ m}$ pipe run $>50\text{ m}^2$ or $>50\text{ m}$ pipe run
Human exposure potential Number of occupants	0 1 2 3	None 1 to 3 4 to 10 >10
Frequency of use of area	0 1 2 3	Infrequent Monthly Weekly Daily
Average time area is in use	0 1 2 3	<1 hour >1 to <3 hours >3 to <6 hours >6 hours

Maintenance activity		
Type of maintenance activity	0	Minor disturbance (eg possibility of contact when gaining access)
	1	Low disturbance (eg changing light bulbs in asbestos insulating board ceiling)
	2	Medium disturbance (eg lifting one or two asbestos insulating board ceiling tiles to access a valve)
	3	High levels of disturbance (eg removing a number of asbestos insulating board ceiling tiles to replace a valve or for recabling)
Frequency of maintenance activity	0	ACM unlikely to be disturbed for maintenance
	1	≤ 1 per year
	2	> 1 per year
	3	> 1 per month

5.5 Each of these four parameters are added up to give an priority assessment score.

5.6 **Total Risk Score**

For each ACM the material assessment and the priority assessment are added together to give a total risk score. The scores are caragorised as follows;

- High risk = 16 - 24
- Medium risk = 9 – 15
- Low risk = 2 – 8

5.7 The material and priority scores can be found contained in the Asbestos Registers. Non-asbestos materials are not scored.

6.

LIMITATIONS AND RESTRICTIONS

6. LIMITATIONS & RESTRICTIONS

Report

- 6.1 This report details the findings of a refurbishment survey for asbestos containing materials as defined in HSG 264.
- 6.2 All reasonably practicable attempts have been made to identify asbestos containing materials within the building. However, this inspection may not identify all asbestos materials even though it is intrusive in nature, as asbestos applications are known to exist in parts of any given building that are inaccessible without demolition and as such are not possible to identify within any survey. This inspection is intrusive by its nature to gain the required access to parts of the building, therefore damage to décor, fixtures and fittings, but not limited to these parts may be disturbed during the investigation.
- 6.2 This report must be read and used wholly in conjunction with all elements of its content. Most sections of this report relate directly to other sections ACM Surveying & Consultancy Ltd. can accept no liability or responsibility for the cost of removal of asbestos or other materials or delays etc caused by the inappropriate use of this report. Should interpretation be taken incorrectly without consulting ACM Surveying & Consultancy Ltd in the first instance then no liability will be associated.
- 6.3 The findings of this report are limited to areas accessed at the time of the survey and areas detailed in this report as per the instruction.
- 6.4 Each item or finding within the asbestos register has been subject to material and priority risk assessment. Recommendations made in respect of each ACM are based on HSG 264 and HSG227.
- 6.5 All dimensions quoted within this report are **approximate** and provide for guidance only. This report should not be solely used as a tender document and the exact extents of materials identified within this report must be verified by contractors on site prior to carrying out removal works etc.

Inspection

- 6.6 No report has been made upon concealed spaces, which may exist within the fabric of the building, where the extent and presence of these is not evident due to inaccessibility or insufficient knowledge of the structure at the time of the survey. Requests will be made for copies of original construction drawings, specifications etc. prior to the start of the survey. The lack of any such drawings may detract from the accuracy of the subsequent survey.
- 6.7 Extensive breaking out of concrete, brickwork, floor slabs etc. is outside the scope of this survey as detailed within the pre-contract quotation. Further inspection using specialist equipment, potentially under controlled conditions, may be required if such opening up is found to be necessary.
- 6.8 Intrusive inspections and/or opening up works, which would involve the removal of materials known or suspected to contain asbestos are outside the scope of this survey. Further inspection under controlled conditions with a licensed asbestos removal contractor in attendance may be required in these situations.

- 6.9 Lift shafts or similar, which require the attendance of a specialist engineer, have not been inspected, unless otherwise stated.
- 6.10 Any other part or area (e.g. internal/external high-level parts, internal elements to plant and boilers) requiring specialist access equipment, other than stepladders, has not been inspected. Any requirement for specialist access equipment has been specifically excluded, unless otherwise stated or previously instructed.
- 6.11 No responsibility is accepted for the presence of asbestos in voids (underfloor, floor, wall or ceiling) other than those opened up during the investigation.

Sampling

- 6.12 Samples have not been taken where the act of sampling would endanger the surveyor. For example fuse liners within live electrical boxes, brake shoes to lift motors etc., which must be assumed to contain asbestos.
- 6.13 Whilst every effort will have been made to identify the true nature and extent of the asbestos material present in the building to be surveyed, no responsibility has been accepted for the presence of asbestos in materials other than those sampled at the requisite density as detailed in HSG 264.
- 6.14 Bulk samples have been taken from all materials which upon visual inspection appeared likely to contain asbestos with the exception of items of bitumen, plastic, resin or rubber which contain asbestos, the thermal and acoustic properties of which are incidental to their main purpose which falls outside the scope of the Control of Asbestos Regulations 2012.
- 6.15 The asbestos content of textured coatings is low and often inconsistent in its distribution throughout the material. For this reason, despite more than one sample having been taken, subsequent sampling and analysis could reveal differing results. ACM Surveying & Consultancy Ltd cannot therefore be held accountable for any such differences.
- 6.16 Materials have been referred to as Asbestos Insulating Board or Asbestos Cement based upon their asbestos content and visual appearance alone. Density checks on materials have not been carried out unless stated otherwise.

General Limitations

- 6.17 Survey techniques used involves trained and experienced surveyors using the combined approach with regards to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by that survey, this could be due to various reasons:
 - a. Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of this survey.
 - b.

- c. Materials may be hidden or obscured by other items or cover finishes i.e. over boarding, disguising etc. Where this is the case then its detection can sometimes be impaired, however concerted efforts will be made with the client at the project planning stage to discuss any limitations which may be imposed on the inspection. Any limitations will be agreed between ASM and the client prior to the commencement of the inspection.
- d. Asbestos may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.
- e. Debris from previous asbestos removal projects may well be present in some areas; general asbestos debris does not form part of this survey however all good intentions are made for its discovery.
- f. Where an area has previously been stripped of asbestos i.e. plant rooms, ducts etc. and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be The Control of Asbestos Regulations 2012 or other similar subsequent Regulations laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris may be present below new coverings.
- g. This survey will detail all areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or other i.e. working operatives, sensitive location or just simply no access. It may be necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- h. Access for the survey may be restricted for many reasons beyond our control such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given. Our operatives have a duty of care under the Health and Safety at Work, etc Act 1974 for both themselves and others.
- j. In the building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of the survey should be treated with caution and sampled accordingly.

Certain materials contain asbestos to varying degrees and some may be less contaminated at certain locations (Artex for example). Where this is the case the sample taken may not be representative of the whole product throughout.

- k. Where a survey is carried out under the guidance of the owner of the property, or his representative, then the survey will be per his instructions and guidance at that time.

1. ACM Surveying & Consultancy Ltd cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample.

Disclaimer

6.18 Every effort has been made to identify all asbestos containing materials within the building, as defined in the scope of works. However, ACM Surveying & Consultancy Ltd. will not entertain any claims for costs incurred as a result of further asbestos items being discovered at a later date. No liability will be accepted for any pollution or contamination that may be caused during the course of the survey works. It has been assumed at the commencement of the inspection that the site/land is not contaminated.

7.

DEFINITION OF TERMS

7. DEFINITION OF TERMS USED IN ASBESTOS REGISTERS

1. Removal	Complete removal of the material under controlled conditions so as to comply with the Control of Asbestos Regulations.
2. Enclosure	Provision of physical barrier to provide mechanical protection of the material so as to prevent it being disturbed / damaged. The material chosen should be sufficient to achieve its task.
3. Repair	Addition of a seal to the material to prevent the further deterioration and breakdown of the material. Should also be carried out with labelling.
4. Encapsulation	Provision of paint type coating to effect a continuous seal to surface of the material and thereby prevent fibre release. This will only remain effective whilst the seal remains undamaged.
5. Manage	Provision of a policy including regular (periodic) inspection together with procedures, including but not exclusively limited to action should deterioration be observed, as well as training for staff and persons possibly coming into contact with the material. Consideration should also be given to affixing warning labels where appropriate.
6. Labelling	Fixing of labels - standard 'red A' label as per Schedule 2 of the Control of Asbestos Regulations 2012 to the surface of the material to warn of the hazard.
7. Registering	Entering of details, including nature / location / extent of material in a register which is brought to the attention of all persons who might plan or undertake works in the building.
8. Inspection	Inspection of the material at regular (defined) intervals to verify that its condition has not deteriorated such as to necessitate enclosure / encapsulation / removal.

7.1 Where remedial action is required for a particular item or finding such action should be taken at the earliest opportunity so as to minimise potential health risks and should form part a structured management plan for the building in accordance with legislation. These items are either damaged or are liable (by virtue of their location or material type) to be damaged in normal occupation or maintenance of the premises, and therefore pose significant health risk to any persons in the vicinity.

7.2 Risk ratings and recommended actions are provided based on information available at the time of the survey. Where details change, for example change of use of room, affected items or findings must be re-assessed.

APPENDIX A

ASBESTOS REGISTER & SURVEY SHEETS

Asbestos Register

Sir Roberts Farm Garages, Goose Green Lane, Pulborough, RH20 2LW

Date: 16 Jun 2022	Item No: 1	Building: 001	Sir Roberts Farm Garages	
Floor: Roof	Location: Garage roofs x3	Extent: 96	m ²	
Area: External	Description: Asbestos cement sheets to roof			



Recommendation

Manage & monitor condition

Total Risk Score: **6** Low

Surveyors Comment:

Material Assessment		Sample Details	
PT: 1. Asbestos composites (Artex, floor tiles, cement etc.)		<input checked="" type="checkbox"/> Sampled	
EOD: 1. Low damage		Sample Reference: 01/16062022/DAS/003	
ST: 1. Enclosed sprays, lagging & AIB, asbestos cement		Type of Asbestos (TY): 1. Chrysotile (white asbestos)	
		Asbestos Content (ASB): 2. Substantial 2 - 50%	

Priority Assesment Score			
NOA: 0. Rare or N/A	HEP: 0. Rare or N/A	Material Risk Score: 4	Very low risk
LOD: 0. Rare or N/A	MA: 2. Medium	Priority Risk Score: 2	Very low risk

Sir Roberts Farm Garages, Goose Green Lane, Pulborough, RH20 2LW

Date: 16 Jun 2022	Item No: 2	Building: 001	Sir Roberts Farm Garages	
Floor: Ground	Location: Garages x3	Extent: 42	m ²	
Area: External/Internal	Description: Asbestos cement vertical cladding panels			



Recommendation

Manage & monitor condition

Total Risk Score: **6** Low

Surveyors Comment:

Material Assessment		Sample Details	
PT: 1. Asbestos composites (Artex, floor tiles, cement etc.)		<input checked="" type="checkbox"/> Sampled	
EOD: 1. Low damage		Sample Reference: 01/16062022/DAS/004	
ST: 1. Enclosed sprays, lagging & AIB, asbestos cement		Type of Asbestos (TY): 1. Chrysotile (white asbestos)	
		Asbestos Content (ASB): 2. Substantial 2 - 50%	

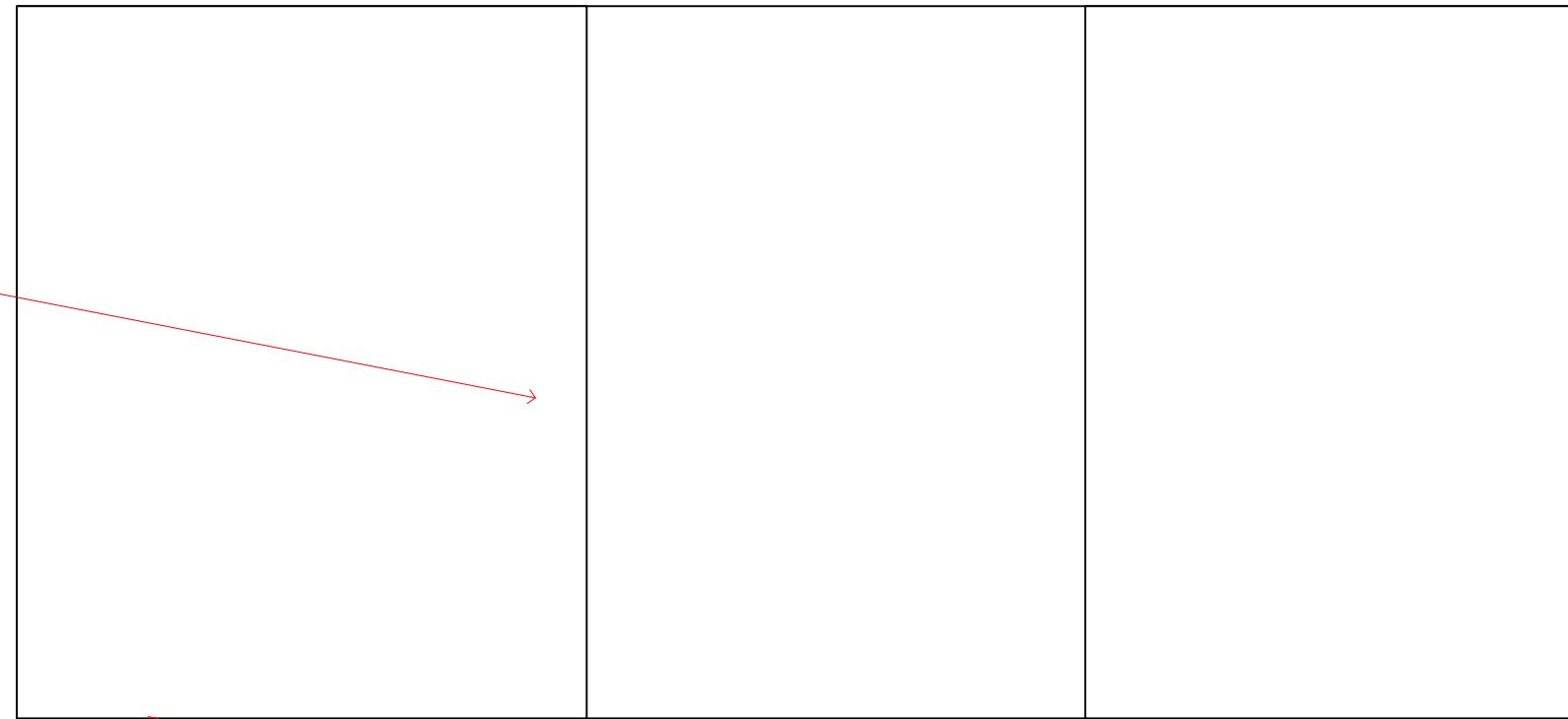
Priority Assesment Score			
NOA: 1. Low disturbance	HEP: 0. Rare or N/A	Material Risk Score: 4	Very low risk
LOD: 0. Rare or N/A	MA: 1. Low	Priority Risk Score: 2	Very low risk

APPENDIX B

ANNOTATED FLOOR PLANS

(Note: item numbers on plans refer
to those detailed in the Asbestos Register)

Item 001
Asbestos cement sheet roof



Item 002
Asbestos cement sheet cladding

 ACM Surveying & Consultancy Asbestos Solutions	Sir Roberts Farm Garages x3 RH20 2LW	
	Annotated floor plan	
NOT TO SCALE	REF: 01/16062022/DAS	Plans 1 of 1

APPENDIX C

ANALYSIS CERTIFICATES



CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

ENV BULK REF:	B0622/161	DATE SAMPLED:	N/A	NO. OF SAMPLES:	2
CLIENT REF:	01-16062022-DAS	DATE RECEIVED:	16.06.2022	SAMPLED BY:	N/A
SURVEY REF:	N/A	DATE ANALYSED:	17.06.2022	ANALYST:	Jack Tandy
CLIENT:		SITE:		DATE REPORT ISSUED:	17.06.2022
ACM Surveying & Consultancy 11 Waterdyke Avenue Southwick West Sussex BN42 4DF		Garages Sir Roberts Farm Goose Green Lane Pullborough West Sussex RH20 2LW		AUTHORISED BY:	Jack Tandy 

* Analyst sample descriptions are outside the scope of our accreditation. The results of analysis relate only to the sample provided. If "Trace Asbestos Identified" is displayed this means analysis identified only 1 or 2 asbestos fibres/bundles in the sample at 2nd stage search using two preparations mounted in suitable RI liquid. Analysis was performed in accordance with HSG248: 'Asbestos: The analysts' guide for sampling, analysis and clearance procedures', and the quality control in-house method of ENV Surveys Ltd. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. ENV Surveys Ltd cannot accept responsibility for any amendments or changes made to this report after issue. ENV Surveys Ltd cannot accept responsibility for any discrepancy or inaccuracy arising from collection or labelling of samples by the client. Samples are retained for 6 months. Reports are retained for 6 years.

SAMPLE NO.	SAMPLE TYPE	LOCATION/DESCRIPTION	ANALYST DESCRIPTION	ASBESTOS FIBRE TYPES	COMMENTS
Sample 3	Scraping	x3 Garages, cement roof sheets	Cement	Chrysotile (White) asbestos	
Sample 4	Scraping	x3 Garages, vertical cladding panels	Cement	Chrysotile (White) asbestos	

APPENDIX D

TYPES OF SURVEY & SURVEY METHODOLOGY

D. HSG 264 – TYPES OF SURVEY

D.01 Management survey

The purpose of the survey is to locate, as far as is reasonably practicable, the presence and extent of any *suspect* ACM's in the building and assess their condition. This survey normally involves the collection of representative samples for the presence of asbestos. Samples from each type of ACM found are collected and analysed to confirm or refute the presence of asbestos. If the material sampled is found to contain asbestos, other similar homogenous materials used in the same way in the building can be strongly presumed to contain asbestos. Less homogenous materials will require a greater number of samples. The number should be sufficient for the surveyor to make an assessment of whether asbestos is or is not present in accordance with DETR guidance. Sampling may take place simultaneously with the survey, or in the case of some larger surveys, can be carried out as a separate exercise. Materials may also be presumed to contain asbestos, which essentially defers the need to sample and analyse for asbestos (or the absence thereof) until a later time (e.g. prior to demolition or major refurbishment). However, the duty holder bears potential additional costs of management for some non-asbestos materials.

All areas should be accessed and inspected as far as is reasonably practicable (e.g. above accessible false ceilings, inside risers, service ducts etc, or must be presumed to contain asbestos if not inspected. Any material, which can reasonably be expected to contain asbestos, must be presumed to contain asbestos, and where it appears highly likely to contain asbestos, there should be a strong presumption that it does. All materials, which are presumed to contain asbestos, must be assessed.

This form of inspection is predominately used to conform to the legislative requirement of managing asbestos in buildings. It inspects, samples, quantifies, reports and recommends on accessible asbestos products identified that will usually be deemed accessible by day-to-day occupation i.e. that any employer would have to manage as part of the regulations.

This inspection may not identify all asbestos present as many applications can be concealed by nature of their location, which are not accessible without intrusive means. As such it should not be utilised for *any* refurbishment, renovation or demolition projects, unless used as a pre-cursor prior to the required intrusive investigation.

D.02 Refurbishment or Demolition Survey

This type of survey is used to locate and describe, as far as is 'reasonably practicable', all ACM's in the building and may involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A full sampling programme is undertaken to identify possible ACM's and estimates of the volume and surface area of the ACM's made. The survey is intended for use as a basis for tendering the removal of ACM's from the building prior to demolition or major refurbishment. Accordingly, the survey does not assess the condition of the asbestos, other than to note areas of damage or where additional asbestos debris may be expected to be present

This form of inspection is to be utilised prior to *any* planned refurbishment, renovation or demolition whether it be a whole site, building or parts thereof. It is a requirement under the Construction (Design & Management) 2007 Regulations and as part of the 'building controllers' responsibility in accordance with the Control of Asbestos Regulation 2012.

This inspection may not identify all asbestos materials even though it is intrusive in nature, as asbestos applications are known to exist in parts of any given building that are inaccessible without demolition and as such are not possible to identify within any survey.

This inspection is intrusive by its nature to gain the required access to parts of the building, therefore damage to décor, fixtures and fittings, but not limited to these parts may be disturbed during the investigation.

D.04. SURVEY METHODOLOGY

D.04.1 The surveys conducted by ACM Surveying & Consultancy Ltd will involve thorough inspection of all accessible parts of a building to which we are able to gain safe access; sampling and testing depending on the type of survey being instructed by the 'client' (or nominated representative) of all suspect materials for asbestos and the provision of a report or similar document which must be wholly read in conjunction with all elements. I would like to draw your attention to the fact that as highlighted within each form of inspection asbestos may still remain undiscovered within any given building or parts thereof and therefore should this be identified at a later stage after our services / involvement have finished that ACM Surveying & Consultancy Ltd should be consulted in the first instance to advise as necessary in accordance with legislation. Should this not be done we would accept no liability should any costs, time or further implications that may arise at a later stage through inappropriate use of the report, documented or otherwise. Should intrusive investigation be undertaken damage will occur to the building or parts thereof by the nature of the inspection, if certain areas are not itemised as not to be inspected all parts will be subjected to such destructive measures and ACM Surveying & Consultancy Ltd cannot be held liable for any damage.

D.04.02 Undertake inspection of site as follows:

- a. Carefully check all spaces in the building(s) or area(s) to be inspected where safe access is granted in a systematic manner. Devise a methodical order applicable to the site and inspect walls, partitions, ceilings, floors, beams, ducts, risers, plant and equipment;
- b. Identify the suspected asbestos containing building materials. All materials not readily identifiable as non-asbestos should be considered suspect until the results of sampling prove otherwise;
- c. Group these materials into homogeneous sampling areas, uniform in texture, colour, and which in all other respect appear identical. Materials which appear to have been installed at different times or if there is any other reason to suspect that materials may be different then the materials must be allocated to different sampling areas,;
- d. Identification of suspect materials and selection of homogeneous sampling areas are by their very nature subjective processes. If there is any doubt the material must be considered suspect or allocated a separate sampling area as appropriate;

D.04.3 Prepare and annotate sketch plans if provided

D.04.4 Determination of the number of samples to be taken is accordance with the guidelines laid out in HSG 264.

D.04.5 Determination of the locations from where samples will be taken is dependent upon the nature of the material but should be chosen so as far as is possible the sample will be representative of the area and that personal bias is avoided.

D.04.6 Samples will then be collected using the techniques set out in HSG 264.

D.04.7 All information will be recorded on standard sample report forms, which details the location, condition nature and extent of the material from where

the sample was taken together with the unique reference number and the results of sample analysis.

D.04.8 A mathematical algorithm is generated based upon all the factors giving give rise to fibre release, which can be assessed at the time of inspection. The algorithm and definitions are given in Section 4. Use of this algorithm produces uniformity between surveyors and of sites' surveyed leading to a more precise product.

D.04.9 Whilst on site, we will make every effort to establish the full extent of asbestos materials within the limits defined for inspection / survey / intrusive survey. However where access has been limited by presence of either 'hazards', refusal of access by tenant or similar, or there are parts present of which we have no knowledge, we will not be able to inspect these parts and thus cannot report on any asbestos that may be present in such parts. These parts will, where possible, be detailed in the areas excluded from inspection / survey within the written report.

D.04.10 The criteria for sampling of suspected asbestos materials are in accordance with HSG 264 'Asbestos: The Survey Guide' and are as follows:-

- a. Sprayed Coatings: Two samples should be sufficient if taken at either end of the sprayed surface unless the installation is particularly large or there are areas of repair.
- b. Pipe/thermal insulation. For individual pipe runs or boilers/vessels two samples may be sufficient although if most of the insulation is apparently non-asbestos it may require a higher rate of sampling. In such situations one sample per 3 metre run of pipe lagging (or one sample per 6 metres for runs over twenty metres) will usually be sufficient. In addition particular attention should be paid to pipe-elbows, taps and valves.
- c. Insulating board. One sample per room or every 25m² is usually adequate. If there is evidently more than one type of panels then representative samples of each should be taken.
- d. Asbestos Cement Products. Unless there are obvious differences between sheets, pipe runs etc. one sample of each type of sheet or product should be taken.
- e. Asbestos ropes, yarns, cloth, millboard and paper products: One sample from each location should be sufficient.
- f. Textured coatings: At least two samples should be taken in different areas of the ceiling or coated areas as the material is unlikely to be uniform in content.
- g. Thermo-plastic floor tiles, sealants and mastics. One sample from each different type/colour of suspect tile used.
- h. Bitumen roofing felt, damp proof course, gutter lining and flashings. One small sample per roll or run of material.
- i. Only one sample of each type of debris found in any one functional space will be taken.

APPENDIX E

ASBESTOS MATERIALS IN BUILDINGS

E. ASBESTOS MATERIALS IN BUILDINGS

E.01 Sprayed coatings applied in the UK were typically a mixture of hydrated asbestos cement containing up to 85% asbestos, mainly amosite but crocidolite and mixtures have been used. Primarily used for anti-condensation and acoustic control and fire protection to structural steelwork. It is a friable material and is likely to release fibres, especially if disturbed during repair and maintenance work. As it ages the binding medium of sprayed asbestos may degrade with the consequent release of more fibres.

E.02 Thermal insulation to boilers, vessels, pipework, valves, pumps etc also known as lagging. Lagging may have a protective covering of cloth, tape, paper, metal or a surface coating of cement. All types of asbestos may be found in lagging and the content can vary from 1% to 100% asbestos. The likelihood of fibre release depends upon its composition, friability and state of repair, but it is particularly susceptible to damage and disturbance through maintenance work or the action of water leaks.

E.03 Asbestos insulating boards usually contain between 16 to 40% Amosite (brown) asbestos, although boards may be found to contain other types of asbestos and in other quantities. Insulating boards were developed in the 1950s to provide an economical, lightweight, fire resisting insulating material. As insulation board is semi-compressed it is more likely to release fibres as a result of damage or abrasion than typically occurs with cement. Work on Asbestos Insulation Board can give rise to high levels of airborne asbestos fibres.

E.04 Asbestos cement products generally contain 10 to 15% of asbestos fibre bound in a matrix of Portland Cement or autoclaved calcium silicate. Three types of asbestos have been used in the manufacture of asbestos cement. The asbestos fibres in asbestos cement are usually firmly bound in the cement matrix and will be released only if the material is mechanically damaged or as it deteriorates with age.

E.05 Ropes, yarns and cloths are usually high in asbestos content, approaching 100%. They were used as packing, caulking or gasket materials where thermal or fire protection was required. The risk of fibre release depends upon the structure of the material. Bonded gasket material is unlikely to release asbestos but an unbonded woven material may release fibres when in use, especially if damaged or frayed.

E.06 Millboard, paper and paper products are usually high in asbestos content, approaching 100%, and may contain any combination of the three most common types of asbestos. They were used for insulation of electrical equipment and for thermal insulation, asbestos paper has been used as fireproofing to wood fibre panels. These materials are not well bonded and will release asbestos fibres if subject to abrasion and wear.

E.07 Bitumen felts and coatings may contain asbestos either bound in the bitumen matrix or as an asbestos paper liner.

- E.08 Reinforced plastics, floor tiles and flooring linoleum may contain asbestos either bound in the matrix or as an asbestos paper liner. These materials may not present a hazard during normal use, but should be removed and disposed of carefully by a licensed asbestos contractor.
- E.09 Textured coatings and paints or 'Artex' may contain small amounts of asbestos, which may be unevenly distributed throughout the material. A risk of exposure to airborne fibres may arise if such materials are sanded etc.
- E.10 Mastics, sealants, putties and adhesives may contain small amounts of asbestos. A risk of exposure to airborne fibres may arise if such materials are sanded.