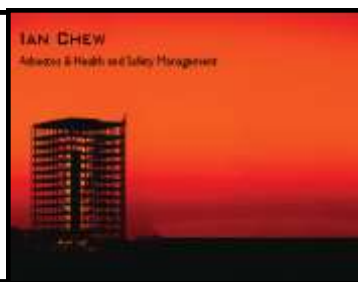


Ian Chew
Asbestos and
Health & Safety Management



23 Broadbent Close, Carrbrook, Stalybridge, Cheshire
SK15 3LJ

Asbestos Survey Report
Premier House
Deansgate, Manchester



Survey carried out

18th March 2021

Report Release Sheet for the Survey of

**Beams and Columns
Premier House
Manchester**

Report No. IC21148

Date of Issue: 22nd March 2021

Survey Type: Refurbishment

Survey Location: 1st & 2nd Floor

Date of Survey: 18th March 2021

Report Prepared by:



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Ian Chew

Asbestos Survey Report
for

Beams and Columns
Premier House
Manchester

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SECTION 1

Survey Results

Note: The appendices at the end of this report contain important relevant information. No section of the report should be read in isolation, and no conclusions drawn without considering the report in its entirety.

1.1 EXECUTIVE SUMMARY

- 1.1.1.** This asbestos survey is not intended to form the basis for a tender for asbestos removal. Any contractor should satisfy themselves as to the full extent of and the difficulties of gaining access to any identified asbestos containing materials (ACMs). Please also note that any priority assessments reported are not normally part of the survey but are given to assist in the formulation of any future management plan. This is normally initiated by the person responsible for the management of the asbestos material and not the surveyor. Any priority assessment scores that may be given are provisional and based on the surveyor's assessment at the time the survey was carried out. As the survey takes place over a relatively short period, there will not be sufficient time to form an accurate assessment of factors such as normal occupancy or activity levels.
- 1.1.2.** The Concrete Beams and Columns within the property known as Premier House, Deansgate, Manchester were surveyed by Ian and Joe Chew on 18th March 2021. The survey conforms to the requirements of HSG264 for a Refurbishment Survey and the methodology as laid out in the company procedures. Sampled material is sent to a UKAS accredited laboratory for subsequent analysis.
- 1.1.3.** The survey identified the following types of asbestos:
- No Additional Asbestos Detected**
- 1.1.4.** Priority assessments have not been carried out as no additional asbestos was detected.

1.2 DESCRIPTION OF THE SITE

- 1.2.1** The building is a brick and concrete former office building situated above retail units at the northern end of Deansgate in Manchester.
- 1.2.2** The areas surveyed were the concrete beams and columns as notified on supplied drawings prior to the carrying out of needle chiselling. This is to be carried out to several areas on the first and second floors of the building.
- 1.2.3** An asbestos survey has already been carried out and will be referred to within this report. The prior survey should be read and understood prior to any works commencing.

1.3 RESULTS AND RECOMMENDATIONS

- 1.3.1** No additional asbestos was located over and above the materials located in the survey previously carried out.
- 1.3.2** The concrete columns investigated were covered with a plaster finish and / or timber and mesh / plaster boxing to pipes that were attached to the columns. The slab above and below the columns is concrete and the internal partition materials where present is plasterboard and rockwool.
- 1.3.3** Ceiling coverings are either plaster over pot and beam or plasterboard layer sitting a few inches below the concrete / pot and beam.
- 1.3.4** Floors are carpeted over concrete to the offices. The stairwells and WCs however, have a layer of asbestos containing floor tiles and tile adhesive. If the chiselling works are to be in an area that has vinyl floor tiles, they must be removed prior to the works, along with the adhesive.
- 1.3.5** There are several riser doors that have asbestos insulation board panels to the interior. These should either be removed or wrapped in visqueen and closed prior to the works to avoid accidental damage.
- 1.3.6** The exterior walls (below the glazed windows) have asbestos insulation board panels to them including to the rear of the heaters to the front and rear elevations of each floor of the building. These panels butt up to the concrete columns and may be disturbed by vibration during the chiselling. Methods to monitor possible fibre release should be put into place during the works (daily background air monitoring) and if the control limit is exceeded, the work should be halted. Personnel should wear appropriate PPE / RPE whilst working.
- 1.3.7** In the area adjacent to column C3 (noted in the previous asbestos survey as areas 1.32), there are broken pieces of asbestos insulation board (items 81 & 82 in the previous survey). This should either be removed or the immediate area surrounding this debris should therefore be marked / sealed off and avoided to prevent any disturbance.
- 1.3.1** Areas of the building that were not accessed may contain other suspect materials. It is important that any major refurbishment or any areas outlined for use that were previously unused, should proceed with caution. Hidden materials may still be present and any planning should account for this fact.

SECTION 1.4.0 ASBESTOS REGISTER

SECTION 1.4.0.1 ASBESTOS PRODUCTS GROUPED BY AREA

The assessment scores recorded here are provisional and represent the observations taken at the time of survey

No Additional Asbestos Detected

1.5 Sample Location Photographs and Risk Assessments

1.5.1 Material Risk Assessments

1.5.1.1 Risk Assessment

Airborne asbestos fibres are recognised as being a serious health risk when inhaled. The risk of fibre release is partly as a result of the material itself, and partly as a consequence of human activities. The risk assessment, logically then, has two components. The Material Risk Assessment, this assesses the risk represented by the material itself, and the Priority Assessment, this is an ongoing evaluation of the activities in the vicinity of the asbestos that may cause fibre release. It is always best to look at the Priority score for any given situation. The score presented in this report is a provisional one based on a single observation, and therefore must be revised periodically by the duty holder.

1.5.1.2 Material Assessments

HSG264 recommends the use of a simple algorithm or formula to take into account the main influencing factors that affect the release of asbestos fibres. The airborne fibres are the main cause of concern and exposure to them will have serious medical consequences. This method applies a numeric score to each factor so that the relative risk can be estimated. These scores are added together and the result is a Material Assessment that can be used to evaluate different materials. The main elements of this, as suggested by HSG264 are:

Product Type
Extent of damage or deterioration
Surface Treatment
Asbestos Type

Each of these parameters is assigned a score within the range of 0-3 and then added together to produce the final result. The score represents an evaluation of the product and it is possible that two people could arrive at a slightly different result.

1.5.1.3 Materials with a score of 10 or more represent a high risk with significant potential to release fibres. A score of 7 to 9 represents a medium risk. A score of 5 to 6 represents a low risk. A score of 4 or less represents a negligible risk. The scores are assigned along the following guidelines.

1.5.1.4 Product Type

Score 1 – Asbestos reinforced composites (e.g. plastics, resins, mastics, roofing felts, vinyl floor tiles, decorative finishes, asbestos cement etc.)

Score 2 – Asbestos Insulating Board, mill board, other low-density insulation boards, asbestos textiles, gaskets, woven textiles, asbestos paper and felt.

Score 3 – Thermal Insulation (e.g. Pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos packing.

1.5.1.5 Extent of Damage / Deterioration.

Score 0 – Good Condition, no visible damage

Score 1 – Low Damage, a few surface scratches or surface marks, broken edges etc.

Score 2 – Medium Damage, significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.

Score 3 – High Damage, delamination of materials, sprays and thermal insulation, visible asbestos debris.

1.5.1.6 Surface Treatment

Score 0 – Composite materials containing asbestos, reinforcing plastics, resins, vinyl tiles.

Score 1 – Enclosed sprays and lagging, asbestos insulation board (with exposed face painted or encapsulated) asbestos cement sheets etc.

Score 2 – Unsealed asbestos insulation board, encapsulated lagging and sprays.

Score 3 – Unsealed lagging and sprays.

1.5.1.7 Asbestos Type

Score 1 – Chrysotile (white)

Score 2 – Any amphibole asbestos excluding crocidolite.

Score 3 – Crocidolite (blue)

1.5.2 Priority Assessments

1.5.2.1 The material assessment gives an indicator of the materials which will most readily release fibres if disturbed. It does not follow that those with the highest score must be given the highest remedial priority. The other factors that can cause fibre release and which must be taken into account for the Management Plan are:

Maintenance Activity
Occupant Activity
Likelihood of Disturbance
Human Exposure Potential

The priority assessment is normally carried out on a periodic basis (often 1, 6 or 12 monthly intervals) by the duty holder and does not form part of the standard asbestos survey. It is only relevant for a type 2 asbestos survey where there is a requirement for an ongoing management plan. A type 3 asbestos survey precedes major refurbishment or demolition projects and as asbestos is normally removed at this time, the ongoing management is not a consideration. There are situations where the surveyor will perform, if requested, a provisional priority assessment in order to facilitate the initial drafting of the management plan. The priority assessment ratings will vary over time, reflecting any changes in usage or condition of the areas containing the asbestos material. The priority assessment is normally carried out periodically by the Duty Holder as there can be considerable variations to the risk as usage of the area or circumstances change.

- 1.5.2.2** A combined score of 17+ (Category A) warrants urgent consideration as at this level there is almost a certainty of asbestos fibre exposure. The exposure may not be uniform, but immediate steps should be taken to seal or isolate the area and plans made to remove the asbestos.
- 1.5.2.3** A combined score of 13 to 16+ (Category B) warrants urgent consideration as at this level there is almost a certainty of asbestos fibre release. The exposure may not be uniform, but immediate steps should be taken to seal or isolate the area and plans made to remove the asbestos. An inspection interval of 6 months is suggested and immediate steps taken as soon as any damage or deterioration is noted.
- 1.5.2.4** A combined score of 8 to 12 (Category C) does not pose an immediate risk as the likelihood of asbestos fibre release is low under prevailing conditions. An inspection interval of 12 months is appropriate to monitor any damage or deterioration and for any change in circumstances.
- 1.5.2.5** A combined score of less than 8 (Category D) represents an area of low priority. It should still be monitored on a regular basis to flag up any change of circumstance or condition.

Non-Asbestos Products



Plaster to Column C1



Plasterboard and Rockwool adjacent to the Top of Column C1



Concrete and Plaster to Beam at Top of Column C1



Timber with Mesh and Plaster to Front of Column C2



Non-Insulated Pipe in Boxing to Column C2



Concrete and Plaster to Beam at Top of Column C2



Timber Boxing to Base of Column C2



Plaster over Concrete to Column C3



Rockwool and Timber to Top of Column C3



Concrete and Plaster with Timber Skirting to Base of Column C3



Concrete and Plaster to Top of Column C4



Mesh and Plaster to Base of Column C4



Concrete and Plaster to Column C4



Timber Boxing to Column C5



Concrete and Plaster to Column C5



Timber and Plaster Boxing to Column C6



Plaster to Beam and Timber Boxing to Top of Column C6



Mesh and Plaster with Timber Boxing to Base of Column C6



Concrete and Plaster to Top of Column C6



Concrete and Plaster to Column C7



Concrete and Plaster to Column C7



Concrete and Plaster to Column C7 (Plasterboard and Rockwool to Partition)



Plasterboard to Ceiling at Top of Column C7



Concrete and Plaster to Column C8



Timber Boxing to side of Column C8



Plasterboard to Ceilings below L02 Slab



Plasterboard to Ceilings below L02 Slab



Plaster to Beams above Windows

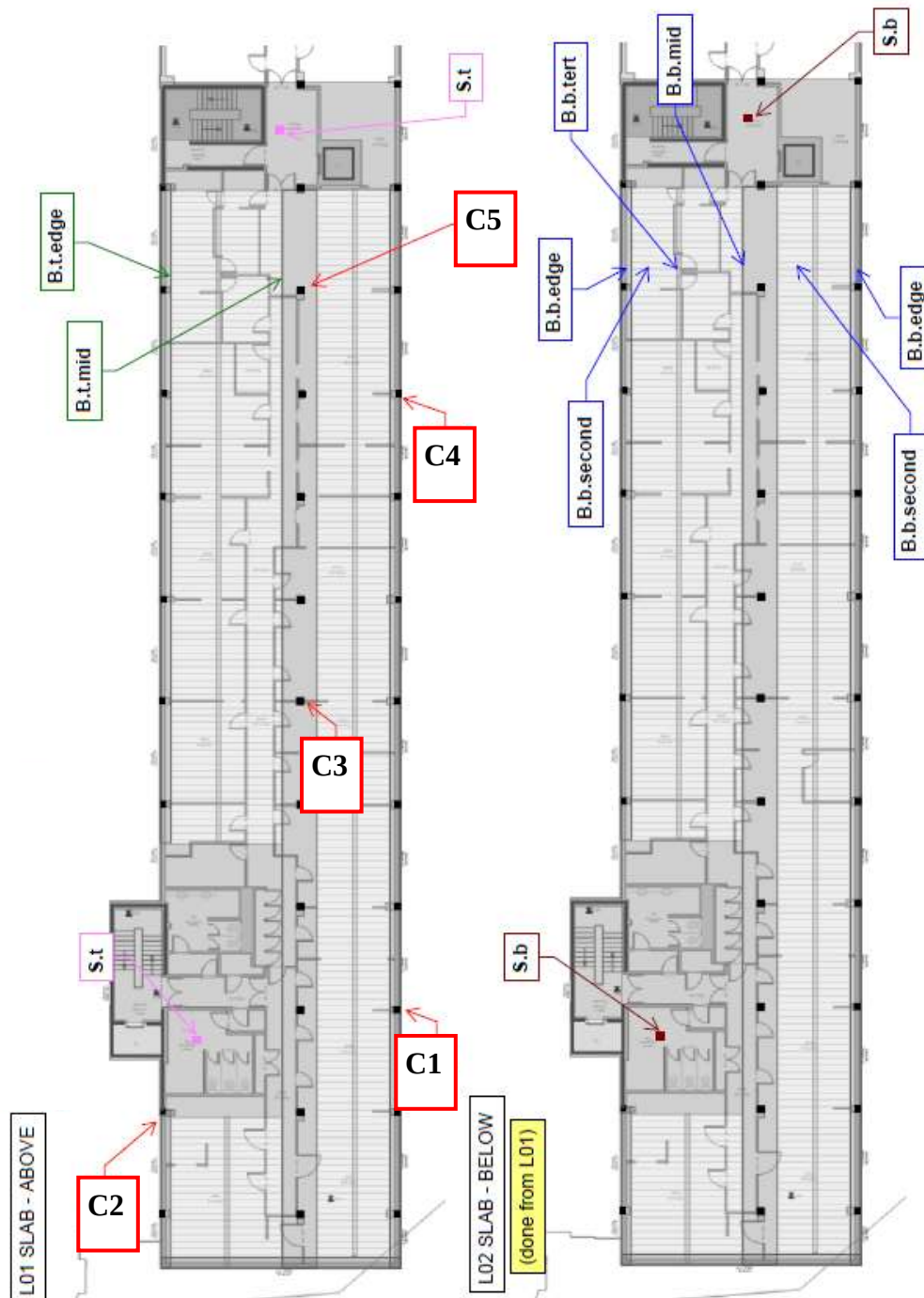


Pot and Beam to L03 Slab

1.8 - Information on Asbestos Survey and Non-Accessible Areas

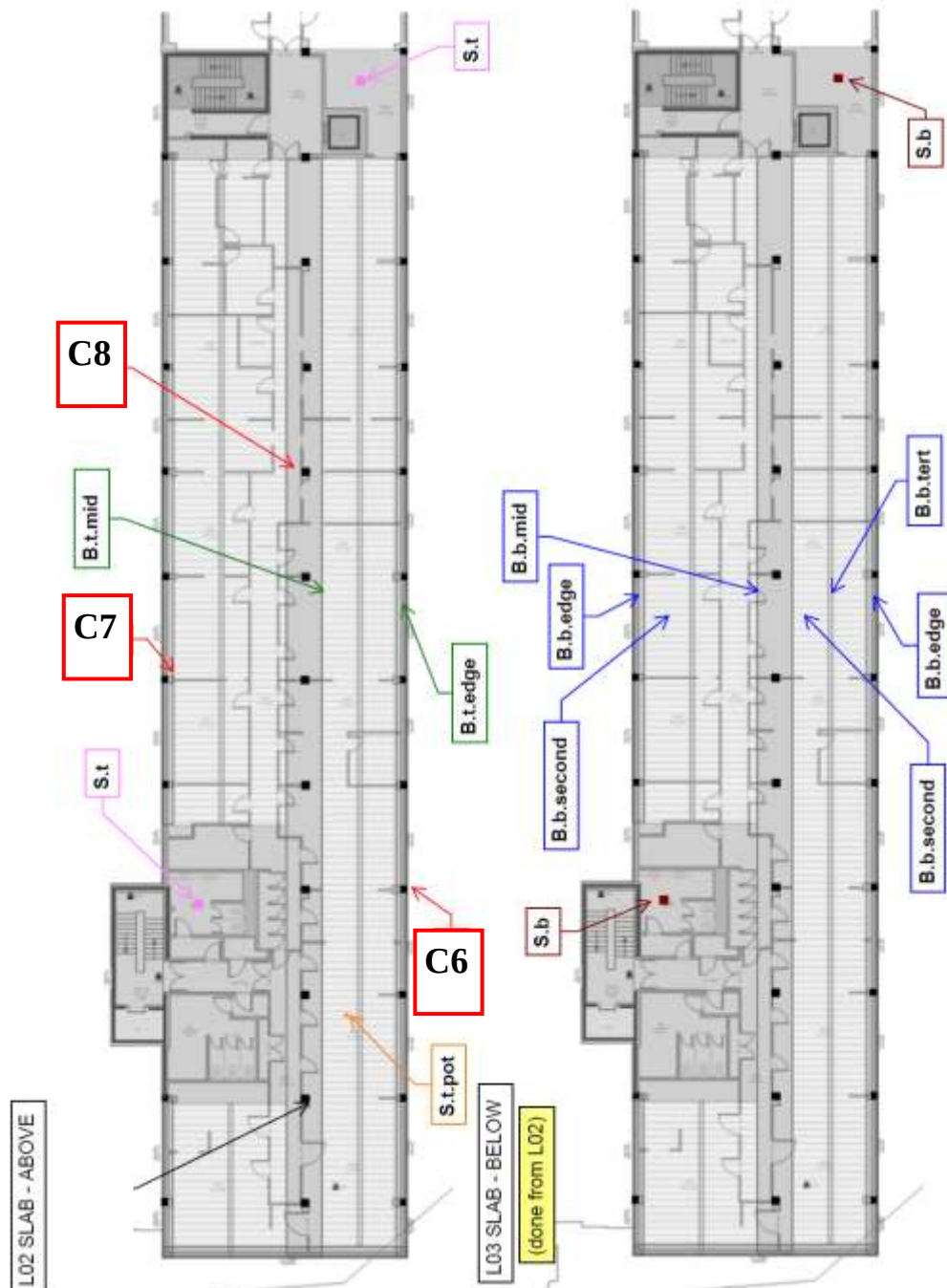
- 1.8.1** The following is a summary of the typical areas of possible asbestos occurrences that could be extremely difficult or impossible to detect with conventional methodology along with areas where access was not available.
- 1.8.2** Wall Cavities – These may be completely bricked in or blocked and otherwise obstructed. Under floor voids present beneath floors are visually checked.
- 1.8.3** Non-Asbestos insulated pipes and vessels. – e.g. Glass Fibre, Cork, Organic or Man Made Mineral Fibre, Polystyrene etc. It is not always possible to identify any residual asbestos on re-insulated pipes without removing large sections of the new insulation. Exposed sections of pipes however, were inspected and samples taken where appropriate. A presumption has therefore been made regarding the balance of the pipework.
- 1.8.4** Electrical Boxes and Equipment – Live systems cannot be checked for obvious safety reasons. Flash pads and fuses were therefore only sampled where the electrical cabinets had been disconnected.
- 1.8.5** Trunking, Flange Gaskets and Ducts – Trunking and Flange Gaskets are not always visible unless the trunking is disassembled. The interior of trunking and ducts are checked as far as possible through existing hatches and access points. A risk assessment will be made before entering confined areas such as ducts.
- 1.8.6** External areas, shuttering and debris – External areas will only be checked if safe access can be provided. Shuttering may be concealed behind decorative finishes. Small areas of debris may have been painted over after previous removal works. This has been a common practice. Small debris is difficult to find and may be present in any location.
- 1.8.7** Mechanical Equipment; hoist machinery etc. – This is visually checked
- 1.8.8** Columns and Decorative Ceilings – Samples were taken where appropriate.
- 1.8.9** Asbestos lying behind known asbestos – This could be asbestos lagging applied behind asbestos tiles or boards. The asbestos tiles or boards are not normally disturbed during sampling, other than to take a sample.
- 1.8.10** Fire and Security – Fire integrity will always be preserved and thus fire doors are not normally sampled.
- 1.8.11** Representative Sampling – The number of samples taken will depend on the types and quantities of materials found on site. It was necessary to sample materials which were later found to be non-asbestos. It is also possible to find isolated occurrences of asbestos, such as where an asbestos compound has been used to repair non-asbestos pipe lagging.
- 1.8.12** Roof Voids – Where access was possible, the survey is carried out within the roof voids.

Location Plan - First Floor Premier House, Manchester



Not to Scale

Location Plan - Second Floor Premier House, Manchester



Not to Scale

Appendix

Standard Terms and Methodology

1.1 Summary

- Please read the report in its entirety and do not rely on a specific section as a stand-alone viewpoint.
- Additional Asbestos Containing Materials (ACM's) were not found to be present in any areas.
- During demolition work other ACM's may be discovered. The selected contractors, supervisors and management team should have a coherent strategy and risk assessment that allows for such an eventuality.
- Electrical equipment, sealed fire doors, high level heaters, heating air conditioning plant, substations etc. may be present on site. These may contain asbestos in varying forms. These should be handled carefully by a licensed contractor and disposed of as asbestos waste unless shown to be otherwise.
- Risk assessments, where required, are carried out with reference to HSG264 and HSG227 as amended.

1.2 Report Format

All individually referenced samples are returned to a UKAS accredited laboratory where they are cross referenced with survey details and catalogued for storage. Analysis is carried out by qualified analysts in accordance with HSG248. Product 'make up' is reported in both asbestos free and asbestos containing materials. For asbestos containing materials the estimated percentage of asbestos, type (chrysotile, amosite and crocidolite) is reported. The results are reported in the form of certificates of analysis held in section 5 of this report. Non-asbestos containing materials are reported based on both visual assessment and laboratory analysis. If analysis results in No Asbestos Detected (NAD) these samples are reported along with photography that has been carried out to assist in the sample location sites. It should be noted however that photographs do not always show the sample point. Section 3 of the report is the documented photographic record of the survey and also serves as a recording system for risk assessment.

1.3 Asbestos Containing Materials in Buildings.

- 1.3.1** 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 also been used. Primarily for anti condensation and acoustic control and fire protection of 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.
- 1.3.2** 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 between 15% to 100% asbestos. The likelihood of fibre release depends on the composition of the material, its friability and state of repair. It is particularly susceptible to damage and disturbance through maintenance work or the action of water leaks.
- 1.3.3** Asbestos insulation boards usually contain between 15% and 40% amosite (brown) asbestos, although boards may be found to contain other types of asbestos and in other quantities. Insulation boards were developed in the 1950s to provide an economical, lightweight, fire resisting material. As insulation board is semi compressed, it is more likely to release fibres as a result of damage or abrasion. Work on asbestos insulation board can give rise to high levels of asbestos fibre.
- 1.3.4** Asbestos cement products generally contain 10% to 15% of asbestos fibres bound in a matrix of Portland cement or autoclaved calcium silicate. All 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 only be released if the material is mechanically damaged or deteriorated with age.
- 1.3.5** Ropes, yarns, and cloths are usually high in asbestos content, approaching 100% and all three types of asbestos have been used in their manufacture. They were used as caulking, packing or gasket materials where the thermal properties were used as fire protection. The risk of fibre release depends on the structure of the materials. Bonded gasket material is unlikely to release fibres but an unbounded woven material may release fibres when in use especially if damaged or frayed.

- 1.3.6** Millboard, paper and paper products are usually high in asbestos content, usually approaching 100% and all three types of asbestos have been used in their manufacture. They were used for insulation in of electrical equipment and for thermal insulation. Asbestos paper has been used for fireproofing to wood fibre panels. These materials are usually not very well bonded and will release fibres if subject to abrasion and wear.
- 1.3.7** Bitumen felts and coatings may contain asbestos either bound in the bitumen matrix or as an asbestos paper liner. These materials are not likely to present a hazard during normal installation or use, but should be removed and disposed of carefully at the end of their useful life.
- 1.3.8** Reinforced plastics and floor tiles may contain asbestos either bound in the matrix or as an asbestos paper liner. These materials are not likely to present a hazard during normal installation or use, but should be removed and disposed of carefully at the end of their useful life.
- 1.3.9** Textured coatings and paints may contain a small amount of asbestos i.e. Artex. Non wettable materials containing asbestos should not be removed without special precautions. Mastics, sealants, putties and adhesives also may contain asbestos in small amounts. The only possible risk is from sanding of the hardened materials. Where appropriate, precautions should be taken (full condition removal)

1.4 Legislation and Codes of Practice

Legislation, Approved Codes of Practice (ACOPs) and Guidance Notes dealing with asbestos for England and Wales include (but not exclusively) those listed on the following pages. Equivalent documentation exists for Scotland and Northern Ireland respectively.

- All Legislation, ACOPs, and Guidance Notes listed together with any subsequent amendments or revisions and any new relevant requirements should be considered before undertaking any work with asbestos or asbestos containing materials.
- The following Legislation ACOPs and guidance notes deal primarily with asbestos. Other legislation dealing with health and safety matters have not been listed here although such legislation still applies to work with asbestos and should be considered at all times.

The following list was last revised in November 2018:

LEGISLATION

- A. The Health & Safety at Work etc. Act 1974
- B. Control of Asbestos Regulations 2012, and subsequent amendments
- C. Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 2013
- D. Management of Health and Safety at Work Regulations 1992
- E. Workplace (Health, Safety and Welfare) Regulations 1992
- F. Personal Protective Equipment at Work Regulations 1992
- G. Provision and use of Work Equipment at Work Regulations 1998
- H. Construction (Design and Management) Regulations 2015
- I. Carriage of Dangerous Goods (Classification, Packaging and labelling) and Use of Transportable Pressure Receptacles Regulations 1996
- J. Carriage of Dangerous Goods by Road Regulations 1996
- K. Carriage of Dangerous Goods by Rail Regulations 1996
- L. Asbestos (Prohibitions) Regulations 1992
- M. The Health and Safety (emissions into the Atmosphere) Regulations 1983
- N. The Health and Safety (Fees) Regulations 1989
- O. Control of Substances Hazardous to Health Regulations 1994

CONTROL OF POLLUTION ACT 1974

- A. Environmental Protection (Duty of Care) regulations 1991
- B. Waste Management Licensing Regulations 1994
- C. Controlled Waste Regulations 1992
- D. Controlled Waste (Regulations of Carriers and Seizure of Vehicles) Regulations 1991
- E. Environmental Protection (Prescribed Processes & Substances) Regulations 1991

APPROVED CODES OF PRACTICE

- A. The Control of Asbestos Regulations 2012 L143 (2013 Edition)
- B. Waste Management. The Duty of Care. A Code of Practice (1991)
- C. Respiratory Protective Equipment, a practical guide to users (1990)
- D. Respiratory Protective Equipment, Legislative requirements and lists of HSE approved standards and type approved equipment, fourth Edition (1995)

Selecting respiratory protective equipment for work with asbestos, INDG264

HEALTH AND SAFETY EXECUTIVE GUIDANCE NOTES

ENVIRONMENTAL HYGIENE SERIES

- A. EH 10 ASBESTOS: exposure limits and measurements of airborne dust concentrations (revised 1995)
- B. EH 57 The problems of asbestos removal at high temperatures (December 1992)

MEDICAL SERIES

- A. MS 5 LUNG function (July 1977)
- B. MS 6 Chest x-rays in dust diseases (September 1980)
- C. MS 13 Asbestos (1999)

HEALTH AND SAFETY GUIDANCE SERIES

- A. HSG 247 The Licensed Contractors Guide
- B. HSG 210 Asbestos Essentials Task Manual
- C. HSG248 Asbestos: The analysts' guide for sampling, analysis and clearance procedures
- D. HSG264 Asbestos: The Survey Guide
- E. HSG 53 The selection use and maintenance of respiratory equipment

1.5 Methods of Bulk Sample Analysis

Analysis of the samples will be carried out using methods as described in the Testing Laboratory Document. All techniques used will be in strict accordance with the HSE document HSG248. A polarised light microscope (PLM) will be used for sample identification. Identification of asbestos fibres will be based on the following analytical procedure: A preliminary visual examination of the whole of the bulk sample is made to assess the sample type and the required sample treatment (if any). Where possible, a representative sub sample treatment may be taken at this stage. Sample treatment (if required) is undertaken to release or isolate fibres. A detailed and thorough search under the microscope is made to classify the fibre types present. Representative fibres are mounted in appropriate RI liquids on microscope slides. The different fibrous components are identified using PLM.

1.6 Health and Safety Statement.

All sampling will be undertaken with care to ensure that possible nuisance and potential risk to health of site visitors are reduced to minimum levels. As required under the Control of Asbestos at Work Regulations 2012, dust release in sampling must be reduced to as low a level as is reasonably practicable. An assessment in respect of likely dust release will dictate the need for precautionary measures. These may include the following:

- Use of Personal Protective Equipment
- Isolation of sampling area
- Wetting of material to suppress dust release
- Appropriate cleaning process following sampling

After sampling, any broken material with potential to cause airborne dust will be sealed and any remaining dust or debris will be removed by wet wiping or by using an approved 'Type H' vacuum cleaner. Immediately after collection, samples will be double sealed in suitable containers that will not release dust when subsequently handled. Any disposable material used in sampling, or dust created whilst sampling, will be treated as contaminated by asbestos. Sampling will not impair the structural integrity of the building or plant. Air monitoring may be appropriate in certain sampling situations for reassurance purposes. All high-level location sampling that requires the use of an extension ladder will only be undertaken when the ladder base has been securely fixed either by ties or by additional staff.

1.7 Types of Survey Method

Management: Standard Sampling and Assessment Survey

The survey will be conducted by means of visual inspection and subsequent sampling of suspect bulk materials. Where the surveyor suspects a material to contain asbestos, a sample will be taken for analysis. The samples taken will be chosen as being representative of the material under investigation. Therefore,

visually similar areas should be regarded as being of uniform composition. Samples will be taken using a sharp knife, a cork borer, or a hand drill and will be collected in self-seal plastic bags. The sample reference number will be recorded on the sample bag. Where appropriate, a label will be left on the site adjacent to the sample location. This label indicates the sample number for cross-reference with the report. Photographs will be taken at every sampling location to confirm details. The object of carrying out sampling is to identify the nature and extent of any visible asbestos-bearing material and where necessary air testing may be carried out, to determine airborne respirable fibre levels. If an area cannot be accessed, then it is presumed to contain asbestos.

Pre-Demolition / Refurbishment: Full Access Sampling and Identification Survey

This survey would be conducted prior to any demolition of major refurbishment and will continue from the Management Survey. This will require full access to all areas. Fixtures and fittings could be damaged and it is best taken out when the premises are unoccupied. Again, the survey will be conducted by means of visual inspection and subsequent sampling of suspect bulk materials. Where the surveyor suspects a material to contain asbestos, a sample will be taken for analysis. The samples taken will be chosen as being

representative of the material under investigation. Therefore, visually similar areas should be regarded as being of uniform composition. Samples will be taken using a sharp knife, a cork borer, or a hand drill and will be collected in self-seal plastic bags. The sample reference number will be recorded on the sample bag. Where appropriate, a label will be left on the site adjacent to the sample location. This label indicates the sample number for cross-reference with the report. Photographs will be taken at every sampling location to confirm details. The object of carrying out sampling is to identify the nature and extent of any visible asbestos-bearing material and where necessary air testing may be carried out, to determine airborne repairable fibre levels. If an area cannot be accessed, then it is presumed to contain asbestos.

1.8 Survey Remit

To conduct a Management Survey of the areas in order to ascertain the presence of any unknown ACMs. Sampling of suspected ACMs was to be undertaken simultaneously with the survey. If a material is sampled and found to contain asbestos (or previous available analysis) assumptions may be made as to the asbestos content of similar homogenous materials. The survey was as intrusive as possible without causing unnecessary damage to live equipment.

1.9 Survey Objective

- To carry out a survey to ascertain the presence of asbestos based materials
- To include a risk assessment for each individual sample or inspection item
- To remove random sections of existing insulation for examination throughout the survey

The survey will, as far as practicable, locate and record any presumed or known ACMs in the building – the location, extent, product type, asbestos type, accessibility, condition and surface treatment were recorded at survey and that information is contained in this report. (Where appropriate)

2.0 Limitations

We have made every effort to locate all known and suspected ACMs; however we cannot guarantee that all ACMs have been located. The fabric of the building may well conceal the location of some ACMs. Some ACMs may well be discovered during maintenance, refurbishment work or demolition. Asbestos residue to pipework or plant insulated with non-asbestos products remains a possibility. It should be noted that all fire doors, shutters and electrical switch boxes within the building might contain asbestos materials. Similarly, any old electrical installations or appliances will probably contain asbestos textiles as flash guards and insulation. Mastics and textiles to old windows may contain asbestos.

2.1 Access

Levels of access were generally within the remit of the survey type required. No access was gained to:

- Areas other than beams and columns as indicated on supplied drawings.

2.2 Findings – Non-Asbestos

Not all areas of material within the site were sampled by the survey team. This was to avoid over sampling and to keep the report as concise as possible. The survey team used their extensive experience to visually inspect all areas within the site that were accessible. Typical areas listed below are some of the above none asbestos product areas.

- Concrete Floors and Stairs
- Plasterboard to Walls / Ceilings
- Timber and Plaster Boxing to Columns

Areas of the building that were not accessed may contain other suspect materials. It is important that any major refurbishment or any areas outlined for use that were previously unused, should proceed with caution. Hidden materials may still be present and any planning should account for this fact.

Terms and Abbreviations

AF	-	Asbestos Free
AIB	-	Asbestos Insulation Board
ACM	-	Asbestos Containing Material
A.C.S	-	Asbestos Cement Sheet
CAF	-	Compressed Asbestos Fibre
MMMF	-	Man Made Mineral Fibre
MRS	-	Material Risk Score
NAD	-	No Asbestos detected
P	-	Presumed
PRS	-	Priority Risk Score
SP	-	Strongly Presumed
Asbestos Textiles	-	Woven or spun Chrysotile
Amosite	-	Brown Asbestos
Beater Sheet	-	Asbestos Paper
Chrysotile	-	White Asbestos
Crocidolite	-	Blue Asbestos
Fortex	-	Wax Suppressed Chrysotile
Lagging	-	Thermal Insulation
Supalux	-	Non-asbestos fire-retardant board
Turnall	-	Bonded high-density sheet
Nilflam	-	Polyurethane foam product
TBC	-	To be confirmed

Quality Assurance and Disclaimer

The survey was carried out in accordance with Ian Chew Asbestos Management's quality and technical procedures and conformed to the requirements of The Institute of Occupational Hygiene guidance document for asbestos surveys. The survey was carried out by an experienced survey team, who inspect all accessible parts of the building, and look for any installation, which, potentially, could contain asbestos. Any suspect materials were sampled and subsequently analysed in accordance with HSG248. This method identifies the asbestos types present and their percentage content. Samples are taken using low – disturbance techniques, whereby a small amount of material (approx. 1cm³) will be taken, after firstly wetting the sample location with polyvinyl acetate (PVA) solution spray. This minimises the release of asbestos fibres during the process. Air monitoring carried out during sampling work of this type has shown airborne fibre concentrations to stay below the clearance indicator level of 0.010 fibres per millilitre of air. Sampled materials are immediately placed in sealable, airtight sample bags and appropriately labelled. Sample points will be suitably filled / sealed using PVA spray, 'Polyfilla' or adhesive tape. The surveyors do not disturb any suspected asbestos installation in any other way than to take a representative sample. This measure shall minimise the risk of asbestos fibre release but shall prevent access above / behind a suspected asbestos installation. It is possible; therefore, that further asbestos material could be present behind an existing asbestos installation. All relevant sample point data is recorded and show in the final report e.g. condition, extent of material, etc. It should be noted that the findings of the survey are discussed across the report in its entirety. Readers should note the contents in all sections of the report and should not rely purely on the information given in individual sections of the report.

Disclaimer

Every reasonable effort has been made to ensure that the information contained in this report is as accurate, and as comprehensive as was practicable at the time of preparation. It is not reasonably practicable to categorically state whether an area is free of all asbestos containing materials. Ian Chew Asbestos Management cannot therefore accept liability for loss: injury: damage: or penalty caused by omissions or errors contained in this report. The report does not waive the responsibility of the building owner, contractor etc; to ascertain for himself as to the composition of materials which may be disturbed or with which he may work. Certain asbestos products contain asbestos fibres that are so well bound into the matrix of the parent material, that they do not readily generate respirable asbestos fibres under reasonable foreseeable circumstances. Examples of such materials include sealing mastics: rubber gaskets: and damp-proof membranes. All such materials have therefore been deliberately excluded from the report. Certain 'Artex' type coatings and decorative plasters may contain very small quantities of asbestos. In situ, these coatings are often composed of different batches of product or may have been repaired / patched at different times. It is therefore possible that any 'Artex' samples taken may not be representative of the entire coating. It is possible that unidentified asbestos residues resulting from earlier asbestos removal works may be present in relatively inaccessible locations. These include: behind column claddings, attached to earlier ceiling tile grids or suspension systems or covered with new or continuous panelling or certain areas of pipe work covered with non asbestos insulation products. Duct covers below carpets or inset within wood block floors etc. were not raised, any unreasonable degree of dismantling of the structure of the building, were not investigated. Access to roof areas was not undertaken (unless outlined). Areas deemed too high to reach from stepladders or otherwise considered unsafe were not inspected. Access to electrical and process equipment was not possible due to safety and technical considerations. Such items may therefore contain unidentified asbestos materials or components.