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MANESTREAM LTD

Pectel (Wales) Limited

Ty Ddowi
St. Davids Close
Pentre,
CF41 7BG

TYPE II ASBESTOS SURVEY

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Signed -

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1. INTRODUCTION

- 1.1. Following discussions with Mr Les Adams of Pectel (Wales) Ltd, Unit 6, Stadium Close, Cardiff, CF11 8TS, Manestream Ltd, Unit 7 Olympic Business Centre, Paycocke Road, Basildon, Essex, SS14 3EX were requested to undertake a Type II inspection of asbestos containing materials in:

Communal Areas

Ty Ddowi

St. Davids Close

Pentre, CF41 7BG

- 1.2. General Building/Site Description: Ground Floor Communal Areas of Brick Built Flats with a Pitch Roof. Constructed 1990.
- 1.3. The main aims and objectives were:
- a) To identify those areas of the above site where asbestos is present.
 - b) To identify the type and extent of asbestos material present.
 - c) To assess the state of repair and general condition of asbestos containing materials and provide a risk assessment for each item.
- 1.4. The purpose of this survey was to identify and register the location of all asbestos containing materials within site, in line with current legislation. Appendix 4 contains a copy of the original Clients instructions. Original site plans were not made available by the Client to Manestream Ltd.
- 1.5. Accreditation Details – see APPENDIX 5.
- 1.6. This survey was carried out by Clive Lovell on 20th July 2005 in accordance with Guidance Note **MDHS 100** *Surveying, sampling and assessment of asbestos-containing materials*
- 1.7. This report documents the samples taken and analysis thereof.
- 1.8. Please note: All measurements of asbestos-containing materials within this report are estimates only and are not suitable for valuation for removal purposes etc.
- All estimates should be confirmed by a Licensed Asbestos Removal Contractor during any tender exercise

2. SITE SURVEY INFORMATION

2.1. Representative Bulk Sampling

The survey was carried in accordance with Guidance Note **MDHS 100 *Surveying, sampling and assessment of asbestos-containing materials***

Bulk samples were taken throughout the specified areas of accessible structural components, which might conceivably contain asbestos. Particular attention was paid to panelling on doors, walls and ceilings and to pipework, vessel and structural beam insulation. Sampling points were made good by the application of reinforced adhesive tape or 'Polyfilla'.

While it was not possible to carry out exhaustive sampling of each and every structural element present on site in order to produce a definitive survey of asbestos materials, it is considered that a representative selection of samples was obtained.

Although it is possible to identify 'asbestos free' areas in respect of accessible structural components, it should be noted that in some cases asbestos materials may be totally enclosed within a structure and will only be revealed when structural alterations take place. All reasonable efforts were made to detect concealed asbestos, for example in the voids above suspended ceilings etc. However, given the way that asbestos is used in composite structures and in inaccessible locations, it cannot therefore be guaranteed that all asbestos materials have been located. If it is suspected that such materials are present but their presence could not be confirmed at the time of survey due to their inaccessibility, this is indicated in the report section relating to the particular area in question.

Prior to the use of plastic rawl plugs, asbestos materials were commonly used in this application. It is extremely difficult to identify such materials due to decorative claddings, paint coatings etc in most properties.

Artex and Bitumen products may contain a low proportion of asbestos, commonly Chrysotile, which is so finely divided so as not to be detected by the dispersion staining method in accordance with MDHS 77: Asbestos in Bulk materials, Sampling and identification by polarised light microscopy (PLM). In this instance Manestream Ltd recommend that a proportion of these samples be analysed using Scanning Electron Microscopy in order to determine any asbestos content.

Electrical fuse boxes sometimes contain asbestos. For reasons of safety such fuse boxes are not normally inspected.

Fire doors frequently contain an inner layer of asbestos materials for fire retardant purposes. The presence of such an inner layer is difficult to determine without causing significant damage to the doors. Sampling is therefore not undertaken unless specifically requested. If it remains undisturbed the asbestos contained within these doors does not present a risk to health, but caution is advised during maintenance work, i.e. renewing locks etc.

Kitchen appliances such as deep fat fryers can possibly contain asbestos. In most instances these are in use and the products form an integral part of such appliances and have not been sampled. The same is true of heavy-duty machinery located within factories.

Plant equipment (Electrical Heaters, Boilers, Air Handling Units etc) often contains asbestos materials. Inspections are only made where safe and practical to do so.

Occasionally, samples were not taken for the following reasons:

- lack of safe access;
- to have done so would have caused irreparable damage to the material, or to the item of which it forms an integral part;
- material of identical appearance had already been sampled.

If a sample is not taken for any reason, there must also be a presumption made whether the material is asbestos or non-asbestos. Unless the surveyor has strong evidence to support a reasoned argument for presuming the material does not contain asbestos (e.g. plaster, plasterboard, wood etc) then it must be presumed to contain asbestos. This will be recorded in Table 1 as 'Presumed' or 'Strongly Presumed' as defined below:

A material is defined as **strongly presumed** to contain asbestos if fibres are visible and have the appearance of asbestos; or if similar construction exists and laboratory analysis of one of the materials has confirmed the presence of asbestos.

A material is defined as **presumed** to contain asbestos if no fibres are visible but asbestos is known to have been commonly used in the manufactured product at the time of installation (e.g. floor tiles, ceiling tiles, insulating boards etc).

In addition where any no accesses are encountered during a survey this is recorded in the in Limitations of Survey (Section 2.5) and must be **presumed** to contain asbestos.

Although it is possible to identify 'asbestos free' areas in respect of accessible structural components, it should be noted that in some cases presumed asbestos materials may be totally enclosed within a structure and will only be revealed when structural alterations take place.

2.2. Buildings/Areas Included in the Survey

All ground floor communal areas of the flats were included in the survey.

2.3. Buildings/Areas Not Included in the Survey

No other areas were surveyed at the request of the client.

2.4. Analytical Techniques

Bulk samples were analysed for asbestos content by polarised light microscopy using the dispersion staining technique as recommended in **MDHS 77: Asbestos in bulk material**

2.5. Limitations of the Survey

Whilst carrying out the survey, the surveyors were unable to access the following buildings/rooms/areas:

Building	Room/Area	Reason for No Access	Comments (If any)
All Areas were accessible during this survey.			

In addition the following deviations from the original method were made:

- No deviations from the original method were made.

2.6. Results

During this survey a total of 9 samples were taken.

Risk assessment sheets with photographs are presented in Appendix 1.

Certificates of Analysis for bulk samples are presented in Appendix 2.

Plans indicating the locations of all samples taken are presented in Appendix 3.

3. SUMMARY

3.1. General

Asbestos materials that have been identified within are in the form of:

- a) Textured Coating to Ceiling

3.2. Type and Extents of Asbestos

See Table 1

3.3. Non Asbestos Samples

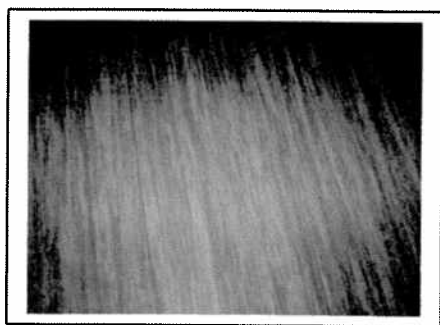
See Table 2

TABLE 1 - ASBESTOS REGISTER

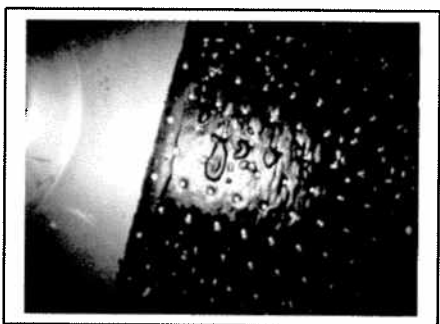
SAMPLE NO	LOCATION	DESCRIPTION	TYPE OF ASBESTOS	GUIDE EXTENT	Material Risk Category	Total Score (MRA + Priority Risk Assessment)	Category	RECOMMENDED ACTION	For CLIENT USE			
									Date Actioned	Authorised By	Work Undertaken By	Completed On / Re-inspection Due (If applicable)
50720RCL032	G001	Textured Coating to Ceiling	Chrysotile	75m2	Very Low	9	3	Label, Maintain & Update Register				
50720RCL035	G002	Textured Coating to Ceiling	Chrysotile	12m2	Very Low	9	3	Label, Maintain & Update Register				
50720RCL037	G003	Textured Coating to Ceiling	Chrysotile	15m2	Very Low	8	3	Label, Maintain & Update Register				
50720RCL039	G004	Textured Coating to Ceiling	Chrysotile	6m2	Very Low	6	3	Label, Maintain & Update Register				

Note: If rooms are not mentioned in this table, and are not included in the areas of no-access, then no suspect materials were found within them.

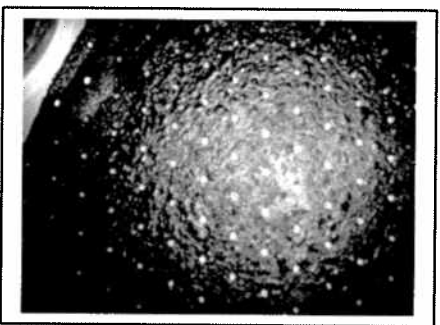
TABLE 2 - NON ASBESTOS SAMPLE PHOTOGRAPHS



Sample No. 50720RCL033
Location G002
Description Patterned Vinyl Floor



Sample No. 50720RCL034
Location G002
Description Sink Pad

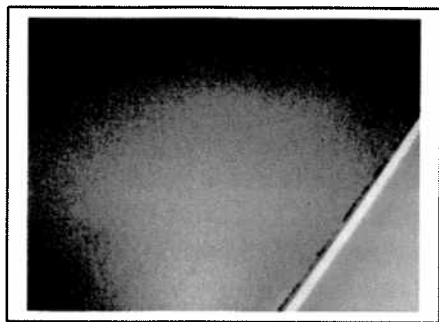


Sample No. 50720RCL036
Location G003
Description Sink Pad



Sample No. 50720RCL038
Location G003
Description Beige Vinyl Floor

Ty Ddowi, St. Davids Close, Pentre, CF41 7BG



Sample No. 50720RCL040

Location G004

Description Brown Vinyl Floor

Material Assessment Algorithm

Sample Variable	Score	Examples of scores
Product Type (or debris from product)	1	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes) Asbestos cement
	2	Asbestos insulating board, mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt
	3	Thermal insulation (e.g. pipe and boiler lagging), sprayed coating, loose asbestos, asbestos mattresses and packing
Extent of damage/deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks; broken edges on boards, tiles etc
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris
Surface Treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles
	1	Enclosed sprays and lagging, asbestos insulating board (with exposed face painted or encapsulated), asbestos cement sheets etc
	2	Unsealed asbestos insulating board, or encapsulated lagging and sprays
	3	Unsealed laggings and sprays
Asbestos Type	1	Chrysotile
	2	Amphibole asbestos excluding Crocidolite
	3	Crocidolite
Total Score		

Priority Assessment Algorithm

Assessment Factor	Score	Examples of score variables
Normal occupant activity Main type of activity in area Secondary activities area	0 1 2 3 As above	Rare disturbance activity (e.g. little used store room) Low disturbance activities (e.g. office type activity) Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs) High levels of disturbance (e.g. fire door with asbestos insulating board sheet in constant use) As above
Likelihood of disturbance Location Accessibility Extent/Amount	0 1 2 3 0 1 2 3 0 1 2 3	Outdoors Large rooms or well ventilated areas Rooms up to 100m ² Confined spaces Usually inaccessible or unlikely to be disturbed Occasionally likely to be disturbed Easily disturbed Routinely disturbed Small amounts or items (e.g. strings, gaskets etc) ≤10m ² or ≤10m pipe run >10m ² to ≤50m ² or >10m to ≤50m pipe run >50m ² or >50m pipe run
Human exposure potential Number of occupants Frequency of use of area Average time area is in use	0 1 2 3 0 1 2 3 0 1 2 3	None 1 to 3 4 to 10 >10 Infrequent Monthly Weekly Daily <1 hour >1 to <3 hours >3 to <6 hours >6 hours
Maintenance activity Type of maintenance activity Frequency of maintenance activity	0 1 2 3 0 1 2 3	Minor disturbance (e.g. possibility of contact when gaining access) Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling) Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve) High levels of disturbance (e.g. removing a number of ceiling tiles) ACM unlikely to be disturbed by maintenance activity ≤1 per year >1 per year >1 per month
Total Score		

The risk assessment then combines the Material Assessment and Priority Assessment. This then forms the basis of the asbestos management plan and allows the selection of appropriate management options.

In areas where extensive building refurbishment or demolition is proposed which could lead to disturbance of asbestos materials, then remedial treatment as indicated in Categories 2/3 is unsuitable and all asbestos should be removed prior to commencement of such works.

4.2. Category 1 High Priority (>18 Points)

Category 1 indicates materials, which contain asbestos and are in a condition and/or location, which require urgent attention. High (>18 Points) materials are not suitable for remedial measures and should be removed as soon as possible.

4.3. Category 2 Medium Priority (13 – 18 Points)

Category 2 indicates that the material contains asbestos and is in a condition and/or location, which require some action. This action would include encapsulating the material either by applying a sealant coat to the surface of boards or enclosing within impervious panelling. Warning labels should be fixed to the encapsulating material in order to alert site occupants to the presence of asbestos and thus to avoid the risk of accidental damage. These materials should be removed as part of a phased removal programme.

4.4. Category 3 Moderate/Low (<13 Points)

Category 3 indicates that the material contains asbestos but is in a condition and/or location which does not give rise to a significant health risk PROVIDED IT REMAINS UNDISTURBED either by routine maintenance or by personnel carrying out routine daily work activities which could cause impact or abrasion of the material. Category 3 Moderate/Low is valid as a priority rating only if this proviso is maintained. Clients are advised to be alert to any changes in work activities in areas where Category 3 risk material is located.

4.5. Key to Management Options

Label, Maintain and Update Register

A means of identifying ACM's to those who may be affected could be the placing of labels on the ACM. There are disadvantages, however, that include the possibility of labels falling off, being painted over or becoming dirty.

The ACM's that are in good condition and are unlikely to be disturbed may be left in place with a programme of monitoring carried out by a competent person. This involves an inspection that is recorded of each asbestos containing material to a pre-determined schedule typically annually. The monitoring would include a visual inspection that would assess the ACM for scratches, signs of disturbance, broken edges, cracked or peeling paint or debris. The asbestos register should be updated accordingly. If the ACM does show visible signs of damage / deterioration then this may promote it into a Category 2 or Category 1 material.

Remove

Category 1 indicates ACM's that should be removed under the Control of Asbestos at Work Regulations 2002 and by an approved licensed asbestos removal contractor or isolated (e.g. locked and labelled door etc) and a Permit to Work system put in operation. Following asbestos removal an accredited independent consultant should undertake a four-stage clearance test (certificate of re-occupation).

Encapsulation

The encapsulation of the Asbestos Containing Materials (ACM's) could be carried out by the following options:

1. Applying a bridging encapsulant that forms a durable layer adhering to the surface.
2. Applying a penetrating encapsulant that penetrates within the ACM before it hardens and thus locking the material together, to provide additional strength.

The materials for consideration for bridging encapsulants are high build elastomers, cementitious coatings and Polyvinyl Acetate (PVA). The type of encapsulant will be dependant on a number of circumstances.

Items for consideration are:

1. Whether the material can take the additional weight of the encapsulant without delamination.
2. Whether additional fire resisting properties are required.
3. Whether future cracking will present a problem (typical of some cementitious coatings)

Repair

The repair of ACM's should be carried out after considering the following options:

1. Small areas of damaged pipe or boiler lagging should be filled with plaster and wrapped with cotton cloth (calico).
2. Small areas of damaged sprayed asbestos should be treated with encapsulant and an open mesh scrim of glass fibre or calico reinforcement applied.
3. Damaged asbestos panelling should be sprayed with PVA or elastomeric paint
4. Asbestos cement should be sealed using an alkali resistant and water permeable sealant.

Enclosure

The enclosure of ACM's should be carried out after considering the following options:

1. Whether the material may be affected by water.
2. Whether the material used for enclosure may affect the fire resistance of the ACM.
3. Whether future maintenance is necessary.

Various solutions include the following:

1. The placing of a bollard or similar object adjacent to a wall panel to prevent damage by vehicles.
2. The installation of a barrier such as plywood that would prevent the release of airborne fibres from the material. This would involve sealing the edges.
3. The sealing and locking of a door to prevent access into a room.

The above options involve the installation of suitable warning signs/ labels and the monitoring of the enclosure.

5. DISCUSSION / RECOMMENDATIONS

The Textured Coating to Ceiling in Room G001 (Sample No 50720RCL032) contains Chrysotile (White asbestos) and is in good condition. Manestream Ltd recommends that this asbestos-containing material is incorporated into an Asbestos Management Plan and is inspected at regular intervals.

Artex is classed as an asbestos coating and the Asbestos (Licensing) Regulations 1983 (as amended) are applicable. Therefore, if at any time this material is to be removed or likely to be disturbed during any refurbishment work, then a licensed removal contractor must be utilised. 14-day notification to the HSE will be required.

The Textured Coating to Ceiling in Room G002 (Sample No 50720RCL035) contains Chrysotile (White asbestos) and is in good condition. Manestream Ltd recommends that this asbestos-containing material is incorporated into an Asbestos Management Plan and is inspected at regular intervals.

Artex is classed as an asbestos coating and the Asbestos (Licensing) Regulations 1983 (as amended) are applicable. Therefore, if at any time this material is to be removed or likely to be disturbed during any refurbishment work, then a licensed removal contractor must be utilised. 14-day notification to the HSE will be required.

The Textured Coating to Ceiling in Room G003 (Sample No 50720RCL037) contains Chrysotile (White asbestos) and is in good condition. Manestream Ltd recommends that this asbestos-containing material is incorporated into an Asbestos Management Plan and is inspected at regular intervals.

Artex is classed as an asbestos coating and the Asbestos (Licensing) Regulations 1983 (as amended) are applicable. Therefore, if at any time this material is to be removed or likely to be disturbed during any refurbishment work, then a licensed removal contractor must be utilised. 14-day notification to the HSE will be required.

The Textured Coating to Ceiling in Room G004 (Sample No 50720RCL039) contains Chrysotile (White asbestos) and is in good condition. Manestream Ltd recommends that this asbestos-containing material is incorporated into an Asbestos Management Plan and is inspected at regular intervals.

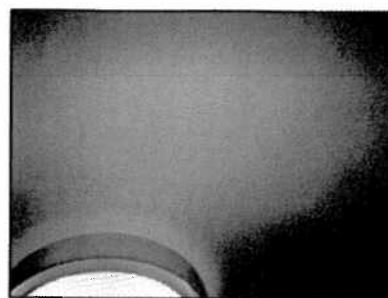
Artex is classed as an asbestos coating and the Asbestos (Licensing) Regulations 1983 (as amended) are applicable. Therefore, if at any time this material is to be removed or likely to be disturbed during any refurbishment work, then a licensed removal contractor must be utilised. 14-day notification to the HSE will be required.

APPENDIX 1

RISK ASSESSMENTS AND PHOTOGRAPHS

Sample No: 50720RCL032

Sample Description:
Textured Coating to Ceiling



ADDRESS: Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

LOCATION: G001

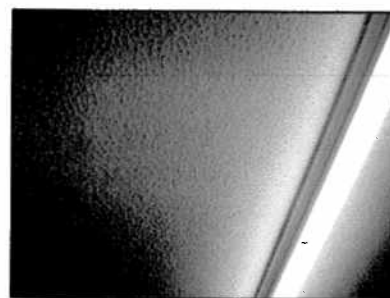
SURVEY DATE: 20 Jul 2005

PHOTO Number: 50720RCL032

Details		Value	Points Rating
1. Product Type	Composites & Cement/ AIB, gaskets etc/ Thermal insulation & sprays	1-3	1
2. Extent of damage	Good/ Low/ Medium/ High	0-3	0
3. Surface treatment	Composite/ Enclosed & Unsealed cement/ Unsealed AIB/ Unsealed friable	0-3	0
4. Asbestos Type	Chrysotile/ Amphibole (excluding Crocidolite)/ Crocidolite	1-3	1
Material Assessment Score Material Risk Category		2	Very Low
5. Main activity	Rare/ Low/ Periodic/ High disturbance	0-3	2
6. Secondary activity	Rare/ Low/ Periodic/ High disturbance	0-3	
7. Location	Outdoors/ Large Rooms/ Rooms up to 100m2/ Confined Spaces	0-3	2
8. Accessibility	Inaccessible/ Occasional/ Easily/ Routinely Disturbed	0-3	
9. Extent/Amount	Small/ <10m2 or 10m pipe run/ >10-<50m2 or >10-<50m pipe run/ >50m2 or >50m pipe run	0-3	
10. Occupants	None/ 1-3/ 4-10/ >10	0-3	3
11. Frequency of use	Infrequent/ Monthly/ Weekly/ Daily	0-3	
12. Time each use	<1hr/ 1-3hrs/ 3-6hrs/ >6hrs	0-3	
13. Type of maintenance	Minor/ Low/ Medium/ High	0-3	0
14. Frequency of maintenance	Unlikely/ <1yr/ >1yr/ >1per month	0-3	
Priority Assessment Score		7	
Total		9	

Sample No: 50720RCL035

Sample Description:
Textured Coating to Ceiling



ADDRESS: Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

LOCATION: G002

SURVEY DATE: 20 Jul 2005

PHOTO Number: 50720RCL035

Details		Value	Points Rating
1. Product Type	Composites & Cement/ AIB, gaskets etc/ Thermal insulation & sprays	1-3	1
2. Extent of damage	Good/ Low/ Medium/ High	0-3	0
3. Surface treatment	Composite/ Enclosed & Unsealed cement/ Unsealed AIB/ Unsealed friable	0-3	0
4. Asbestos Type	Chrysotile/ Amphibole (excluding Crocidolite)/ Crocidolite	1-3	1
		Material Assessment Score	2
		Material Risk Category	Very Low
5. Main activity	Rare/ Low/ Periodic/ High disturbance	0-3	3
6. Secondary activity	Rare/ Low/ Periodic/ High disturbance	0-3	
7. Location	Outdoors/ Large Rooms/ Rooms up to 100m2/ Confined Spaces	0-3	2
8. Accessibility	Inaccessible/ Occasional/ Easily/ Routinely Disturbed	0-3	
9. Extent/Amount	Small/ <10m2 or 10m pipe run/ >10-<50m2 or >10-<50m pipe run/ >50m2 or >50m pipe run	0-3	
10. Occupants	None/ 1-3/ 4-10/ >10	0-3	2
11. Frequency of use	Infrequent/ Monthly/ Weekly/ Daily	0-3	
12. Time each use	<1hr/ 1-3hrs/ 3-6hrs/ >6hrs	0-3	
13. Type of maintenance	Minor/ Low/ Medium/ High	0-3	0
14. Frequency of maintenance	Unlikely/ <1yr/ >1yr/ >1per month	0-3	
		Priority Assessment Score	7
		Total	9

Sample No: 50720RCL037

Sample Description:
Textured Coating to Ceiling



ADDRESS: Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

LOCATION: G003

SURVEY DATE: 20 Jul 2005

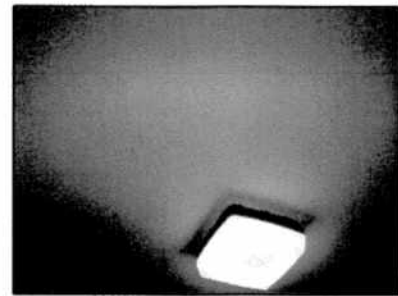
PHOTO Number: 50720RCL037

Details		Value	Points Rating
1. Product Type	Composites & Cement/ AIB, gaskets etc/ Thermal insulation & sprays	1-3	1
2. Extent of damage	Good/ Low/ Medium/ High	0-3	0
3. Surface treatment	Composite/ Enclosed & Unsealed cement/ Unsealed AIB/ Unsealed friable	0-3	0
4. Asbestos Type	Chrysotile/ Amphibole (excluding Crocidolite)/ Crocidolite	1-3	1
Material Assessment Score Material Risk Category		2	
		Very Low	
5. Main activity	Rare/ Low/ Periodic/ High disturbance	0-3	3
6. Secondary activity	Rare/ Low/ Periodic/ High disturbance	0-3	
7. Location	Outdoors/ Large Rooms/ Rooms up to 100m2/ Confined Spaces	0-3	1
8. Accessibility	Inaccessible/ Occasional/ Easily/ Routinely Disturbed	0-3	
9. Extent/Amount	Small/ <10m2 or 10m pipe run/ >10-<50m2 or >10-<50m pipe run/ >50m2 or >50m pipe run	0-3	
10. Occupants	None/ 1-3/ 4-10/ >10	0-3	2
11. Frequency of use	Infrequent/ Monthly/ Weekly/ Daily	0-3	
12. Time each use	<1hr/ 1-3hrs/ 3-6hrs/ >6hrs	0-3	
13. Type of maintenance	Minor/ Low/ Medium/ High	0-3	0
14. Frequency of maintenance	Unlikely/ <1yr/ >1yr/ >1per month	0-3	
Priority Assessment Score		6	
Total		8	

Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

Sample No: 50720RCL039

Sample Description:
Textured Coating to Ceiling



ADDRESS: Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

LOCATION: G004

SURVEY DATE: 20 Jul 2005

PHOTO Number: 50720RCL039

Details		Value	Points Rating
1. Product Type	Composites & Cement/ AIB, gaskets etc/ Thermal insulation & sprays	1-3	1
2. Extent of damage	Good/ Low/ Medium/ High	0-3	0
3. Surface treatment	Composite/ Enclosed & Unsealed cement/ Unsealed AIB/ Unsealed friable	0-3	0
4. Asbestos Type	Chrysotile/ Amphibole (excluding Crocidolite)/ Crocidolite	1-3	1
Material Assessment Score Material Risk Category		2	
		Very Low	
5. Main activity	Rare/ Low/ Periodic/ High disturbance	0-3	2
6. Secondary activity	Rare/ Low/ Periodic/ High disturbance	0-3	
7. Location	Outdoors/ Large Rooms/ Rooms up to 100m2/ Confined Spaces	0-3	1
8. Accessibility	Inaccessible/ Occasional/ Easily/ Routinely Disturbed	0-3	
9. Extent/Amount	Small/ <10m2 or 10m pipe run/ >10-<50m2 or >10-<50m pipe run/ >50m2 or >50m pipe run	0-3	
10. Occupants	None/ 1-3/ 4-10/ >10	0-3	1
11. Frequency of use	Infrequent/ Monthly/ Weekly/ Daily	0-3	
12. Time each use	<1hr/ 1-3hrs/ 3-6hrs/ >6hrs	0-3	
13. Type of maintenance	Minor/ Low/ Medium/ High	0-3	0
14. Frequency of maintenance	Unlikely/ <1yr/ >1yr/ >1per month	0-3	
Priority Assessment Score		4	
Total		6	

Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

APPENDIX 2

CERTIFICATE OF ANALYSIS

22 Aug 2005

Pectel (Wales) Limited
Unit 6
Stadium Close
Cardiff
CF11 8TS

FOR THE ATTENTION OF: Mr Les Adams



MANESTREAM LTD
Health & Safety Consultancy
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CERTIFICATE OF ANALYSIS**CERTIFICATE NUMBER:** C9925.129.5.08.001_DR**SITE:** Ty Ddowi, St. Davids Close, Pentre, CF41 7BG**LOCATION:** Ground Floor Communal Areas of the Flats**SAMPLES TAKEN BY MANESTREAM** Clive Lovell **ON:** 20th July 2005**ANALYSED BY:** Joe Mcevilley

2329

<u>Sample Number</u>	<u>Sample Description</u>	<u>Content</u>
50720RCL032	G001, Textured Coating to Ceiling	Chrysotile Min Con
50720RCL033	G002, Patterned Vinyl Floor	No Asbestos Detected
50720RCL034	G002, Sink Pad	No Asbestos Detected
50720RCL035	G002, Textured Coating to Ceiling	Chrysotile Min Con
50720RCL036	G003, Sink Pad	No Asbestos Detected
50720RCL037	G003, Textured Coating to Ceiling	Chrysotile Min Con

Regional Office

Suite 19-24
Pembroke House
TY Coch Lane
Llantarnam Park Way
Cwmbran
NP44 3AU

Tel 01633 877773
Fax 01633 877774

Clients' Samples

Where clients have provided their own samples of bulk materials, the Laboratory is not responsible for such sampling. Such sampling is outside the scope of UKAS accreditation for bulk sampling. Nor is the laboratory responsible for the consequences of inaccurate results or conclusions based on these samples. All opinions stated herein are outside the scope of Manestream / UKAS accreditation.

Issue 1

Rev 1 Page 1 of 3

August 2005

atac

AT4360



MANESTREAM LTD
Health & Safety Consultancy
Project Management
Asbestos Consultancy
Ventilation Hygiene
Specialist Engineering Services

Head Office & Laboratory
Unit 7
Olympic Business Centre
Paycocke Road
Basildon
Essex
SS14 3EX

Tel 01268 272363
Fax 01268 272365



2329

CERTIFICATE OF ANALYSIS

CERTIFICATE NUMBER: C9925.129.5.08.001_DR

SITE: Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

LOCATION: Ground Floor Communal Areas of the Flats

SAMPLES TAKEN BY MANESTREAM (Clive Lovell) ON: 20th July 2005

ANALYSED BY: Joe Mcevilley

<u>Sample Number</u>	<u>Sample Description</u>	<u>Content</u>
50720RCL038	G003, Beige Vinyl Floor	No Asbestos Detected
50720RCL039	G004, Textured Coating to Ceiling	Chrysotile Min Con
50720RCL040	G004, Brown Vinyl Floor	No Asbestos Detected

Regional Office

Suite 19-24
Pembroke House
TY Coch Lane
Llantarnam Park Way
Cwmbran
NP44 3AU

Tel 01633 877773
Fax 01633 877774

Clients' Samples

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AT4360



MANESTREAM LTD

CERTIFICATE NUMBER: C9925.129.5.08.001_DR**NOTES**

If asbestos is present in the material which the sample represents, and if this material is to be stripped or removed or otherwise disturbed, then safety precautions must be taken in accordance with the Control of Asbestos at Work Regulations 1987 (As Amended) and associated Codes of Practice.

Chrysotile	-	White asbestos
Amosite	-	Brown asbestos
Crocidolite	-	Blue asbestos

Method of Analysis

The bulk samples were analysed by the dispersion staining method in accordance with MDHS 77: Asbestos in Bulk materials, Sampling and identification by polarised light microscopy (PLM).

Estimates of Concentration

Opinions expressed in estimates of concentration of asbestos components are outside the scope of UKAS accreditation:

Maj Con = Major Constituent total fibre (by volume)	-	estimated as greater than 10% of total fibre (by volume)
Min Con = Minor Constituent fibre (by volume)	-	estimated as 1% - 10% of total fibre (by volume)
Trace fibre (by volume)	-	estimated as less than 1% of total fibre (by volume)

Please Note: Artex and Bitumen products may contain a low proportion of asbestos, commonly Chrysotile, which is so finely divided so as not to be detected by dispersion staining method in accordance with MDHS 77: Asbestos in Bulk materials, Sampling and identification by polarised light microscopy (PLM).

ANALYST NAME: 

COUNTER SIGNED:

J Nicholls
Contract Director

SIGNED: 

or

P Limber
Technical Manager

On behalf of Manestream

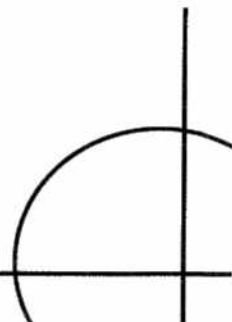
Clients' Samples

Where clients have provided their own samples of bulk materials, the Laboratory is not responsible for such sampling, which is outside the scope of UKAS accreditation for bulk sampling, nor is the responsible for the consequences of inaccurate results or conclusions based on these samples. All opinions stated herein are outside the scope of Manestream / UKAS accreditation.

Issue 1

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APPENDIX 3

SITE PLANS AND KEY

GROUND FLOOR

COMMUNAL SITTING AREA & KITCHEN

50720RCL033

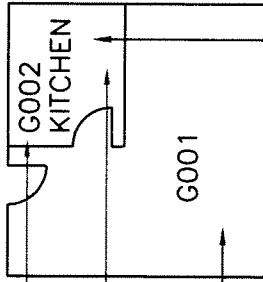
PATTERNED
VINYL FLOOR

50720RCL034

SINK PAD

50720RCL032

TEXTURED COATING
TO CEILING



50720RCL035
TEXTURED COATING
TO CEILING

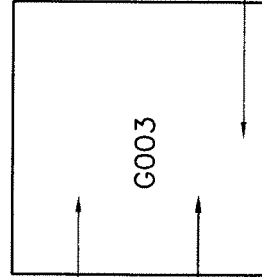
COMMUNAL LAUNDRY ROOM

50720RCL036

SINK PAD

50720RCL037

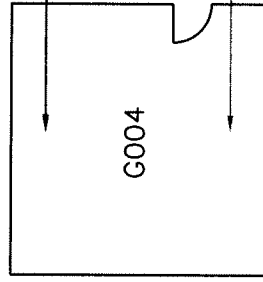
TEXTURED COATING
TO CEILING



50720RCL038

BEIGE VINYL FLOOR

COMMUNAL W.C



50720RCL039

TEXTURED COATING
TO CEILING

50720RCL040

BROWN VINYL FLOOR



MANESTREAM LTD

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Project Management
Asbestos Consultancy

Training Services
Specialist Engineering
Ventilation Hygiene

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Llantarnam Parkway
Cwmbran
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Tel 01633 877773
Fax 01633 877774

www.manestream.co.uk
e-mail info@manestream.co.uk

Type of Survey

This is a type 2 Survey
(Standard Sampling,
Identification and
Assessment Survey).

See Report for Details

DRAWING KEY

ASBESTOS PRESENT
PRESUMED TO CONTAIN ASBESTOS
NO ASBESTOS DETECTED
OUTSIDE SCOPE OF SURVEY
NO SUSPECT MATERIALS FOUND
NSME

Rev	Date	Report by	DWH	CHK

Project Name and Address

Communal Areas Ty Ddow
St Davids Close
Penre
CF41 7BG

Client Name

Pectel (Wales) Ltd

Report Ref.

R9925.129.5.08.001_DR

Checked by / Date

JP 09/08/05

Scale

NTS

Sheet

1/1

Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

APPENDIX 4

COPY OF CLIENT INSTRUCTIONS

Ty Ddowi, St. Davids Close, Pentre, CF41 7BG

APPENDIX 5

ACCREDITATION INFORMATION

United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE



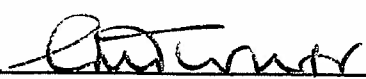
INSPECTION BODY
No. 282

Manestream Limited
Unit 7
Olympic Business Centre
Paycocke Road
Basildon
Essex
SS14 3EX

is accredited to ISO/IEC 17020 *General Criteria for the operation of various types of bodies performing inspection*
to undertake inspections as a type C body as detailed in the schedule bearing the above accreditation number.
From time to time the schedule to this certificate may be revised and reissued by the
United Kingdom Accreditation Service.

This Accreditation shall remain in force until the expiry date printed below, subject to continuing conformity
with United Kingdom Accreditation Service requirements

Initial Accreditation 29 September 2003



Accreditation Manager, United Kingdom Accreditation Service

This certificate issued on 15 April 2004

Expiry date 31 August 2007

The Department of Trade and Industry (DTI) has entered into a memorandum of understanding with the United Kingdom Accreditation Service (UKAS) through which UKAS is recognised as the national body responsible for assessing and accrediting the competence of organisations in the fields of calibration, testing, inspection and certification of systems, products and personnel.

United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE



TESTING LABORATORY
No. 2329

Manestream Ltd
Unit 7
Olympic Business Centre
Paycock Road
Basildon
Essex
SS14 3EX

is accredited to BS/EN/ISO/IEC 17025 *General Requirements for the competence of testing and calibration laboratories* to undertake tests as detailed in the schedule bearing the above accreditation number.

From time to time the schedule to this certificate may be revised and reissued by the
United Kingdom Accreditation Service.

This Accreditation shall remain in force until the expiry date printed below, subject to continuing conformity
with United Kingdom Accreditation Service requirements.

Initial Accreditation 26 September 2001

R. Bell

Accreditation Manager, United Kingdom Accreditation Service

This certificate issued on 09 August 2005

Expiry date 30 September 2009

The Department of Trade and Industry (DTI) has entered into a memorandum of understanding with the United Kingdom Accreditation Service (UKAS) through which UKAS is recognised as the national body responsible for assessing and accrediting the competence of organisations in the fields of calibration, testing, inspection and certification of systems, products and personnel.

CLIENT:

**WALES & WEST HOUSING
ASSOCIATION
3 ALEXANDRA GATE
FFORDD PENGAM
TREMORFA
CARDIFF
CF24 2UD**



INTERNATIONAL ENVIRONMENTAL CONSULTANTS

www.envirotec.com

UPRN NO: N/A

PROJECT NO: J024039

DATE: JUNE 2012

**ASBESTOS MANAGEMENT SURVEY
OF
ST DAVIDS CLOSE, PENTRE, CF41 7BG**



Office Locations Chelmsford • Newport • Mansfield • Brighouse • Newcastle upon Tyne • Hamilton

Registered Address Envirotec Limited, Envirotec House, The Street, Hatfield Peverel, Chelmsford, Essex CM3 2EJ

Registered in England No. 2981693 • VAT No. 630 8944 29

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1.0 EXECUTIVE SUMMARY	3
2.0 INTRODUCTION	7
3.0 SURVEY TYPE	8
4.0 SPECIFIC SURVEY INFORMATION	10
5.0 CAVEAT AGREED WITH CLIENT	12
6.0 QUALITY ASSURANCE STATEMENT	13

APPENDICES

APPENDIX 1	ASBESTOS REGISTER
APPENDIX 2	PHOTOGRAPHS
APPENDIX 3	BULK ANALYSIS CERTIFICATE
APPENDIX 4	SKETCH/PLANS
APPENDIX 5	GENERAL SURVEY INFORMATION

1.0 EXECUTIVE SUMMARY

1.1 Asbestos containing materials have been identified or strongly presumed in the following locations

Location	Description	Priority/Risk	Recommendation
common lounge (014) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
corridor (006) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
cupboard (002) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
disabled W.C. (003) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
electrical switch room (005) / Ground Floor	No access due to health and safety reasons	Very Low	Conduct further investigation prior to relevant maintenance / refurbishment works
Kitchen 016 / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
laundry (007) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
lift motor room (010) / Ground Floor	No access due to health and safety reasons	Very Low	Conduct further investigation prior to relevant maintenance / refurbishment works
office (004) / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
stairwell 019 / Ground Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
void above laundry / Ground Floor	Accessed - no suspect materials found	-	Conduct further investigation prior to relevant maintenance / refurbishment works
Bathroom 208 / 2nd	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to

Floor			relevant works
corridor 201 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
corridor 202 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works

Location	Description	Priority/Risk	Recommendation
corridor 203 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
corridor 204 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
corridor 205 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
guest room 206 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works

1.2 The following areas were not accessed during the survey and must be presumed to contain asbestos materials.

Location	No Access Area	Reason For No Access
1st Floor	cupboard 111	
2nd Floor	cupboard 207	
2nd Floor	store cupboard 209	locked
2nd Floor	cleaners cupboard 210	locked
Roof Void	a008	
Roof Void	a002	
Roof Void	a003	block walls, timber frame, mmmf insulation, metal pipes, non suspect felt, metal water tank with mmmf insulation
Roof Void	a004	
Roof Void	a005	
Roof Void	a006	
Roof Void	a007	

1.2.1 The client should note that if demolition or refurbishment works are undertaken then some areas may be accessed that were physically and visually impossible to access and identify within the scope of this

survey and report. The client should therefore exercise some caution when such works are undertaken.

2.0 INTRODUCTION

- 2.1 Following evaluation of the clients requirements and considering the aim and purpose of the survey and detailed planning considerations we have undertaken an **Asbestos Management Survey** where reasonably practicable of *St Davids Close, Pentre CF41 7BG*
- 2.2 The building is a typical sheltered housing complex of brick construction with a pitched tile roof
- 2.3 The building consists of a ground floor with a further two floors of residential apartments with additional communal areas
- 2.4 The site survey has been undertaken and report compiled in accordance with the **HSG 264: Asbestos: The Survey Guide**.

Priority Assessment is outside the scope of our UKAS accreditation to HSG264 Asbestos: The Survey Guide

The type of survey undertaken may vary, depending on the aim and purpose for which it is to be used. Surveys before demolition and refurbishment will continue to be required under **Control of Asbestos Regulations (CAR) 2012** and the **Construction (Design & Management) Regulations 2007**. However, it is anticipated that most surveys will be undertaken to comply with the **Duty to Manage Asbestos in Non-Domestic Premises Regulation 4 of the Control of Asbestos Regulations 2012**. In these cases, the aim of an asbestos survey is, as far as reasonably practical, to locate and assess all the Asbestos Containing Materials (ACMs) present in the building and its purpose is to present the information collected in a way which allows the employer to manage the risk.

- 2.5 This survey report is in a number of sections, the essential sections will be the Asbestos Register (Appendix 1) which is a detailed systematic diligent inspection and sampling report of each room with enhanced annotated Plans (Appendix 4) indicating where samples have been taken and asbestos positively identified.

3.0 SURVEY TYPE

3.1 Management Survey

- 3.1.1 A **management survey** is the standard survey. Its purpose is to locate as far as reasonably practicable, the presence and extent of any suspect Asbestos Containing Materials in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.
- 3.1.2 The purpose of the survey is to assist the client to comply with the ***Health and Safety at Work Act 1974*** and the ***Control of Asbestos Regulations 2012 (Regulation 4)*** which contains an explicit duty on the owners and occupiers of non domestic premises who have maintenance and repair responsibilities, to assess and manage the risks from the presence of asbestos.
- 3.1.3 Every effort has been made to identify all asbestos materials so far, as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.
- 3.1.4 Survey techniques used involves trained and experienced surveyors using the combined diligent approach with regard 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:
- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
 - 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. (This is covered in the scope of a Refurbishment and Demolition Survey)
- 3.1.5 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.
- 3.1.6 Where an area has been previously 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 at Work Regulations (1987) 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.

- 3.1.7 A limited inspection only has been carried out of pipework concealed by overlying non-asbestos insulation. Inspection of pipework has been restricted primarily to areas where insulation was removed it is not practicable to inspect the entire pipework which would require the removal and replacement of all overlying non-asbestos insulation, therefore this has been considered outside the scope of this survey.
- 3.1.8 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 another i.e. working in sensitive location or just simply no access as keys not available such as a sub-station.
- 3.1.9 Access for the survey may be restricted for many reasons beyond our control such as where electrical equipment is present and live. Our operatives have a duty of care under the Health and Safety at Work act (1974) for both themselves and others.
- 3.1.10 Certain materials contain asbestos to varying degrees and some may not be uniformed (textured coating for example). Where this is the case the samples will be taken in accordance with the sampling regime however this may not be representative of the whole product throughout.
- 3.1.11 This survey is purely an Asbestos Management survey which involves minor intrusive works. We have not inspected flues, ducts, risers, undercrofts, voids or any similarly enclosed areas, the access to which necessitated the use of specialist equipment or tools, or which would have caused damage to decoration, fixtures, fittings or the structure there may be asbestos concealed in these voids, risers, undercrofts etc. These areas will **not** be mentioned as a **no access** area in this report as the report will be misleading to the client as these areas and asbestos identified in these areas are outside the scope of an Asbestos Management Survey.
- 3.1.12 We have not inspected lift shafts, plant rooms or similar which require the attendance of a specialist engineer.

4.0 SITE SPECIFIC SURVEY INFORMATION

- 4.1 The report is the result of the analysis of suspect materials and a visual inspection.
- 4.2 The survey was undertaken and completed by an Environtec Ltd asbestos survey team.
- 4.3 Access was arranged with Perry Dobbins who enabled and provided all keys and access facilities to all necessary areas of the building.
- 4.4 The physical survey was undertaken on the 28th June 2012 to 2nd November 2012.

For buildings where positive asbestos materials have been identified, a further inspection will be required no later than 28th June 2013. For areas of high risk the Client should implement more regular inspections to assess the condition of the materials.

- 4.5 The site survey was undertaken by David Crofts, during normal business hours of 9.00 am to 5.00 pm.
- 4.6 The bulk analysis of suspect materials for asbestos content was undertaken as follows :-

Date Analysed	Laboratory Technician(s)
08/11/2012	Paula Turner

- 4.7 During the site survey work the building remained occupied.
- 4.8 Samples were taken of suspected materials and where possible photographs of the samples taken. Clearly it is not possible to sample every material encountered therefore, where common areas and features exist, representative samples were taken and extrapolations were made to the nature of the material.
- 4.9 Where suspected asbestos materials form a duct cover, false ceiling, etc or where these materials would require disturbing to gain access to an area, they have not been displaced, as any physical disturbance of these materials may have resulted in a release of airborne asbestos fibres which may pose a hazard to health.

- 4.10 Photographs have been included in the report to highlight particular instances or detail as required.
- 4.11 Plans of the premises were provided by the client/prepared by Environtec Ltd to assist in the location and designation of rooms for ease of reference. It must be noted that these plans are not to be regarded as accurate but for assistance purposes only. These plans are located within the appendices of this report.
- 4.12 During the period of the survey electrical supplies and artificial illumination were operative in all areas of the building.
- 4.13 It must be noted that the information contained within this report is compiled and dealt with in a number of sections to enable and give a complete overall assessment and conclusion when considering the asbestos materials positively identified and possible potential hazards.

It is therefore recommended that when passing information onto third parties such as contractors etc that the complete report be issued to ensure that all information is available to such responsible parties that they may consider all options and actions to be undertaken to so far as is reasonably practicable.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves.

- 4.14 The survey included the following areas of the site:

Management survey to communal and external areas

- 4.15 The following areas were specifically excluded from the survey:

All other areas beyond those detailed in section 4.14

5.0 CAVEAT AGREED WITH CLIENT

- 5.1 We have not inspected any part requiring specialist access equipment other than stepladders. Any requirement for specialist access equipment has been specifically excluded unless otherwise stated.
- 5.2 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 i.e. if 5 out of 20 samples of visually identified ceiling tiles were analysed negative, there could be a possibility of one tile being asbestos but could easily be missed.
- 5.3 Accessible is defined as reasonably and safely reachable by foot or reachable from a step ladder up to 3m. Opening electrical equipment (e.g. switchboxes), plant (e.g. boilers, air handling units and ducted systems) and hazardous installation (e.g. chemical containers) are specifically excluded.
- 5.4 Where suspected asbestos materials form a duct cover, false ceiling, etc or where these materials would require disturbing to gain access to an area, they have not been displaced, as any physical disturbance of these materials may have resulted in a release of airborne asbestos fibres which may pose a hazard to health.
- 5.5 Due to the non uniform matrix of textured coatings, where some textured coatings have proved to be asbestos containing and further samples have given negative results, we would urge the Client to treat all textured coatings as asbestos containing and implement the relevant management of such materials.

6.0 QUALITY ASSURANCE STATEMENT

Project Ref: J024039

This report has been compiled by the following authorised staff member of Environtec Ltd.

Name:David Crofts

Signed:



Date:

16 November 2012

Consultant

Designation:

The contents of this report have been checked by the Survey Quality Administrator.

The results are accurate and any conclusions and recommendations made are suitable and in line with current company policy.

Name:Joseph Thomas

Signed:



Date: 16 November 2012

Senior Consultant

Designation:

APPENDIX 1

ASBESTOS REGISTER

The following are the summary of asbestos materials and priority rating assessments and should be read in conjunction with the attached plans and report

General Sampling Strategy: a) Panels: One sample every 20 m² and one of each different item. b) Lagging: One sample every 3 m (if pipe runs in excess of 20 m, one every 6 m). c) Floor Tiles: One sample of each different type and one sample per 20 m² section. d) Cement Products: One sample of each different item. 4 maximum of large scale roofs. e) Artex: One sample per independent location. f) Spray Coating: One sample per 20-25 m². **Unless otherwise stated there is no deviation from the General Sampling Strategy.**

SITE ADDRESS: ST DAVIDS CLOSE, PENTRE, CF41 7BG						DATE: 28/06/2012 to 02/11/2012				
SURVEY TYPE: MANAGEMENT SURVEY						PROJECT REF: J024039				
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
MAIN BUILDING										
Ground Floor / Reception (001)	None	coating to mmmf firebreak	1m²	Sealed	Low Damage	Low	DU000241 / No Asbestos Detected	-	-	No further action required
Ground Floor / Reception (001)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / Reception (001)		Suspended ceiling tiles and metal frame, Brick walls, concrete screed below carpet to floor. automatic pvc glazed entrance door, metal radiators and pipes, timber handrails to walls, pvc trunking. low level plasterboard ceiling to rear of reception Above auspended ceiling: Non suspect suspended ceiling, concrete ceiling, brick walls Beams clad with supalux boards, metal cable trays, metal pipes and new pipe isolation								
Ground Floor / cupboard (002) (1)	4 - 10 (2)	Textured coating to ceiling (1)	4m² (1)	Sealed (0)	Good Condition (0)	Low (1)	DU000242 / Chrysotile (1)	2 + 5 = 7	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / cupboard (002)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / cupboard (002)		plasterboard ceiling, solid walls and floor, metal trunking, metal pipes, timber door								
Ground Floor / disabled W.C. (003) (1)	>10 (3)	Textured coating to ceiling (1)	6m² (1)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000242 / Chrysotile (1)	2 + 6 = 8	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / disabled W.C. (003)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / disabled W.C. (003)		plasterboard ceiling, solid walls and floor, ceramic cistern, ceramic tiles to sink splashback, electric extractor, metal radiator and pipes, plastic waste pipe, supalux riser boxing, metal handrail to w/c								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16				
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

SITE ADDRESS: ST DAVIDS CLOSE, PENTRE, CF41 7BG							DATE: 28/06/2012 to 02/11/2012			
SURVEY TYPE: MANAGEMENT SURVEY							PROJECT REF: J024039			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Ground Floor / office (004) (1)	4 - 10 (2)	Textured coating to ceiling (1)	6m² (1)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000242 / Chrysotile (1)	2 + 5 = 7	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / office (004)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / office (004)		plasterboard ceiling, glazed half solid walls, timber door, solid floor								
Ground Floor / electrical switch room (005) (1)	None (0)	No access due to health and safety reasons (2)	15no. (0)	Unsealed (1)	Good Condition (0)	Low (1)	Chrysotile (1)	4 + 2 = 6	Very Low	Conduct further investigation prior to relevant maintenance / refurbishment works
Ground Floor / electrical switch room (005)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / electrical switch room (005)		plasterboard ceiling to concrete above, timber panels to walls, fixed sheet vinyl flooring								
Ground Floor / corridor (006) (1)	None (0)	Textured coating to ceiling (1)	3m² (1)	Sealed (0)	Good Condition (0)	Low (1)	DU000243 / Chrysotile (1)	2 + 3 = 5	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / corridor (006)	None	coating to mmmf insulation	<1m²	Sealed	Low Damage	Low	Strongly presumed similar to DU000241 / No Asbestos Detected	-	-	No further action required
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

SITE ADDRESS: ST DAVIDS CLOSE, PENTRE, CF41 7BG							DATE: 28/06/2012 to 02/11/2012			
SURVEY TYPE: MANAGEMENT SURVEY							PROJECT REF: J024039			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Ground Floor / corridor (006)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / corridor (006)		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, part plasterboard ceiling, part concrete ceiling								
Ground Floor / laundry (007) (1)	>10 (3)	Textured coating to ceiling (1)	12m² (2)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000243 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / laundry (007)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / laundry (007)		plasterboard ceiling, solid walls and floor, timber worktop, modern stainless steel sink unit, pvc window, timber door, pvc door, metal radiator and pipes, plastic waste and vent pipes, plastic vent cover, metal electrical switch cupboard, metal drain grill, fixed modern sheet vinyl flooring with rubber nosing, ceramic tiles to wall x 1, timber hatch to void above,								
Ground Floor / void above laundry	-	Accessed - no suspect materials found	-	-	-	-		-	-	Conduct further investigation prior to relevant works
Ground Floor / void above laundry		timber frame, non suspect felt, metal flues, block walls, mmmf insulation, supalux panels to flues, metal pipes								
Ground Floor / corridor (009)	None	coating to firebreak	1m²	Sealed	Low Damage	Low	Strongly presumed similar to DU000241 / No Asbestos Detected	-	-	No further action required
Ground Floor / corridor (009)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / corridor (009)		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors, timber and supalux panels to wall outside each flat, plastic meter cupboard Above suspended ceiling: plaster to walls, metal trunking and pipes, mmmf insulated pipes, concrete ceiling								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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SURVEY TYPE: MANAGEMENT SURVEY							PROJECT REF: J024039			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Ground Floor / lift motor room (010)	-	No access due to health and safety reasons	-	-	-	-		-	-	No further action required
Ground Floor / lift motor room (010) (1)	1 - 3 (1)	No access due to health and safety reasons (2)	2no. (0)	Unsealed (2)	Good Condition (0)	Rare (0)	Chrysotile (1)	5 + 2 = 7	Very Low	Conduct further investigation prior to relevant maintenance / refurbishment works
Ground Floor / lift motor room (010)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / lift motor room (010)		concrete ceiling, block and brick walls, concrete floor, lift motor equipment not accessed, plastic pipe, supalux panel to lift shaft wall, metal trunking, timber door with metal vent								
Ground Floor / stairwell (011)	None	coating to firebreak	<1m²	Sealed	Good Condition	Low	Strongly presumed similar to DU000241 / No Asbestos Detected	-	-	No further action required
Ground Floor / stairwell (011)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / stairwell (011)		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors, concrete stairs, metal rail to stairs Above suspended ceiling: plaster to walls, metal trunking and pipes, mmmf insulated pipes, concrete ceiling, plastic pipes, suplux panels to firebreak								
Ground Floor / corridor (012)	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
Ground Floor / corridor (012)		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes,timber doors,, pvc door and windows, timber and supalux panels outside flat, plastic meter cupboard Above suspended ceiling: plaster to walls, metal trunking and pipes, mmmf insulated pipes, concrete ceiling, plastic pipes, suplux panels to firebreak								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Ground Floor / refuse room (013)	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
Ground Floor / refuse room (013)		block walls, concrete floor, modern insulation to pipework, timber door, supalux panels to door headers and to high level boxing and ceiling, metal and plastic pipes								
Ground Floor / common lounge (014) (1)	>10 (3)	Textured coating to ceiling (1)	36m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	DU000244 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / common lounge (014)	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / common lounge (014)		Suspended ceiling tiles and metal frame, Brick walls, concrete screed below carpet to floor. metal radiators and pipes, timber handrails to walls, pvc trunking. low level plasterboard ceiling to front of lounge, glazed full wall pvc window with low wall, timber hatch to void above. Above suspended ceiling to 50% of lounge: Non suspect suspended ceiling, concrete ceiling, brick walls, supalux boards forming riser, metal cable trays, metal pipes and modern pipe insulation								
Ground Floor / void above lounge (015)	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
Ground Floor / void above lounge (015)		timber frame, block walls, mmmf insulation, non suspect felt, plastic pipes, flexible vent hoses								
Ground Floor / Kitchen 016 (1)	>10 (3)	Textured coating to ceiling (1)	15m ² (1)	Composite Material (0)	Good Condition (0)	Low (1)	DU000293 / Chrysotile (1)	2 + 6 = 8	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / Kitchen 016	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / Kitchen 016		plasterboard ceiling, solid walls and floor, timber units and worktops, modern stainless sink, metal radiator and pipes, ceramic tile splasback, ceramic hand basin, metal extract unit, metal shutter to hatch, fixed vinyl flooring, supalux panels to riser								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H					Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16		
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Ground Floor / corridor 017	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
Ground Floor / corridor 017		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes,timber doors,, pvc door and windows, timber and supalux panels outside flat, plastic meter cupboard Above suspended ceiling: plaster to walls, metal trunking and pipes, mmmf insulated pipes, concrete ceiling, plastic pipes, suplux panels to firebreak								
Ground Floor / corridor 018	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
Ground Floor / corridor 018		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes,timber doors,, pvc door and windows, timber and supalux panels outside flat, plastic meter cupboard Above suspended ceiling: plaster to walls, metal trunking and pipes, mmmf insulated pipes, concrete ceiling, plastic pipes, suplux panels to firebreak								
Ground Floor / stairwell 019 (1)	>10 (3)	Textured coating to ceiling (1)	25m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	DU000294 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
Ground Floor / stairwell 019	>10	Stair nosing	32m ^L	Composite Material	Good Condition	High	DU000295 / No Asbestos Detected	-	-	No further action required
Ground Floor / stairwell 019	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
Ground Floor / stairwell 019		concrete stairs and ceiling to landing, solid platered walls, metal bannister rail with timber grip, pvc window and door, metal radiator and pipes								
1st Floor / corridor 101	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
1st Floor / corridor 101		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16				
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations	
1st Floor / corridor 102	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required	
1st Floor / corridor 102		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling									
1st Floor / corridor 103	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required	
1st Floor / corridor 103		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling									
1st Floor / corridor 104	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required	
1st Floor / corridor 104		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. pvc window Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling									
1st Floor / Cleaners Cupboard 105	1 - 3	Textured coating to ceiling	2m²	Sealed	Good Condition	Low	DU000296 / No Asbestos Detected	-	-	No further action required	
1st Floor / Cleaners Cupboard 105	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required	
1st Floor / Cleaners Cupboard 105		plasterboard ceiling, solid plaster walls and concrete floor, non suspect riser boxing, ceramic sink and tile splashback, plastic and metal pipes									
1st Floor / store Cupboard 106	1 - 3	Textured coating to ceiling	2m²	Sealed	Good Condition	Low	Strongly presumed similar to DU000296 / No Asbestos Detected	-	-	No further action required	
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16					
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations	
1st Floor / store Cupboard 106	-	All other areas visually no asbestos detected	-	-	-	-	Strongly presumed similar to DU000296 / No Asbestos Detected	-	-	No further action required	
1st Floor / store Cupboard 106		plasterboard ceiling, solid plaster walls and concrete floor, plastic vent									
1st Floor / store Cupboard 107	1 - 3	Textured coating to ceiling	4m²	Sealed	Good Condition	Low		-	-	No further action required	
1st Floor / store Cupboard 107	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required	
1st Floor / store Cupboard 107		plasterboard ceiling, solid plaster walls and concrete floor, electric power box, non suspect riser boxing					Strongly presumed similar to DU000296 / No Asbestos Detected				
1st Floor / corridor 108	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required	
1st Floor / corridor 108		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling									
1st Floor / hairdressers 109	4 - 10	Textured coating to ceiling	12m²	Sealed	Good Condition	Low		-	-	No further action required	
1st Floor / hairdressers 109	-	All other areas visually no asbestos detected	-	-	-	-	Strongly presumed similar to DU000296 / No Asbestos Detected	-	-	No further action required	
1st Floor / hairdressers 109		plasterboard ceiling, solid plaster walls and concrete floor, non suspect riser boxing, ceramic sink and tiled splashback, timber worktop, pvc window, timber door and timber glazed panel									
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16					
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
1st Floor / shop 110	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required
1st Floor / shop 110		non suspect suspended ceiling and framework, solid walls and floor, metal radiator and pipes, timber handrail and doors. pvc window Above suspended ceiling: plaster to walls, steel beam, metal trunking and pipes, mmmf insulated pipes, concrete ceiling								
1st Floor / cupboard 111	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
1st Floor / cupboard 111										
2nd Floor / corridor 201 (1)	>10 (3)	Textured coating to ceiling (1)	12m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	DU000297 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / corridor 201	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / corridor 201		plasterboard ceiling and, solid walls and floor, metal radiator and pipes, timber handrail and doors, plastic meter cupboards, non suspect panels above								
2nd Floor / corridor 202 (1)	>10 (3)	Textured coating to ceiling (1)	10m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / corridor 202	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / corridor 202		plasterboard ceiling and, solid walls and floor, metal radiator and pipes, timber handrail and doors, plastic meter cupboards, non suspect panels above								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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2nd Floor / corridor 203 (1)	>10 (3)	Textured coating to ceiling (1)	22m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / corridor 203	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / corridor 203		plasterboard ceiling and, solid walls and floor, metal radiator and pipes, timber handrail and doors, plastic meter cupboards, non suspect panels above								
2nd Floor / corridor 204 (1)	>10 (3)	Textured coating to ceiling (1)	10m ² (1)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 6 = 8	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / corridor 204	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / corridor 204		plasterboard ceiling and, solid walls and floor, metal radiator and pipes, timber handrail and doors, plastic meter cupboards, non suspect panels above								
2nd Floor / corridor 205 (1)	>10 (3)	Textured coating to ceiling (1)	12m ² (2)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 7 = 9	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / corridor 205	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / corridor 205		plasterboard ceiling and, solid walls and floor, metal radiator and pipes, timber handrail and doors, plastic meter cupboards, non suspect panels above								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
2nd Floor / guest room 206 (1)	1 - 3 (1)	Textured coating to ceiling (1)	8m ² (1)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 4 = 6	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / guest room 206	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / guest room 206		plasterboard ceiling, solid walls and floor, pvc window, timber door, metal radiator and pipes, ceramic sink and tile splashback								
2nd Floor / cupboard 207	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
2nd Floor / cupboard 207										
2nd Floor / Bathroom 208 (1)	1 - 3 (1)	Textured coating to ceiling (1)	6m ² (1)	Sealed (0)	Good Condition (0)	Low (1)	Strongly presumed similar to DU000297 / Chrysotile (1)	2 + 4 = 6	Very Low	Manage, monitor and inform maintenance personnel prior to relevant works
2nd Floor / Bathroom 208	-	All other areas visually no asbestos detected	-	-	-	-		-	-	No further action required
2nd Floor / Bathroom 208		plasterboard ceiling, solid walls and floor, ceramic tiles to walk in shower, metal radiator and pipes, ceramic cistern and sink, non suspect riser boxing, sealed non suspect vinyl flooring								
2nd Floor / store cupboard 209	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
2nd Floor / store cupboard 209		locked								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							


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Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations	
2nd Floor / cleaners cupboard 210	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works	
2nd Floor / cleaners cupboard 210		locked									
Roof Void / aoo1	-	Accessed - no suspect materials found	-	-	-	-		-	-	No further action required	
Roof Void / aoo1		block walls, timber frame, mmmf insulation, metal pipes, non suspect felt									
Roof Void / aoo2	-	Inaccessible	1no.	-	-	-		-	-	Conduct further investigation prior to relevant works	
Roof Void / aoo2											
Roof Void / aoo3	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works	
Roof Void / aoo3		block walls, timber frame, mmmf insulation, metal pipes, non suspect felt, metal water tank with mmmf insulation									
Roof Void / aoo4	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works	
Roof Void / aoo4											
Roof Void / aoo5	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works	
Roof Void / aoo5											
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H								
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								


SITE ADDRESS: ST DAVIDS CLOSE, PENTRE, CF41 7BG							DATE: 28/06/2012 to 02/11/2012			
SURVEY TYPE: MANAGEMENT SURVEY							PROJECT REF: J024039			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Roof Void / a006	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
Roof Void / a006										
Roof Void / a007	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
Roof Void / a007										
Roof Void / a008	-	Inaccessible	-	-	-	-		-	-	Conduct further investigation prior to relevant works
Roof Void / a008										
External / External	-	External	-	-	-	-		-	-	No further action required
External / External	-	External	-	-	-	-		-	-	No further action required
External / External	-	External	-	-	-	-		-	-	No further action required
External / External		non suspect roof, plastic gutter and rainwater pipes, plastic clad to gable ends, brick elevations, pvc cladding to underhangs								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H							
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							


APPENDIX 2

PHOTO PAGES OF ASBESTOS OCCURENCES


ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	Ground Floor cupboard (002)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	DU000242	
RESULT:	Chrysotile	


FLOOR/LOCATION:	Ground Floor disabled W.C. (003)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	SPST DU000242	
RESULT:	Chrysotile	

FLOOR/LOCATION:	Ground Floor office (004)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	SPST DU000242	
RESULT:	Chrysotile	


ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	Ground Floor electrical switch room (005)	
DESCRIPTION:	No access due to health and safety reasons	
RECOMMENDATIONS:	Conduct further investigation prior to relevant maintenance / refurbishment works	
EXTENT:	Minor amounts, String, Gaskets	
SAMPLE REF:	Presumed	
RESULT:	Presumed Chrysotile	


FLOOR/LOCATION:	Ground Floor corridor (006)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	DU000243	
RESULT:	Chrysotile	

FLOOR/LOCATION:	Ground Floor laundry (007)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	SPST DU000243	
RESULT:	Chrysotile	


ADDRESS:	St Davids Close, Pentre, CF41 7BG
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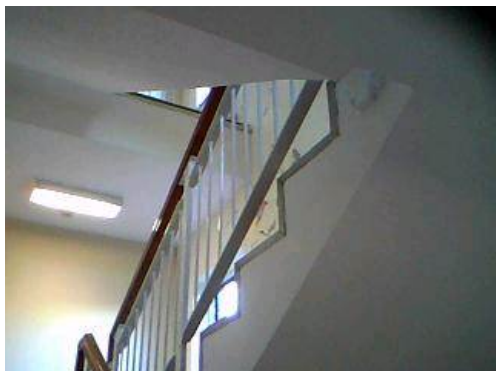
FLOOR/LOCATION:	Ground Floor void above laundry	
DESCRIPTION:	Accessed - no suspect materials found	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	


FLOOR/LOCATION:	Ground Floor lift motor room (010)	
DESCRIPTION:	No access due to health and safety reasons	
RECOMMENDATIONS:	Conduct further investigation prior to relevant maintenance / refurbishment works	
EXTENT:	Minor amounts, String, Gaskets	
SAMPLE REF:	Presumed	
RESULT:	Presumed Chrysotile	

FLOOR/LOCATION:	Ground Floor common lounge (014)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	DU000244	
RESULT:	Chrysotile	


ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	Ground Floor Kitchen 016	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	DU000293	
RESULT:	Chrysotile	


FLOOR/LOCATION:	Ground Floor stairwell 019	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	DU000294	
RESULT:	Chrysotile	

FLOOR/LOCATION:	1st Floor cupboard 111	
DESCRIPTION:	Inaccessible	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	

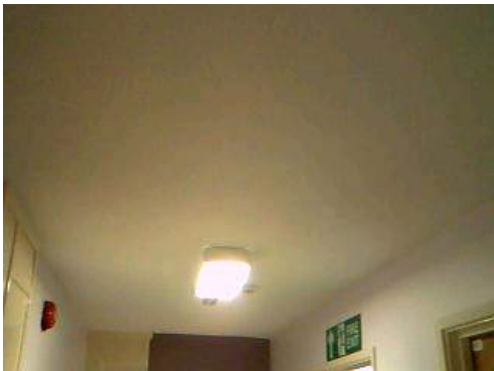
ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	2nd Floor corridor 201	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	DU000297	
RESULT:	Chrysotile	


FLOOR/LOCATION:	2nd Floor corridor 202	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	

FLOOR/LOCATION:	2nd Floor corridor 203	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	


ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	2nd Floor corridor 204	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	


FLOOR/LOCATION:	2nd Floor corridor 205	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	10 - 50 m² or 10 - 50m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	

FLOOR/LOCATION:	2nd Floor guest room 206	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	

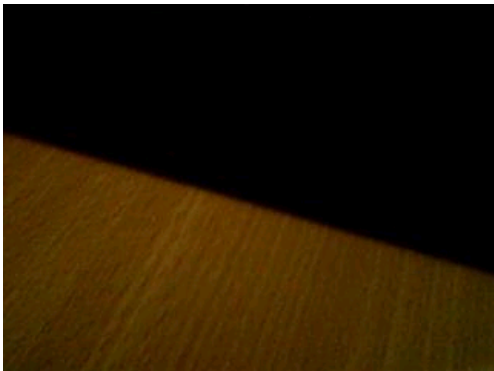
ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	2nd Floor cupboard 207	
DESCRIPTION:	Inaccessible	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	

FLOOR/LOCATION:	2nd Floor Bathroom 208	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	SPST DU000297	
RESULT:	Chrysotile	

FLOOR/LOCATION:	2nd Floor store cupboard 209	
DESCRIPTION:	Inaccessible	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	

ADDRESS:	St Davids Close, Pentre, CF41 7BG
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FLOOR/LOCATION:	Roof Void a002	
DESCRIPTION:	Inaccessible	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	

FLOOR/LOCATION:	Roof Void a008	
DESCRIPTION:	Inaccessible	
RECOMMENDATIONS:	Conduct further investigation prior to relevant works	
EXTENT:		
SAMPLE REF:	Presumed	
RESULT:	Presumed	

APPENDIX 3

BULK ANALYSIS CERTIFICATE

CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Wales & West Housing Association	Surveyor:	David Crofts
Client Address:	3 Alexandra Gate, Ffordd Pengam, Tremorfa, Cardiff, CF24 2UD	Analysis Report No:	J024039
Attention of:	Jen Barton	Report Date:	14th November 2012
Site Address:	St Davids Close, Pentre, CF41 7BG	Site Reference No:	N/A
Date Samples Taken:	28th June 2012	No. of Samples:	9
Date Samples Received:	2nd November 2012	Obtained:	9
Date of Analysis:	8th November 2012		
Analysed By:	Paula Turner		

Method Statement

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Environtec 'In House' documented technical method of transmitted/polarised light microscopy and centre stop dispersion staining, in accordance with our UKAS Accreditation, based on the HSG 248 Asbestos: The Analyst Guide. Calibration of equipment and general quality control procedures are in accordance with our in-house quality control document. Sampling methods are in accordance with documented in-house procedures and UKAS Accreditation.

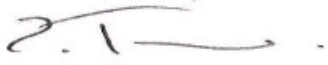
Disclaimer

If samples have been DELIVERED the site address and actual sample location or sample type is given by the client at the time of delivery. Environtec are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Environtec cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our UKAS Accreditation for sampling. Environtec takes responsibility of information reported, only when a staff member of Environtec takes the sample(s).

Sample Number	Sample Location / Sample Type	Fibre Type Detected
DU000241	Ground Floor / Reception (001) / coating to mmmf firebreak - Spray Coating	NADIS
DU000242	Ground Floor / cupboard (002) / Textured coating to ceiling - Textured Coating	Chrysotile
DU000243	Ground Floor / corridor (006) / Textured coating to ceiling - Textured Coating	Chrysotile
DU000244	Ground Floor / common lounge (014) / Textured coating to ceiling - Textured Coating	Chrysotile
DU000293	Ground Floor / Kitchen 016 / Textured coating to ceiling - Textured Coating	Chrysotile
DU000294	Ground Floor / stairwell 019 / Textured coating to ceiling - Textured Coating	Chrysotile
DU000295	Ground Floor / stairwell 019 / Stair nosing - Stair Tread	NADIS
DU000296	1st Floor / Cleaners Cupboard 105 / Textured coating to ceiling - Textured Coating	NADIS

Sample Number	Sample Location / Sample Type	Fibre Type Detected
DU000297	2nd Floor / corridor 201 / Textured coating to ceiling - Textured Coating	Chrysotile

Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience. On rare occasions where there is an element of doubt for samples which are borderline or too insignificant to determine whether the material is asbestos insulation board or asbestos cement, you will be notified and offered a water absorption test. A water absorption test is a longer process undertaken to a supplement asbestos analysis and has a cost implication. We will advice you accordingly should this situation arise. Environtec Ltd cannot be held responsible for inaccuracies based on the material type opinion if a water absorption test has been offered and refused. Material type opinion falls outside the scope of our UKAS accreditation.	K	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
		CROCIDOLITE	= Typically Known as Blue Asbestos (Amphibole Group)
		AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
	E	CHRYSOTILE	= Typically Known as White Asbestos (Serpentine Group)
		ANTHOPHYLLITE	= Asbestos (Amphibole Group)
	Y	ACTINOLITE	= Asbestos (Amphibole Group)
		TREMOLITE	= Asbestos (Amphibole Group)
All samples will be retained in the laboratory for a minimum of 6 Months.			

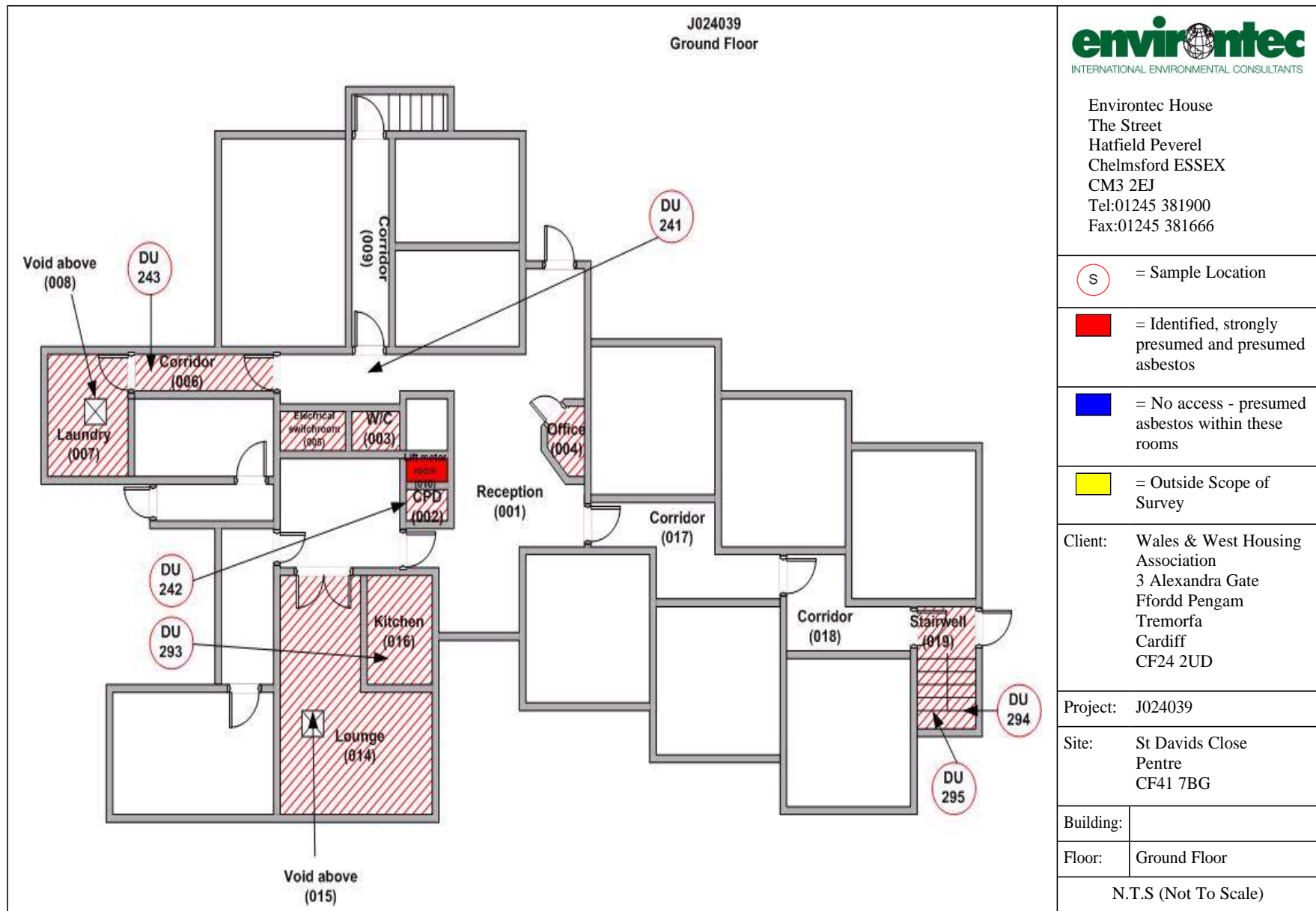
Typed By:	Paula Turner	Authorised Signatory:	
Position::	Senior Laboratory Technician	Print Name:	Paula Turner
UKAS/New AFI/Statements/EA			

APPENDIX 4

SKETCH / PLANS

These plans are provided to assist in the location and designation of rooms etc

The accuracy of the plans / sketches cannot be guaranteed.



J024039
First Floor



Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

S = Sample Location

= Identified, strongly presumed and presumed asbestos

= No access - presumed asbestos within these rooms

= Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

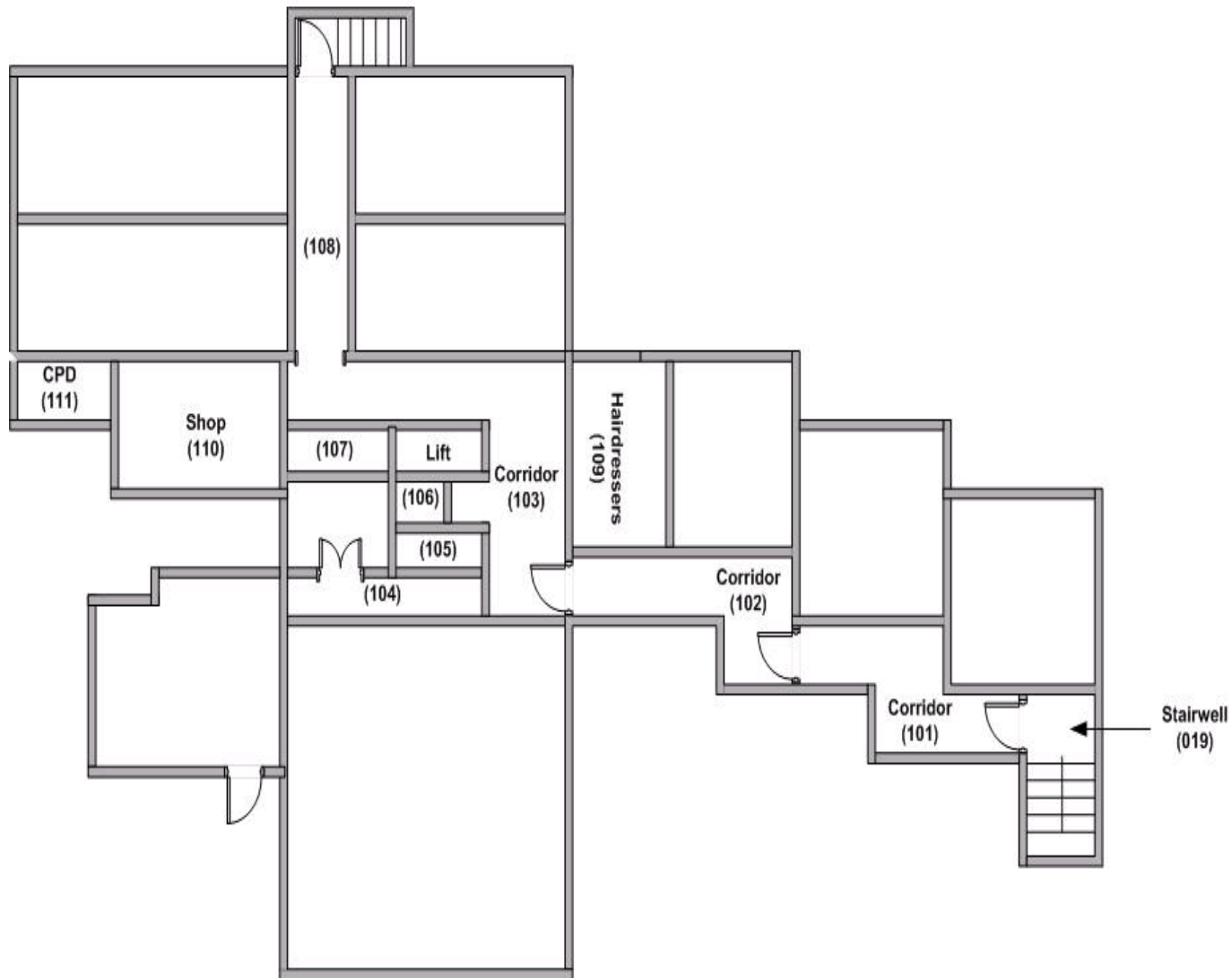
Project: J024039

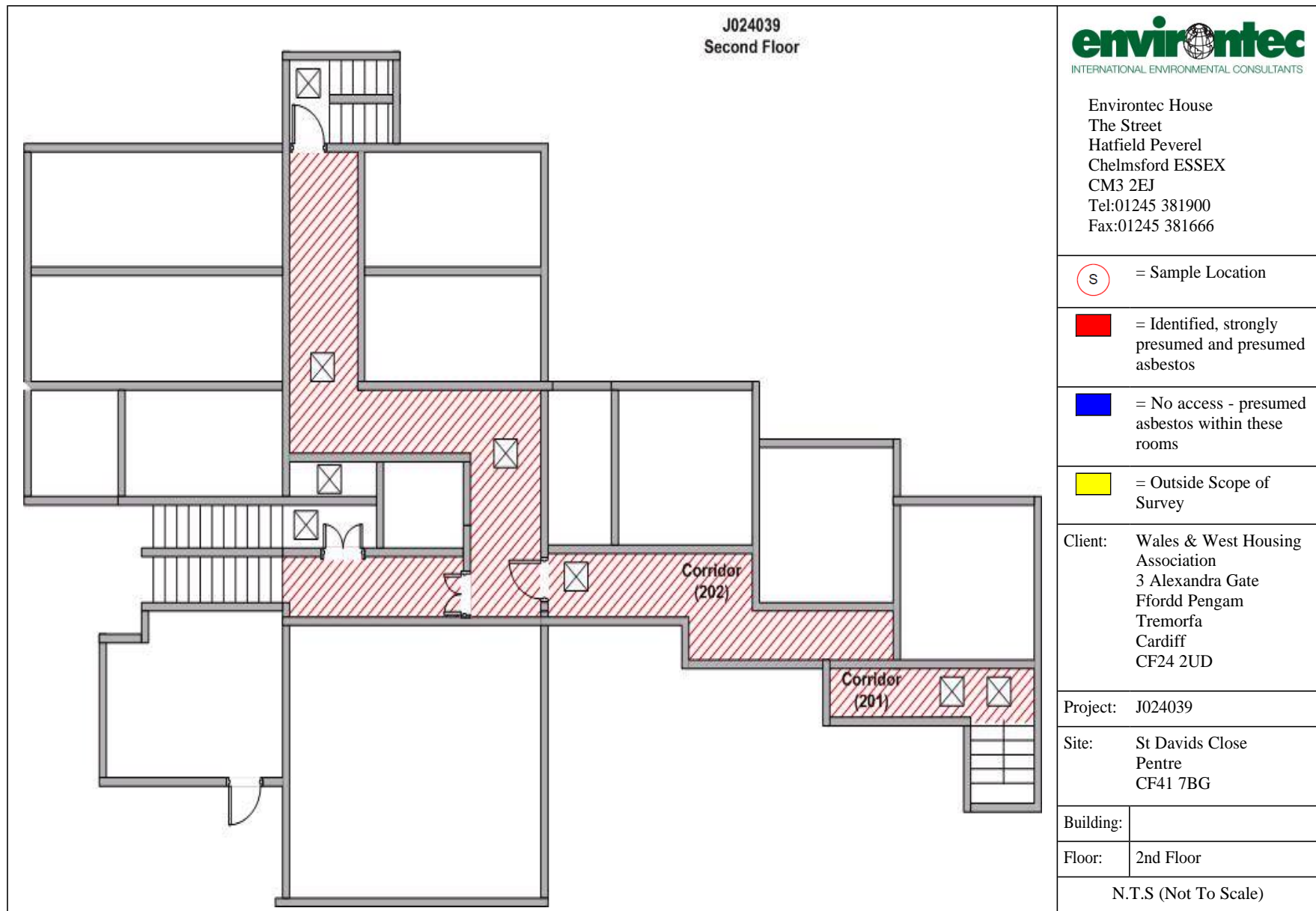
Site: St Davids Close
Pentre
CF41 7BG

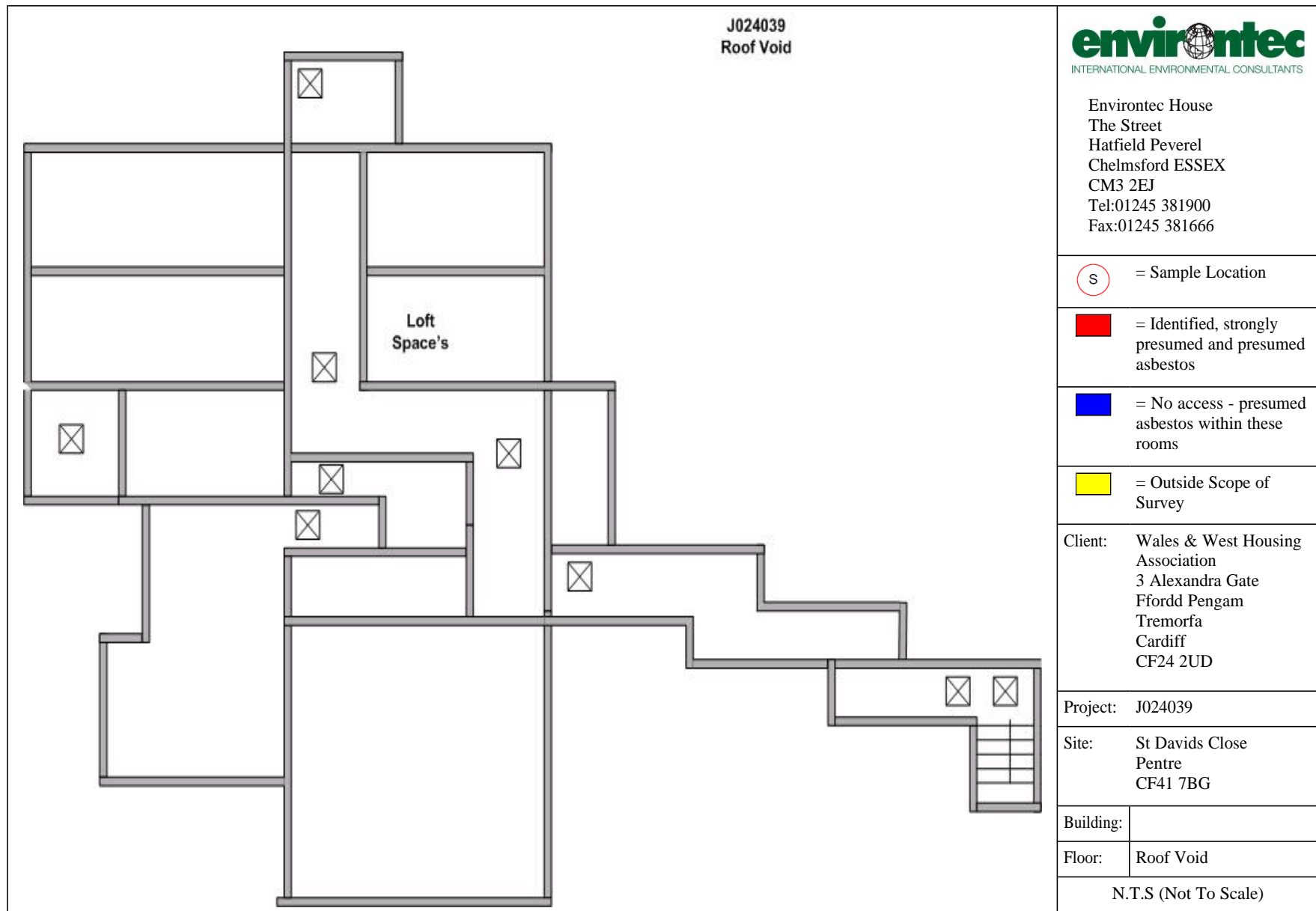
Building:

Floor: 1st Floor

N.T.S (Not To Scale)









J024039
External




Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

 = Sample Location

 = Identified, strongly
presumed and presumed
asbestos

 = No access - presumed
asbestos within these
rooms

 = Outside Scope of
Survey

Client: Wales & West Housing
Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

Project: J024039

Site: St Davids Close
Pentre
CF41 7BG

Building:

Floor: External

N.T.S (Not To Scale)

APPENDIX 5

GENERAL SURVEY INFORMATION

GENERAL SURVEY INFORMATION

1.0 SURVEY METHOD

- 1.1 The survey was conducted by means of visual inspection and subsequent sampling of suspect bulk materials. Environtec Ltd is accredited by UKAS for surveying, this incorporates carrying out sampling of suspect asbestos bulk materials. Where the surveyor suspected a material of containing asbestos, a sample was taken for analysis. The samples taken were chosen as being representative of the material under investigation. Therefore, where there are visually similar materials, they have been regarded as being uniform composition.

1.2 Health & Safety

1.2.1 Working at Heights

All high-level survey work was undertaken in accordance with the Working at Heights Regulations 2005 where a risk assessment is undertaken prior to the use of Step ladders where a second operative may have been required to assist in stabilising ladders, etc. In certain instances where the operative was at risk from falling a harness would be worn and / or scaffold platforms erected.

1.2.2 Entry into Confined Spaces

Entry into confined spaces was only permitted to staff holding a current confined space training certificate. All necessary equipment such as escape packs, gas monitors and intrinsically safe electrical equipment and then only after authorisation from the site/ building manager was given and investigating the atmosphere for fumes / oxygen deficiency, etc. Once the responsible person was satisfied that the confined space was safe for the inspection to take place, a second operative waited outside and kept in regular contact with the surveyor. For areas of particular concern and large duct systems the surveyor was provided with a harness and rope.

1.2.3 Loft Space and Roof Structures

Surveyors would only enter roof spaces and flat-roof structures when they were considered safe to do so. Surveyors would enter loft spaces if they were boarded across the joists or could be assured to remain on the timber joists if their strength permits.

1.2.4 Inadequate Lighting

All surveyors would use torches for buildings with no natural or electrical illumination and would have full use of mobile phones in case of emergency. Surveyors would work in pairs in these circumstances.

1.2.5 Construction and Demolition Sites

When surveys or sampling was to take place on construction or demolition sites the operatives

would wear hard hats, protective footwear and luminous jackets, all of which would have been provided. Surveyors would work in pairs and have had full use of mobile phones for case of emergency in these circumstances.

1.2.6 Working on Machinery

Working on machinery that was not guarded or that was functional was not permitted.

1.2.7 Chemical Hazards

Surveyors would access the premise's COSHH register and identify any chemical hazards that need the appropriate action to be taken prior to entering such areas.

1.2.8 Biological Hazards

Surveyors would only enter areas identified as biological hazards after donning the appropriate personal protective equipment in accordance with the client's instructions, training and warning signs when safe to access. Should other biological hazards such as pigeon excrement, rats or needles be encountered, surveyors would don the appropriate personal protective equipment; including overalls, gloves, boots and respiratory equipment.

1.2.9 Noise Hazards

Surveyors would don the appropriate ear defenders or plugs when entering areas that had a noise hazard in accordance with the client's instructions, training and warning signage.

1.2.10 Sampling Safety

All surveyors conducting sampling would don protective disposable overalls and overboots and wear suitable RPE; mostly an orinasal mask would be adequate, but higher protection may have been needed for severely contaminated buildings or higher risk materials e.g. sprayed coating.

Care would always be exercised when carrying out bulk sampling to ensure that the disturbance of the materials being sampled is minimised. When carrying out sampling it would be ensured that the area from which the sample was taken was repaired and no loose materials were spread around the area.

This would be undertaken by minimizing emission of asbestos fibres by use of a water spray or PVA/water mixture spray to damp down a panel or lagging. A polythene sheet laid under the sample point was used to collect any debris, this was wiped down with wet wipes before removing. An "H" type vacuum cleaner was used if available. All sampling tools were cleaned before moving on to the next sample, placing dirty wet wipes into a sealable sample bag, which upon filling would be double bagged and transferred to the asbestos waste bag in the laboratory.

Operatives undertaking the survey would have relevant Company identification and would undertake their duties discreetly without causing alarm or stress to occupants by unnecessary conversation or remarks.

Staff involved in taking samples of this nature would be fully acquainted with the environmental hazards and would take essential precautions for both their own protection and that of personnel in the vicinity. All samples would be taken while the area is not occupied, but explanations to personnel present what was being done would be undertaken, with as much honesty as the client and the situation demands. In an occupied building, sampling may have been undertaken during lunch breaks or after normal working hours.

Deviations from the above method may have been required where instances are such that wearing full protective clothing cannot be worn without being alarmist to occupants. It would have been suggested to the client that the sampling be conducted out of hours or alternatively recommended air monitoring been conducted whilst sampling was in progress to reassure occupants.

2.3 Sampling Techniques for Bulk Materials

When taking a sample care would be exercised to minimise the damage caused. Often it is possible to find a damaged area of boarding or insulation from which a sample would be removed without causing further damage. When it was necessary to make a fresh hole to take a sample this would be done with a sharp implement such as a stanley knife, bradawl, cork borer or a hand drill. The sample would be extracted and placed directly into self-seal plastic bags and double bagged. The sample reference number was allocated to each sample taken and recorded on the sample bag ensuring that the dust suppressant was sprayed within the vicinity and over the sampling surface.

The damaged material would be repaired with either polyfilla and/or fabric tape.

Labels indicating sample location were left in-situ if permitted by the client.

2.0 SAMPLING STRATEGY

2.1 The object of carrying out sampling was to identify the nature and extent of any visible asbestos bearing material.

All sampling was undertaken causing the minimum possible nuisance and potential risk to health of building occupants and visitors.

2.2 Sampling Strategies to Locate Asbestos

The strategy was based on a systematic diligent visual examination of a building, usually in conjunction with building plans supplied by the client. It was often useful to categorise the building components to be examined as a checklist, i.e.

- Doors
- Ceiling tiles/firebreaks
- Wall panels
- Heaters/heating cupboards/central heating systems
- Stairs

- Service ducts and risers/floor ducts/ceiling voids/under crofts
- External panels
- Soffits
- Roofs
- Gutters/downpipes
- Outbuildings/walkways
- Steelwork
- Boiler houses
- Gaskets
- Ventilation systems
- Lift motor rooms
- Laboratory

When accessing voids, it was essential to inspect for debris from damaged asbestos either from previous installation or careless removals. Floors would not usually contain asbestos but may well have debris of Asbestolux panels or cement sheets in existence.

Also inspections under existing non-asbestos insulation for asbestos residue from a previously inadequate asbestos removal operation would have been undertaken.

2.2.1 Visual Inspections

If the surveyor can confirm from a visual basis that the asbestos material was uniform then it is possible to extrapolate sampling information from identical locations to keep unnecessary sampling to a minimum.

2.2.2 Panels

Samples of every single ceiling panel was evidently not required but sufficient were needed to be sure of locating all the same installations of a particular type. It was recommended that at least one sample per room be taken or every 25 m² or increase the frequency should it be required. However, samples of each type of asbestos panel occurrence would be taken throughout each floor.

2.2.3 Doors

Doors would be inspected adjacent to the door furniture and if visible, a sample of the internal lining would be taken where exposed.

2.2.4 Floor Tiles

One sample of each obvious type of vinyl and colour floor tile. Should it be deemed that all floor tiles are the same then one sample per 25 m² sections would be sufficient.

2.2.5 Gaskets

One sample of each type of gasket was recommended.

2.2.6 Bitumen Products

The variation between each type of bitumen product is not uncommon therefore, for example, one sample of each bitumastic under sink was required.

2.2.7 Textured Coating

The minimal content of asbestos in textured coating requires significantly more sampling. It was suggested that at least 2 samples of textured coating be taken per independent location.

2.2.8 Cement Products

Cement products e.g. roofs, tend to be uniform therefore for a large scale roof a maximum of 4 samples would be deemed sufficient. For small scale roofs and areas a maximum of 2 samples would be required.

2.2.9 Spray Coating

Different mixtures containing different materials may have been used in different areas and layers. Material may also have been removed, repaired or patched at various times. Samples would be taken by carefully removing pieces of approximately 5 cm², where the material appears uniform and consistent, two samples should usually be enough if taken at either end of the sprayed surface in installations exceeding 100m², one sample per

25-35 m². At least one sample would be taken from each patched area. Care would be taken to include all layers of sprayed coating through to the covered surface.

2.2.10 Lagging

The number of samples would depend on the intended treatment. If the entire boiler house has to be stripped, then it was probably only necessary to prove that one sample contains asbestos. In general one sample should be taken per 3m run of pipe with particular attention paid to different layers and functional items (valves etc). For long runs of pipe, eg > 20m, one sample per 6m item will usually be enough. If only a small part of the lagging was evidently asbestos, then it would have been necessary to inspect all branches of the pipework with particular attention to damaged/repaired lagging and extensions to the system.

Fibreglass lagging can be often found on straight portions of pipe runs, but the bends may be wound with asbestos chrysotile rope or packed with an asbestos composite insulation.

3.0 **SURVEY STRATEGY**

3.1 **Visual Inspection and Sampling**

- 3.1.1 The site survey and report has been undertaken in accordance with the latest version of **HSG 264: Asbestos: The Survey Guide** incorporating our procedures accredited by UKAS for surveying. A strategy has been established to keep to a minimum, the number of bulk/dust

samples taken for analysis and hence minimise the cost of the survey. The strategy employed a combination of visual inspection and sampling of bulk materials thus:

3.1.2 Where the surveyor suspected a material containing asbestos, a bulk sample was taken for analysis. In areas where there were substantial quantities of visually uniform materials, then a small number of samples were taken as being representative of the whole area. Because of this strategy, the client must interpret the results such that where asbestos is detected in a material (such as board or beam cladding) then all visually similar material in the same area must be assumed to contain asbestos.

3.1.3 Where the surveyor reports a material as **non asbestos** by visual inspection and with no analysis of samples (e.g. recently lagged pipework covered with metal cladding) then the client must exercise caution in interpreting the results. It is **IMPORTANT** to stress that in such circumstances, it is possible that there are residues of asbestos trapped under the newly applied lagging (e.g. from poor quality stripping methods carried out at some time in the past).

It is not practicable to detect such residues until substantial disturbance of the material takes place, e.g. during major alterations, and Environtec cannot accept liability for the detection of such residues in this survey. If the client undertakes major alterations in a specific area where it is possible that residual asbestos may be found, we recommend that a further investigation of the specific area be carried out before starting any works.

3.1.4 Where there are large numbers of identical items distributed in numerous locations throughout the site, e.g. cement flue pipes, oven door seals etc., a single analysis will have been carried out by the surveyor and the client must assume that all identical items have the same composition as the one specified.

3.1.5 Where a 'NO ACCESS' is used, it indicates that the area specified was not accessible to the analyst at the time of the survey, either because of locked rooms or because to gain entry, would require an unreasonable degree of dismantling of the structure of the building. The client is advised to be alert to the possibility of there being asbestos materials in such areas.

4.0 PRIORITY RATING/RISK ASSESSMENT

4.1 For ease of reference of this report and easy use where asbestos bearing material has been identified a priority rating system has been implemented based on condition, which will allow the client the opportunity to plan any requirement for the remedial action and expenditure. This system operates as follows:

4.2 A priority rating has been assigned to each sample taken and is based on a method of summarising the surveyor's estimate of the condition of the material examined. It is included to assist the client in determining priorities when drawing up a programme of action for asbestos abatement, however, it must be stressed that priorities for action must be drawn up using the priority together with a consideration of the location of the material and any work methods and schedules which may result in disturbance of the material. To assist, a material risk assessment score has been applied to each sample based on the likelihood of asbestos fibres being released into the breathing zone of persons at risk. A single example can be used to illustrate this point; a partition consisting of asbestos insulating board containing amosite observed at the time of the

survey to be in good physical condition with no breaks or abrasions would be given a priority rating of **Low**, i.e. low hazard not requiring urgent attention. If the location of the board is such that it is not subjected to impact or abrasions by normal work activities then the priority for action is also low. The priority would, of course, change to priority **High** if it is decided to carry out works such as upgrading, which would require substantial disturbance of the material.

- 4.3 To summarise, the priority assessment is also the priority for action in cases where the material remains undisturbed through normal work activities. Changes in priorities can be assessed only by the client's representative on site in the light of planned or unscheduled maintenance requirements or changes in normal working patterns as they arise.
- 4.4 The priorities are defined as follows:
- 4.5 **No priority has been assigned - for a material where no asbestos has been detected.**
- 4.6 **VERY LOW (Score 9 or lower)** - indicates a composite asbestos material which has a very low potential to release asbestos fibres in its normal occupation unless damage occurs.
- 4.7 **LOW (Score 10-12)** - indicates a more friable material that contains asbestos but is in a condition and/or location which does not give rise to a significant health risk, **PROVIDED IT REMAINS UNDISTURBED** either by routine maintenance or by personnel carrying out routine daily work activities which could cause impact or abrasion of the material. Priority **Low** is valid as a priority rating only if this proviso is maintained. Minor remedial action such as very minor encapsulation may be required in order that the material may remain in-situ. Clients are advised to be alert to any changes in work activities in areas where priority **Low** material is located. Permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.
- 4.8 **MEDIUM (Score 13-15)** - indicates the material contains asbestos and is in a location and/or condition which requires some remedial action. The remedial action may be relatively simple such as applying a sealant coat to the surfaces of boards. Priority **Medium** materials may be encapsulated by appropriate remedial action but it is recommended that they be stripped or cleaned as appropriate as soon as resources become available.
- 4.9 **HIGH (Score ≥16)** - indicates materials which contain asbestos and which are in a condition and/or location which requires urgent attention. Priority **High** materials are usually not suited to any form of containment programme and should be stripped or cleaned as appropriate as soon as possible.

4.10 Material Assessment Algorithm (MA)

Each of the parameters given below are assessed during material risk assessment.

Variable	Score	Examples
Product type* (or debris from product)	1 (Low)	Composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, paints, decorative finishes, cement, textured coating etc.
	2 (Medium)	AIB, textiles, gaskets, ropes paper etc.
	3 (High)	Lagging, spray coatings, loose asbestos etc.
Surface Treatment*	0	Non-friable composite asbestos/ encapsulated cement
	1 (Low)	Enclosed sprays/ lagging/ board or bare cement/ textured coating
	2 (Medium)	Bare AIB or encapsulated lagging/ spray material/ rope
	3 (High)	Unsealed lagging/ spray material/ loose asbestos.
Extent of damage*	0 (None)	No visible damage
	1 (Low)	Few scratches/ marks, broken edges etc.
	2 (Medium)	Significant breakage of non-friable materials or several small areas of damage to friable material
	3 (High)	High damage/ visible debris.
Asbestos Type*	0	No asbestos detected.
	1	Chrysotile
	2	Amphibole asbestos excluding Crocidolite.
	3	Crocidolite.

The Material Assessment score is calculated by adding the parameters above and the potential for releasing fibres assigned as detailed below.

Material Assessment Score	Fibre Release Potential
10 or higher	High
7 - 9	Medium
5 - 6	Low
4 or lower	Very Low

4.11 Priority Assessment Algorithm (PA)

Each of the parameters given below are assessed during priority risk assessment.

Variable	Score	Examples
Vulnerability to damage ✓	0	Rare disturbance activity - Only during structural alteration.
	1	Low disturbance activity - Office type activity
	2	Periodic disturbance activity - e.g. Industrial or vehicular activity which may contact ACMs.
	3	High levels of disturbance - e.g. Fire door with A.I.B. sheet in constant use
Extent ✓	0	Small amounts or items (e.g. strings, gaskets)
	1	< 10 m ² / pipe run
	2	> 10 - 50 m ² / pipe run
	3	> 50 m ² / pipe run
Location ✓	0	External
	1	Internal
	2	Heat
	4	Air Conditioning
Number of occupants ✓	0	None
	1	1 - 3
	2	4 - 10
	3	> 10

Priority Assessment + Material Assessment Score	Total Risk Assessment (Priority Rating)
≥ 16	High
13 - 15	Medium
10 - 12	Low
9 or lower	Very Low

The total risk assessment score is calculated by adding the priority assessment and material assessment score.

- 4.12 We have assigned a priority rating in accordance with the algorithm. The priority rating risk assessment is established by adding the material assessment and priority assessment to provide a total risk assessment score.
- 4.13 The Risk Assessment Algorithm is purely guidance to establishing a priority rating which can be adapted to allow for other factors. The survey shall take into account other parameters making adjustment to the priority rating as required to ensure the priority rating is appropriate.
- 4.14 To minimise the risk of exposure to fibres and damage to decorations or fabric, not all asbestos containing materials were sampled. Some were strongly presumed or presumed to contain asbestos.

"Strongly presumed" is where the surveyor has confirmed by Laboratory Analysis the presence of asbestos or non asbestos in a material and the surveyor has used this information by extrapolating the results for the material of similar construction. Also this terminology will be used where asbestos has been known to have been commonly used in manufacturing and where access restricts the possibility of sampling eg. corrugated cement roofs.

"Presumed" asbestos is a *default situation* where there is insufficient evidence to confirm that it is asbestos free ie where there is no samples taken during a survey as requested by the client or where an area cannot be inspected or accessed. In both cases the areas must be presumed to contain asbestos unless there is strong evidence to prove otherwise.

"Presumed" or "Strongly presumed" asbestos containing materials are scored as Crocidolite (3) unless analysis of similar samples from the building shows a different asbestos type.

- 4.15 The priority assigned to a specific material to remain in-situ is representative and transient, hence, routine periodic audits must be conducted to reassess the condition on a regular basis at least annually or sooner if there is a particular concern or problem highlighted.
- 4.16 A permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.

4.17 Management Plan

A management plan should be developed based on this risk assessment. The management plan may include the following :-

- .. Clean up debris
- .. Repair
- .. Encapsulate
- .. Enclosed
- .. Remove
- .. Maintain and update log of asbestos containing materials
- .. Monitor condition
- .. Restrict access

- “ Label or colour code
- “ Inform
- “ Train
- “ Define safe systems of work
- “ Operate a permit to work system

To manage the risk effectively you will need to:

- “ Keep and maintain an up to date record of the location, condition, maintenance and removal of all asbestos materials on your premises
- “ Repair, seal or remove if there is a risk of exposure
- “ Maintain in a good state of repair and regularly monitor the condition
- “ Inform anyone likely to disturb asbestos of its location and condition
- “ Have arrangements in place so that work which disturbs asbestos complies with the Control of Asbestos Regulations (CAR)
- “ Review the plan at regular intervals and update if circumstances change

- 4.18 Generally, work with asbestos insulation, insulating board and spray coating **must not** be carried out without a licence from the HSE although there are exceptions for very minor works - more information is available in "*Work with materials containing asbestos - L143*". As a general guideline, work on these materials should be carried out inside full enclosures incorporating negative pressure and decontamination facilities although minor works may be carried out in accordance with the "*Asbestos Essentials Task Manual*" (HSG210).
- 4.19 The removal of asbestos insulation, insulating board and spray coating is subject to a statutory 14 day notification to the Health and Safety Executive. The notification period is a condition of the removal contractor's licence. Note, also there may be additional restrictions placed on a licence at the discretion of the HSE.
- 4.20 Following the introduction of the *Hazardous Waste (England & Wales) Regulations 2005*, all materials with an asbestos content greater than 0.1% by weight - including asbestos cement where applicable - is now classified as a Special Waste and must be disposed of at a site licensed to accept such waste. An appropriate consignment note is also required.
- 4.21 Although not a legal requirement, it is recommended that a licensed asbestos contractor is engaged for any work with asbestos - including cement products - to ensure full compliance with all current legislation.

5.0 UKAS

- 5.1 In accordance with current legislation as of August 1999, as an employer, you must only engage laboratories to carry out air monitoring, clearance sampling and analysis who can demonstrate that they conform to *European Standard ISO 17025* by accreditation with a recognised accreditation body.
- 5.2 Environtec Ltd are accredited by *UKAS (United Kingdom Accreditation Service)* for fibre counting, clearance sampling, bulk sampling and bulk analysis (**Testing 2030**) thereby assuring our audit system, quality system, calibration and testing operations are in compliance with the

relevant requirements and are regularly assessed both internally and externally. Environtec Ltd is a UKAS accredited inspection body for asbestos surveying in complying with the standard **ISO 17020 (Inspection 197)**.

- 5.3 Environtec Ltd has a wealth of experience and knowledge to ensure maximum standards are maintained and that the reporting to the client is of the highest quality achievable. Views and interpretations expressed within the content of this report are outside the scope of UKAS.

6.0 AIR SAMPLE ANALYSIS RESULTS

- 6.1 If required, air tests were taken in accordance with **HSG 248** and our UKAS accreditation for fibre counting and sampling. Air test filters were cleared using acetone/triacetin and read using phase contrast microscopy.

Environtec Ltd are participants, with current satisfactory performance in the RICE scheme (The Regular Inter-Laboratory Counting Exchange), which formally established in 1984 as the UK National Proficiency Testing Scheme for laboratories using the membrane filter method.

7.0 DISCLAIMER

- 7.1 This consultancy contract was completed by Environtec Ltd on the basis of a defined programme of work and terms and conditions agreed with the Client. This report was compiled with all reasonable care and attention, bearing in mind the project objectives, the agreed scope of works, prevailing site conditions and the degree of manpower and resources allocated to the project, as agreed.
- 7.2 Environtec Ltd cannot accept responsibility to any parties whatsoever, following the issue of this report, for any matters arising which may be considered outside of the agreed scope of works.
- 7.3 This report is issued in confidence to the client and Environtec Ltd cannot accept responsibility to any third parties to whom this report may be circulated, in part or in full, and any such parties rely on the contents of the report solely at their own risk.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves

- 7.4 Any questions or matters arising from this report may be addressed in the first instance to the Surveyor.

8.0 CONCLUSION

8.1 General

- 8.1.1 Where asbestos materials have been positively identified to this property remedial action may be required to be completed to render them safe. Some asbestos materials may remain in-situ in their present condition to fulfil their life expectancy, providing they remain undisturbed and undamaged.
- 8.1.2 Careful consideration must be given to all maintenance and associated operations that will or are likely to disturb any asbestos bearing materials that remain in-situ.
- 8.1.3 It must be considered that whilst asbestos materials remain in-situ a primary source of contamination will exist with secondary contamination by air movement and traffic through which will continue to spread asbestos contamination over a wider extensive area with risk to health and cost implications to the client.
- 8.1.4 It must be noted that demolition works prior to refurbishment or similar may expose asbestos materials that were physically and visually impossible to locate and identify within the restraints of this survey. Caution should therefore always be adopted where there is a question of doubt.
- 8.1.5 Caution must therefore be adopted when maintenance works are conducted, should any suspect materials be revealed then the works must stop immediately and expert advice sought.
- 8.1.6 The test results set out within the appendices show the nature and condition of the asbestos present in the building. Should the building be programmed for major demolition and redevelopment works all asbestos materials positively identified must be removed under controlled conditions by a registered licensed asbestos removal contractor and disposed of as special waste, prior to the commencement of such works.

9.0 RECOMMENDATIONS

- 9.1.1 This survey report and recommendations detailed shall form part of the asbestos management plan in accordance with **regulation 4 of the (CAR 2012)**.
- 9.1.2 To comply with and ensure that the requirements of ***The Control of Asbestos Regulations 2012, Health and Safety at Work Act 1974, The Management of the Health & Safety at Work Regulations 1999, Construction (Design and Management) Regulations 2007 and ACoP The Management of Asbestos in Non Domestic Premises*** - It is proposed and recommended that the following are implemented and actioned:-
- 9.1.3 That access and disturbance to all areas containing loose or substantially damaged/ deteriorated asbestos materials with a priority **High** be restricted immediately.
- 9.1.4 That all asbestos materials listed under priority **High** be the subject of removal/ remedial action to be implemented immediately to render them safe. This action to include all necessary environmental decontamination and cleaning as necessary.

- 9.1.5 That those items listed under priority **Medium** which are vulnerable to damage be removed and replaced with a non-asbestos substitute or if the ACM is not vulnerable to damage then the ACM must be encapsulated within 12 months of the date of this report.
- 9.1.6 That all individual recommendations relating to ACM occurrences listed within the asbestos register are implemented within 12 months or sooner of the date of this report, depending on the individual circumstances. The prefix word "Programme for removal" shall indicate a less urgent ACM occurrence that requires remedial action to be implemented at a later date depending upon budget restraints.
- 9.1.7 That those items listed under priority **Low/Very Low** may remain in situ unless there is a high vulnerability to damage and/or disturbance as a result of routine occupational activity or maintenance/refurbishment.
- 9.1.8 That all asbestos containing materials that are to remain in place are clearly labelled with statutory warning labels. Labelling of ACMs that are in good condition and may remain in-situ is purely a recommendation. We appreciate in certain circumstances asbestos can be an emotive subject and labelling of asbestos may draw unwanted attention to the said material. Other warning systems can be applied to the ACMs for example a colour coding and/or permit to work scheme should be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area. Environtec Ltd can provide full details of a comprehensive permit to work scheme upon request.
- 9.1.9 Consideration should be given to future proposed refurbishment work and the asbestos removal abatement works programmed in to take advantage of that opportunity. If during refurbishment of a building it becomes necessary for asbestos materials to be worked upon or disturbed in any way there is a requirement under the **CAR 2012** to carry out a risk assessment.
- 9.1.10 That all removal, encapsulation and abatement works are undertaken and completed in compliance with a detailed specification and method statement for asbestos works.
- 9.1.11 That where asbestos materials are to remain insitu then regular, at least annual periodic audit inspections are carried out to monitor and maintain the condition of the asbestos materials such that the risks to health are reduced to the minimum possible so far as is reasonably practicable.
- 9.1.12 That those employed in management positions directly or indirectly having control of the building (dutyholder) and/or any works within these premises are made fully aware of this report and all asbestos materials identified. Those management have a responsibility to provide awareness training for all personnel, site and office based.
- 9.1.13 Those who have repair and maintenance responsibilities for the premises because of a contract or tenancy or those in control of the premises if no such contract or tenancy exists are the "duty holder". The dutyholder shall adopt all liabilities for management of ACMs.
- 9.1.14 That all contractors and those who visit site to undertake any works be notified and made aware of this report and that asbestos materials are present prior to the undertaking of such works to

enable suitable precautionary actions to maintain and reduce the risk to health.

- 9.1.15 That asbestos airborne fibre monitoring be completed to all areas where asbestos materials have been listed under priority **High or Medium** which are programmed for removal at a later date, to identify if airborne fibres are being generated under prevailing conditions. It is considered that this monitoring exercise will act as a reassurance confirmation as it is not expected that airborne fibres will be generated.

This monitoring should be maintained periodically until the said asbestos materials are made safe by removal or abatement works.

- 9.1.16 That all asbestos removal/abatement works are undertaken by a licensed asbestos removal contractor under the direct supervision of Environtec Ltd appointed by the client and that all analytical attendance and monitoring be completed by Environtec Ltd in accordance with our UKAS accreditation.
- 9.1.17 That competitive quotations/tendering procedures are employed to achieve the most economically favourable costings and programme.

10.0 CLIENT OPTIONS

- 10.1 Environtec Limited, on the basis of the survey report can assist the duty holder in compiling a detailed management plan and asbestos policy on behalf of the client which shall incorporate involve asbestos remedial works. If necessary, together with future updates to the register, asbestos awareness training together with our comprehensive popular permit to work scheme.
- 10.2 Environtec Ltd can also undertake annual inspections/re-surveys of premises on behalf of clients to assess in-situ asbestos containing materials and inspect areas originally omitted from the survey with the purpose of updating the asbestos register especially when remedial works or maintenance works take place. The register shall be issued with updates on a regular basis one copy to the client and one for the premises.
- 10.3 Where remedial works are identified, Environtec Ltd can prepare a detailed specification or method statement for the safe removal/containment and any decontamination of all asbestos identified. The specification will encompass all current legislation, extent of works and any site restrictions.
- 10.4 The works can be programmed to progress in phases in order to keep staff disturbance to a minimum. All works to be managed and monitored by Environtec Limited who will provide all necessary certification upon successful completion of the works.
- 10.5 Environtec Limited have been involved as Project Managers on asbestos projects acting as principles for clients for some years, and as such, have compiled a list of reputable Licensed Asbestos Contractors. The contractors are familiar with our Specification and are usually selected for their particular experience or location to the particular site.
- 10.6 Returned tenders will be vetted by Environtec Limited to ensure that contractors have demonstrated a thorough understanding of the proposed works and provided all necessary

supporting information. From the details returned, a recommendation will be made of the most suitable tender received. The tenderers and recommendations will be submitted to the client in the form of a tender summary report.

- 10.7 Budget prices based on our knowledge and experience in the industry can be prepared if requested.
- 10.8 The client should consider undertaking asbestos surveys of other properties under their control and management to formulate and generate an asbestos risk register for their portfolio of buildings so that the asbestos can be effectively controlled and managed. This should be undertaken prior to future projects enabling the client to account for any additional costs/timescale additions necessary on such projects as well as locating previously unidentified asbestos material. Current legislation has placed a statutory obligation on the dutyholder to manage ACMs in non-domestic premises. The asbestos register will form part of the management plan. It is a requirement that all properties controlled by the dutyholder have a management plan that incorporates an asbestos register.
- 10.9 Environtec Ltd can provide a computer web-based database system so that asbestos risk registers for various buildings can be properly managed and updated accordingly incorporating current legislation.

11.0 REGULATIONS ON ASBESTOS IN BUILDINGS

11.1 General

- 11.1.1 Prior to any work involving the disturbance or removal of asbestos containing materials, points that must be noted:

In accordance with the *Approved Code of Practice, (ACoP), entitled 'Work materials containing asbestos - L143*, all work with asbestos falls within the scope of the Code of Practice and guidance therein. In general terms, if the code applies, various provisions and regulations have to be complied with. Although failure to observe any provision of this code is not in itself an offence, that failure may be taken by a court in criminal proceedings as proof that a person has contravened a regulation to which the provision relates.

- 11.1.2 An additional *ACoP entitled The Management of Asbestos in Non-Domestic Premises (second edition November 2012) - L127* is aimed at those who have repair and maintenance responsibilities for non-domestic premises.

11.1.3 Definitions

- a) Control Limits: The single control limit for all asbestos types is 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

For further reference, please refer to the following Guidance Notes:-

- 1) *HSG248 - Asbestos: The analyst's guide for sampling, analysis & clearance procedures*, published by the Health and Safety Executive.

- 11.1.4 Every effort has been made to identify all asbestos materials so far, as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard 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:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes i.e. paint, over boarding, disguising etc. where this is the case then its detection will be impaired.
- 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.
- 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.
- Where an area has been previously 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 at Work Regulations (1987) 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.
- 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 another i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- 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 act (1974) for both themselves and others.
- 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 densely contaminated at certain locations (textured coating for example). Where this is the case the sample taken may not be representative of the whole product throughout.

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

- Environtec Limited cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report. Environtec Limited 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.

As a general guide:

- a) Asbestos materials which are sound, undamaged and not releasing dusts, should not be disturbed unless for refurbishment works and then, all necessary precautions must be taken and in accordance with the ACoP document, entitled '*Work with materials containing asbestos*' - **L143**.

- b) Those activities that are likely to produce a release of asbestos dust should be avoided as far as possible.

- c) The concentration of airborne asbestos in occupied areas should be reduced to the lowest, reasonably practicable level.

11.2 Specific

11.2.1 **Section 2(d) of the Health and Safety at Work Act 1974 (Chapter 37)**, places a general duty on employers to:

'So far as is reasonably practicable as regards any place of work under the employers control, the maintenance of it in a condition that is safe and without risk to health, and adequate as regards facilities and arrangement for their welfare at work'.

Section 3 of the Act places general duties on employers and the self employed persons other than their employees:

'It shall be the duty of every employer to conduct his undertaking in such a way to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected, thereby are not exposed to such risks to their health or safety'.

Section 4 places general duties on persons concerned with premises to persons other than their employees in non-domestic premises:

'... to take such measures as it is reasonably practicable, that the premises, and any plant or substance in the premises or, as the case may be, provided for use there, is or are safe and without risk to health'.

11.2.2 The **Control of Asbestos Regulations 2012 (CAR)** requires employers to prevent the exposure of employees to asbestos. If this is not reasonably practicable the law says their exposure should be controlled to the lowest possible level. Before any work with asbestos is carried out, the

Regulations require employers to make an assessment of the likely exposure of employees to asbestos dust. The assessment should include a description of the precautions that are to be taken to control dust release and to protect workers and others who may be affected by that work. If you are employing a contractor to work in your building make sure that either the work will not lead to asbestos exposures or that they have carried out this assessment and identified work practices to reduce exposures.

11.2.3 The ***Construction (Design and Management) Regulations 2007*** require the client to provide the CDM co-ordinator with information about the project that is relevant to health and safety. This information might, for instance, include previous surveys of the building for asbestos. Not all projects come within the scope of these Regulations. These Regulations place duties on clients, clients' agents (where appointed), designers and contractors to ensure that the health and safety aspects of the work are taken into account, and then co-ordinated and managed effectively throughout all the stages of a construction project. This includes all stages in the life cycle of a project, from conception, design and planning through to the execution of works on site and subsequent construction, maintenance and repair.

11.2.4 These Regulations apply to the planning and execution of much construction work that involves asbestos cement. Where CDM applies, the following conditions apply:

- clients should provide information about the location, type and condition of asbestos cement;
- designers should take account of this information by altering their designs to remove or reduce the need to work with asbestos cement;
- CDM co-ordinators should ensure information about asbestos, relevant to the work in hand, is available to designers and the principal contractor;
- the principal contractor should ensure that individual contractors are aware of the relevant information, and workers should be briefed;
- anyone arranging for someone to undertake construction work should be reasonably satisfied that their appointees are competent to undertake the work safely and without risk to health;
- where work with asbestos cement is part of the construction work, anyone arranging for someone to do work should be reasonably satisfied that they are competent in work of that type;
- at the end of a project, a health and safety file should be prepared which includes relevant information about asbestos.

11.2.5 Assessment of work which exposes employees to asbestos (as detailed in regulation 6 of the ***Control of Asbestos Regulations 2012***):

The ***Control of Asbestos Regulations 2012*** place strict duties on those who have repair and maintenance responsibilities for premises, because of a contract or tenancy, to manage the risk from asbestos in those premises. Where there is no contract or tenancy the person in control will be the duty holder. There is also a duty of co-operation on other parties. The duty is supported by an ***Approved Code of Practice -The Management of Asbestos in Non-Domestic Premises -***

L124.

Who has a duty to Manage asbestos?

A wide range of people potentially have obligations under this regulation, including employers and the self-employed, if they have responsibilities for maintaining or repairing non-domestic premises, and the owner of those premises, whether they are occupied or vacant. In all these cases, regulation 4 of CAR may apply, but the extent of the practical duties will be determined by contractual and other existing legal obligations towards the property.

Specific legal duties under regulation 4 of CAR 2012

The broad requirements on employers and others are to:

- Take reasonable steps to find materials likely to contain asbestos;
- Presume materials contain asbestos, unless there is strong evidence to suppose they do not;
- Assess the risk of the likelihood of anyone being exposed to asbestos from these materials;
- Make a written record of the location and the condition of the ACMs and presumed ACMs and keep it up to date;
- Repair or remove any material the contains or is presumed to contain asbestos, is necessary, because of the likelihood of disturbance, and its location or condition;
- Prepare a plan to manage that risk and put it into effect to ensure that;
 - Information on the location and condition of ACMs is given to people who may disturb them;
 - any material known or presumed to contain asbestos is kept in a good state of repair;
- Monitor the condition of ACMs and presumed ACMs; and
- Review and monitor the action plan and the arrangements made to put it in place;

11.2.6 Information, Instruction and Training (as detailed in Regulation 10 of CAR 2012):

Every employer shall ensure that adequate information, instruction and training is given to his employees who are liable to be exposed to asbestos so that they are aware of the risks and the precautions that should be observed.

11.2.7 Use of *Control Measures* (as detailed in Regulation 12 of CAR 2012):

Every employer who provides personal protective equipment shall ensure that it is properly used. Every employer shall make full and proper use of any personal protective equipment and if he discovers any defect he shall report it to his employer.

11.2.8 Maintenance of *Control Measures (as detailed in Regulation 13 of CAR 2012)*:

Every employer who provides any personal protective equipment shall ensure that it is maintained in a clean and efficient state, in efficient working order and in good repair.

11.2.9 *Provision and Cleaning of Protective Clothing (as detailed in Regulation 14 of CAR 2012)*:

Every employer shall provide adequate and suitable protective clothing for his employees who are exposed to asbestos. The employer shall ensure that any protective clothing provided, is either disposed of as asbestos waste or adequately cleaned.

11.3 **Removal**

11.3.1 When it is not possible to seal an asbestos material effectively and it is likely to release dust, it may be decided to remove it completely. If it is necessary to disturb asbestos materials frequently, for example, for maintenance purposes, the cost of the precautions required may make it more cost effective to replace them. However, it should be recognised that removal often leads to higher short-term dust levels than sealing the material in place, and appropriate precautions must be taken.

Removal may involve complete removal of board or lagging for example, or simply removal of a small vulnerable area from an installation. Temporary repair, sealing or enclosure may be required to render asbestos material safe pending removal. When asbestos fire protection material is removed, it must be immediately replaced with materials having at least an equivalent fire rating.

Removal of sprayed asbestos, lagging and asbestos insulating board should generally be carried out by a Contractor licensed by the Health and Safety Executive (HSE).

Work with materials in which the asbestos fibres are firmly linked in a matrix do not require to be conducted by a licensed contractor as long as the conditions set out in Regulation 3(2) are fulfilled (Refer to paragraphs 34-39 of ACoP L127), although it is recommended that all such works are undertaken by a licensed contractor.

11.3.2 The *Control of Asbestos Regulations 2012, entitled 'Asbestos'*: sets down a single control limit for the level of airborne asbestos fibres for all asbestos types, this being 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

It should be noted, however, that this level refers to those who would expect to come into contact with asbestos as part of their employment. There are currently no levels set for the general public. However, in terms of non-occupation exposure, airborne fibre levels should be controlled to as low as reasonably practicable. For most practicable purposes, this effectively means less than 0.01 fibres/ml.

Should one wish to disturb this material, the above level must not be exceeded.

11.3.3 Any intended de-contamination/removal work should be undertaken in accordance with a

detailed specification.

The specification should include for:-

a)The continued operational requirements.

b)The continuation of the current refurbishment works and the following legislation:-

- 1) *The Control of Asbestos Regulations (CAR) 2012. Approved Code of Practice's - Work with materials containing asbestos - L143 and The Management in Non-Domestic Premises - L127.*
- 2) *Health and Safety at Work etc Act 1974.*
- 3) *HSG248: Asbestos: The analysts' guide for the sampling, analysis and clearance procedures.*
- 4) *Construction (Design and Management) Regulations 2007.*
- 5) *Control of Substances Hazardous to Health Regulations 2002.*
- 6) *HSG247 Asbestos: The Licensed Contractors' Guide*
- 7) *Respiratory Protective Equipment at Work; A Practical Guide HSG53.*
- 8) *A comprehensive guide to Managing Asbestos in Buildings HSG227.*
- 9) *HSG 264: Asbestos: The Survey Guide*
- 10) *Asbestos Essentials Task Manual HSG210.*
- 11) *Introduction to Asbestos Essentials HSG213.*
- 12) *The Hazardous Waste Regulations 2005*

c)Further reading:

- *Working with asbestos cement HSG 189/2.*
- *Asbestos MS13.*



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Asbestos Refurbishment Survey

Ty Ddewi (Scheme)
Ton Pentre
Pentre
Mid Glamorgan
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UPRN: 0291-500



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APPENDICES - Survey Results

Appendix 1 - Asbestos Register - Results

Appendix 2 - Negative Register - Results

Appendix 3 - Survey Data Sheets

Appendix 4 - Non-Asbestos Materials Register

Appendix 5 - Analysis Certificate(s)

Appendix 6 - Plans

1.0 Executive Summary:



Asbestos Containing Materials (ACMs) that have been identified during this Refurbishment Survey and the specific areas in which they are located are categorised below, in order of risk, according to the combined Material Assessment (MA) and Priority Assessment (PA) risk scores, produced by Kovia in consultation with the duty-holder / client (using the scoring algorithm guidance provided within HSG227).

HIGH RISK MATERIALS - Combined MA+PA score of 19-24

ACMs in poor condition, often including associated asbestos debris and contamination, have been identified within the following areas listed in the table below. It is recommended that a full Risk Assessment be undertaken by the client to ensure that Regulations 4, 7, 10, 11 and 16 of the Control of Asbestos Regulations 2012 are complied with.

Building	Floor	Room	Description	Material	Risk assessment Score	Recommendations
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There were no results found.

MEDIUM RISK MATERIALS - Combined MA+PA score of 13-18

Unsealed or damaged ACMs, identified during this survey, are listed in the table below. In accordance with Regulation 7 of the Control of Asbestos Regulations 2012, it is recommended that work to remove these materials is undertaken as a priority and that air monitoring is carried out within adjacent areas, in order to assess airborne fibre levels.

Building	Floor	Room	Description	Material	Risk assessment Score	Recommendations
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There were no results found.

1.0 Executive Summary:



LOW RISK MATERIALS - Combined MA+PA score of 12 or less

The following ACMs, that are in good condition, have been identified during this survey and are listed in the table below. In accordance with Regulation 7 of the Control of Asbestos Regulations 2012, it is recommended that work to remove these materials is undertaken as a priority. A management policy and plan must be implemented to manage any ACMs that are outside the refurbishment area and are to be left in-situ (a further Management Survey is recommended in this instance). Such remaining ACMs may require labelling and the condition of these materials re-inspected at regular intervals e.g. 12-months. Where licensable ACMs have been identified, then the re-inspection frequency may be increased.

Building	Floor	Room	Description	Material	Risk assessment Score	Recommendations
Block 38-41						
Block 38-41	Ground	Corridor G01	Textured coating to fixed plasterboard ceiling.	Textured Coating	LOW (2 + 6)	Manage in-situ or remove if affected by works

1.0 Executive Summary:



NO ACCESS AREAS - PRESUMED ASBESTOS

In accordance with 'HSG264 - Asbestos: The survey guide', ACMs have been presumed as being present to the following areas, as access could not be gained at the time of the survey. An interim management policy and plan may be required, to identify that these areas require further inspection, if the period between survey and refurbishment is significant e.g. more than three months. No access areas will require intrusive inspection prior to the commencement of refurbishment works.

Building	Floor	Room/Area	Recommendation
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There were no results found.



Building Notes:

Internal notes: N/A

External notes: N/A

2.0 Contract Review:



Name and address of site:	Ty Ddewi (Scheme), Ton Pentre, Pentre, Mid Glamorgan		
Name and address of client:	Wales & West Housing, Head Office, Archway House, 77 Parc Ty Glas, Llanishen, Cardiff		
Client contact:	Perry Dobbins		
Type of survey:	Refurbishment Survey (with MA + PA)		
Date of survey:	12 Mar 2020		
Report revision number:	1		
TEAMS internal job number:	J024943		
Lead surveyor(s):	Chris Goodman	Signature:	
Additional site personnel:	None recorded		
Technically reviewed by:	James Lidbury	Signature:	
Report issue date:	15 Mar 2020		

3.0 Introduction & Objectives:



Kovia received an order of confirmation to undertake an Asbestos Refurbishment Survey from Wales & West Housing. This order has been accepted on the basis of the original quotation and the Kovia Terms & Conditions of business.

The order relates to an 'Asbestos Refurbishment Survey' of:

Ty Ddewi (Scheme)
Ton Pentre
Pentre
Mid Glamorgan
CF41 7BG

The survey was carried out by Chris Goodman.

The type of inspection selected / requested by the client was a Refurbishment Survey (MA+PA).

The reason for selecting this survey is to locate and quantify all ACMs within the vicinity of the refurbishment works, in order to enable the duty-holder / client to arrange for their removal.

The survey has included the completion of Priority Assessment scoring in accordance with HSG227. This Priority Assessment was completed using an agreed methodology with the duty-holder and their representatives.

This survey was carried out in accordance with documented Kovia procedures, which are based on the HSE guidance document HSG264.

Purpose of Survey

The purpose of an Asbestos Refurbishment Survey is to identify all ACMs in the area where the refurbishment is to take place, as reasonably practicable, through fully intrusive and destructive inspection techniques, in order to facilitate asbestos removal prior to the commencement of works. It provides sufficient information for an asbestos register to be generated in accordance with HSG264 so that the duty-holder can remove the identified ACMs in accordance with Regulation 7 of the Control of Asbestos Regulations 2012 (CAR 2012).

Aim of Survey

The aim of this survey was to:

1. Locate all ACMs within the fabric of the building, as far as reasonable practicable, prior to the refurbishment works.
2. Identify and record the product type, extent of damage, surface treatment and asbestos type of known or presumed ACMs (MA).
3. Determine and record the asbestos type, based on sampling or by making a presumption based on product type and appearance.
4. Inspect and record information on the location, accessibility, extent, human exposure potential and maintenance of known or presumed ACMs (PA).

3.0 Introduction & Objectives (Cont):

- Type of Survey



3.4 Type of Survey – Refurbishment Survey

The purpose of this Refurbishment Survey was to identify all ACMs to be removed prior to any major refurbishment work being carried out.

A Refurbishment Survey is intended to locate all asbestos within the building (unless both the works and the resulting survey are specified to be localised in scope). It is a disruptive, fully intrusive survey that involves destructive inspection techniques that penetrate the building structure extensively. This involves breaking into floors, through walls, into wall voids, ceilings, claddings and boxings, as necessary, to gain access to all areas, including the inner fabric of the building. A full sampling programme is undertaken to identify possible ACMs and estimate their quantities.

The survey is designed to be used to help the tendering process under CDM, and should be used to start generating a specification for tendering the removal of ACMs from the building, prior to major refurbishment.

Whilst all asbestos materials have been identified as far as is reasonably practicable, some asbestos materials may remain unidentified, buried within the fabric of the building, during the survey. Asbestos shuttering buried within concrete slabs, asbestos hidden by structural supports or behind other asbestos products and asbestos within building structures which are unsafe to fully access, are all potential locations.

It must be presumed that asbestos may remain unidentified to these type of areas and if suspect materials are uncovered during major refurbishment then samples should be taken for analysis.

4.0 Desk Top Review & Survey Planning:



4.1 Details of information requested from the duty-holder by Kovia, in order to carry out a desktop review and plan the survey in accordance with HSG264, was provided by Perry Dobbins as the client / client representative and recorded on the Kovia Pre-start Form.

The information provided was assessed during the desktop review and a survey plan and risk assessment were produced for the survey of:

Ty Ddewi (Scheme)
Ton Pentre
Pentre
Mid Glamorgan
CF41 7BG

Building Designation: Block 38-41

Building Description: Two storey, converted residential block of flats with a roof space.

Age of Building: Late nineteenth century

Construction Type: Brick/block and concrete construction with a pitched tiled roof.

Scope of Works: The 'Asbestos Refurbishment Survey' was carried out to the broken boards and immediate surrounding areas in the corridor only.

Exclusions: The following areas were excluded from the 'Asbestos Refurbishment Survey': All residential areas of the block, as well as all communal and external areas of the associated block.

Where information was provided regarding the presence of known or presumed ACMs, this has been validated during the course of the survey and recorded within this report.

Detailed drawings were not provided by the client at the time of the survey.

A decontamination unit was not needed on site during the survey.

Utilities and services were still live at the time of the survey.

Access equipment for working at heights was not required and the survey did not involve confined-space working.

The client did not inform Kovia of any chemical or biological hazards.

An appropriate exchange of information has occurred between Perry Dobbins of Wales & West Housing and Kovia to enable survey planning in accordance with 'HSG264 Asbestos: The survey guide'.

5.0 Survey Method



5.1 This survey has been undertaken in accordance with HSG264 and Kovia procedures.

Clients of Kovia that have signed our terms and conditions are deemed to have agreed to and accepted our surveying approach, our sampling strategy and our standard planning, surveying and reporting format unless they have made specific requests to the contrary.

The information provided by the client, or their representative, are recorded in the planning document and has been used to define the scope of the survey.

Photographs of suspected ACMs will be taken at the time of the survey unless the client expressly requests otherwise. Sampling points and suspected ACMs will not be identified with labels, unless the client expressly requests otherwise.

All suspect fibrous materials and items will be sampled during the survey, where possible, unless, in the surveyors professional opinion, these items can be safely regarded as non-suspect e.g. timber, wallpaper, man-made mineral fibre (MMMMF). Such non-asbestos items will be listed within Appendix 4 of this report. Samples of all thermoplastic floor coverings will be taken unless, in the surveyors professional opinion, such items can be safely excluded. All textured coatings and novel bituminous materials will be sampled.

Areas that could not be accessed are presumed to have ACMs present until proven otherwise. Each area requiring further inspection is documented within the Executive Summary (No Access Areas). Inaccessible areas are also shown on the plan drawings (Appendix 6).

All areas within the scope of the survey will be subject to inspection. Any materials that, due to unforeseen circumstances, cannot be accessed safely at the time of the survey will be subject to further inspection, once safe access arrangements have been made and prior to the report being issued. Materials that are not sampled but in the surveyor's opinion have a similar appearance, location and function as a previously sampled material will be strongly presumed to be similar to the sampled material.

The quantity of samples taken may have been minimised by using 'strongly presumed' as defined above. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the 'Sample No' box as an 'As *sample no.* (SP)' within the Survey Data Sheets (Appendix 3) and referenced against the original sampled material.

Kovia surveyors make every attempt to avoid causing damage during refurbishment surveys, whilst attempting to identify possible ACMs. Minor repairs will be made accordingly and any areas accessed will be left in a safe condition.

Intrusive damage that is required to gain access to an area / location that is within the scope of the survey has been agreed with the client or the client's representative. Any remedial action will be put in place before such action is attempted. If remedial action cannot be arranged, no attempt to access the area will be made and the reasons recorded. The area / location will be presumed to have ACMs present until proven otherwise.

Non-fibrous materials and items known not to contain asbestos (e.g. blockwork, plaster, plasterboard, plastics and non-textured paints) will not be sampled during the survey unless the surveyor suspects that these materials have been contaminated with asbestos from other sources or unless specifically requested by the client. Such non-suspect items that fall within the survey scope will still be recorded in Appendix 4.

Items of older electrical equipment, that could not be inspected to determine if ACMs were present, have been presumed to contain asbestos, unless, in the surveyors professional opinion, such items could be reliably excluded.

6.0 Exclusions & Caveats:



6.1 For safety reasons it is not possible to inspect internal areas of plant and machinery.

Where areas have been designated as 'No Access' or 'Restricted Access', unless further inspection / sampling proves otherwise, the presumption has been made that these structures / areas contain asbestos materials.

During the course of the survey it may not have been possible to access all areas of the site. Details of areas requiring further access are identified within the Survey Data Sheets of this report (Appendix 3). In accordance with HSG264, asbestos is presumed to be present within these areas and should be treated accordingly until further inspection and analysis of building fabric and services proves otherwise.

It is essential that further intrusive inspection and sampling be carried out where site refurbishment, maintenance, or similar may disturb ACMs that have remained inaccessible during this survey. This should be a Refurbishment or Demolition Survey, as described in HSG264.

Residual asbestos material may be present beneath re-lagged services. As such, systematic inspection will be carried out to such materials to identify the potential presence of asbestos residue.

This report does not include investigations into land contamination associated with asbestos or any other contaminant.

6.2 Specific caveats:

It was agreed with the client that access above or behind known or suspected ACMs was not feasible at the time of the survey.

It was agreed with the client that core boring into the concrete slabs was not required within the survey.

Wales & West Housing has requested a less intrusive survey to existing doors and windows with no intrusive inspection to be carried out directly to, or within the immediate area of, these features.

Underground services were not included in the survey.

It was agreed with Wales & West Housing that there were no unsafe structures on site.

7.0 Sampling & Analysis:



7.1 The objective of bulk sampling is to identify the nature and extent of any visible ACM.

7.2 Bulk sampling is undertaken in line with the recognised safe procedures in order to cause minimal possible nuisance and potential risk to the health of the building occupants and visitors. Bulk samples are taken in accordance with documented Kovia procedures, following guidelines detailed in 'HSG264 Asbestos: The survey guide'. The quantity of samples taken will be safely minimised by utilising the ability to 'strongly presume'. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the 'Sample No' box as an 'As sample no. (SP)' within the Survey Data Sheets (Appendix 3) and referenced against the original sampled material.

7.3 Bulk samples are returned to a UKAS-accredited bulk analysis laboratory with the appropriate sample / report reference numbers. If appropriate, a label will be left on site adjacent to the sample location.

7.4 The label will indicate the sample number and the date taken. This label can be used along with the report for cross-reference purposes.

7.5 Bulk sample analysis is carried out in accordance with Kovia's approved laboratories' in-house methods and ISO 17025 UKAS accreditation. Samples are examined under a low magnification stereomicroscope and the fibres teased apart. The fibres are then mounted in liquids of known refractive indices and examined under high magnification using polarised light and dispersion staining in accordance with 'HSG248 The Analysts' Guide'.

7.6 The bulk sample description and analysis results can be found in Appendix 5 of this report – Analysis Certificate(s).

Key to Analysis Results:

Chrysotile - White Asbestos

Amosite - Brown Asbestos

Crocidolite - Blue Asbestos

Tremolite - Rare Asbestos

Actinolite - Rare Asbestos

Anthophyllite - Rare Asbestos

8.0 Survey Results - Interpretation:



Survey Results

8.1 The results of the survey inspections and sampling undertaken are recorded on the enclosed Asbestos Register (Appendix 1), Negative Register (Appendix 2), Survey Data Sheets (Appendix 3) and Non-Asbestos Materials Register (Appendix 4). Where ACMs have been identified or presumed to be present then a Material Risk Assessment Algorithm and a Priority Risk Assessment Algorithm has been used, as detailed in HSG264 (reproduced in the tables below).

8.2 Within the Survey Data Sheets (Appendix 3), the individual scores in brackets, for each sample variable, are added together to form the final Material Risk Assessment (MA) score. The Priority Risk Assessment (PA) scores are averaged and totalled, appearing directly above the MA total score.

8.0 Survey Results - Interpretation (cont):



Material Risk Assessment Algorithm

Product type (or debris from product)

Score	Examples of scores
1	Asbestos reinforced composites [plastics, resins, mastics, roofing felts, vinyl floor tiles, semi- rigid paint, decorative finishes and asbestos cement etc]
2	Asbestos insulating board, mill boards, other low-density boards, textiles, gaskets, ropes and woven materials and asbestos paper.
3	Thermal insulation [e.g. pipe and boiler lagging], sprayed asbestos, loose asbestos, asbestos mattresses and packing.

Extent of damage / deterioration

Score	Examples of scores
0	Good condition: no visible damage
1	Low damage: a few scratches or surface marks, broken edges on boards or tiles, etc.
2	Moderate damage: significant breakage of materials or several small areas where material has been damaged exposing fibrous edges.
3	High damage or deterioration of materials, sprays and thermal insulation. Visible asbestos contamination by debris or residues.

Surface treatment

Score	Examples of scores
0	Composite materials containing asbestos, reinforced plastics, resins, vinyl tiles
1	Enclosed sprays or insulation, AIB [with exposed face encapsulated], cement sheets, etc.
2	Unsealed AIB, encapsulated insulation and sprays.
3	Unsealed insulation and sprays.

Asbestos type

Score	Examples of scores
1	Chrysotile
2	Amphibole asbestos (excluding Crocidolite)
3	Crocidolite

Priority Risk Assessment Algorithm

Assessment Factor		Score	Examples of score variables
Normal occupant activity	Main type of activity in area	0 1 2 3	Rare disturbance activity (e.g. little used store room) Low disturbance activities (e.g. office type activity) Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs) High levels of disturbance, (e.g. fire door with asbestos insulating board sheet in constant use)
	Secondary activities for area	As above	As above
Likelihood of disturbance	Location	0 1 2 3	Outdoors Large rooms or well ventilated areas Rooms up to 100m ² Confined spaces
		0 1 2 3	Usually inaccessible or unlikely to be disturbed Occasionally likely to be disturbed Easily disturbed Routinely disturbed
	Accessibility	0 1 2 3	Small amounts or items (e.g. strings, gaskets) ≤10m ² or ≤10m pipe run >10m ² to ≤50m ² or >10m to ≤50m pipe run >50m ² or >50m pipe run
		0 1 2 3	
	Extent/amount	0 1 2 3	
		0 1 2 3	
Human exposure potential	Number of occupants	0 1 2 3	None 1 to 3 4 to 10 >10
		0 1 2 3	Infrequent Monthly Weekly Daily
	Frequency of use of area	0 1 2 3	<1 hour >1 to <3 hours >3 to <6 hours >6 hours
		0 1 2 3	
	Average time area is in use	0 1 2 3	
		0 1 2 3	
Maintenance activity	Type of maintenance activity	0 1 2 3	Minor disturbance (e.g. possibility of contact when gaining access) Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling) Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve) High disturbance (e.g. removing a number of asbestos insulating board ceiling tiles to replace a valve or for re-cabling)
		0 1 2 3	ACM unlikely to be disturbed for maintenance ≤1 per year >1 per year >1 per month
	Frequency of maintenance activity	0 1 2 3	
		0 1 2 3	

Combined Material & Priority Risk Assessment Score

Risk Category	Risk	Score Range	Fibre release potential
A	HIGH	Combined MA+PA score of 19-24	High risk with a high potential to release fibres if disturbed
B	MEDIUM	Combined MA+PA score of 13-18	Medium risk with a medium potential to release fibres if disturbed
C	LOW	Combined MA+PA score of 9-12	Low risk with a low potential to release fibres if disturbed
D	VERY LOW	Combined MA+PA score of 8 or less	Very low risk with a very low potential to release fibres if disturbed

9.0 Recommendations:



9.1 To comply with and ensure that the requirements of Section 2 and 3 of the Health and Safety at Work Act (as amended) 1974, the Management of Health and Safety at Work Regulations 1999, the Control of Asbestos Regulations 2012 and the Control of Substances Hazardous to Health 2002 are met, the following recommendations should be implemented:

9.2 Undertake suitable and sufficient Risk Assessments of identified Asbestos Containing Materials (ACMs) against normal occupation and maintenance operations, in compliance with Regulations 3 of the Management of Health & Safety at Work Regulations 1999 and Regulation 6 of the Control of Asbestos Regulations 2012.

9.3 The findings of the survey be brought to the attention of those persons who are likely to come in contact with asbestos, in compliance with Section 2 and 3 of the Health and Safety at Work Act (as amended) 1974 and Regulation 10 of the Control of Asbestos Regulations 2012.

9.4 Implement an Asbestos Management Policy, Plan and review process in compliance with Regulation 4 of the Control of Asbestos Regulations 2012.

9.5 Instigate regular inspections, to record and update details of retained asbestos containing materials.

9.6 Review the arrangement under the Asbestos Management Plan (AMP) in accordance with Regulation 4 of the Control of Asbestos Regulations 2012.

9.7 During the course of the survey it may not have been possible to access all areas of the site. Details of areas requiring further access are identified within the Survey Data Sheets (Appendix 3) of this report. In accordance with HSG264, asbestos has been presumed to be present within these areas and should be treated accordingly until further inspection and analysis of the building fabric and services proves otherwise.

9.8 Where asbestos debris or asbestos in poor condition has been found it is recommended that access is restricted and / or controlled to these areas in accordance with Regulation 11 and Regulation 16 of the Control of Asbestos Regulations 2012.

9.9 If asbestos materials in poor condition have been identified, it is recommended that air monitoring is carried out within a number of areas where the ACMs are located in order to assess airborne fibre levels within adjacent occupied areas in relation to the clearance indicator, as documented by 'HSG248 The Analysts' Guide'.

9.10 All identified asbestos is to be appropriately identified and subject to risk assessment, removal / management and re-inspection, as necessary.

9.11 Site-specific recommendations in respect to the location and condition of ACMs identified during the course of this inspection are detailed in the Survey Data Sheets (Appendix 3) and Asbestos Register (Appendix 1).

9.12 In accordance with the Control of Asbestos Regulations 2012 the removal of ACMs fall into one of the three categories below:

Licensed Asbestos Removal

Defined as any work which is undertaken on a friable asbestos product or which is likely to exceed the control limit of 0.1f/cm³. A licensed asbestos removal contractor must undertake this work and a 14-day notice must be given to the HSE prior to the commencement of the work.

Notifiable Non-Licensed Work

If work on an ACM causes the deterioration of the matrix material in which the asbestos fibres are firmly linked, then these works are Notifiable Non-Licensed Work (NNLW). Work of this type does not require an asbestos removal licence but the company undertaking the work must have the following:

- Notification of the work submitted to the relevant enforcing authority prior to the work commencing.
- Medical examinations to assess each workers' state of health to be carried out before any possible exposure to asbestos. Then re-examinations every three years.
- Insurance for working with asbestos containing materials.
- A register of work to be kept by the employer for each employee exposed to asbestos.

Non-Notifiable Non-Licensed Work

Non-Licensed Work is defined as any work which involves short, non-continuous maintenance activities, during which only non-friable materials are removed. It can also involve the removal of non-friable materials for refurbishment purposes. However, work of this type is only applicable where the matrix material in which the asbestos fibres are firmly linked remains intact.

If a non-licensed contractor is appointed to undertake the removal works on the above materials, the following points must be adhered to:

- All operatives undertaking work on the material must have asbestos awareness training and practical asbestos training.

9.13 It is recommended that further intrusive investigations and sampling be carried out in accordance with HSG264, where any major refurbishment, maintenance, installation or similar activity may expose asbestos materials that have remained inaccessible during the survey. This should also be done as a Refurbishment or Demolition Survey, as documented in HSG264.

9.14 The findings of this report should not be solely relied upon in obtaining costs for proposed asbestos abatement work. Any proposed abatement / removal of the asbestos should be undertaken against a detailed specification.



Appendix 1 – Asbestos Register – Results

Building	Floor	Location /Room	S,P,SP,AS Sample No	Product Type	Condition	Surface Treatment	Asbestos Type	Quantity	Accessibility	Material Score	Priority Score	Total PA risk assessment score	Recommendation
Block 38-41													
Block 38-41	Ground	Corridor G01, Textured coating to fixed plasterboard ceiling.	S AS001531	Textured Coating	Good Condition	Completely Sealed	Chrysotile	8m ²	Occasionally likely to be disturbed	2	6	8	Manage in-situ or remove if affected by works

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Appendix 2 – Negative Register – Results



Building	Floor	Location /Room	S,P,SP,AS Sample No	Product Type	Condition	Surface Treatment	Asbestos Type	Quantity	Accessibility	Material Score	Priority Score	Total PA risk assessment score	Recommendation
Block 38-41													
Block 38-41	Ground	Corridor G01, Insulating board panel to stud wall at end of corridor between flats 38 & 39, with non-suspect void containing bare copper pipework and plastered block walls beyond.	S AS001530	Insulating Board	N/A	N/A	No Asbestos detected	N/A	N/A	N/A	N/A	N/A	No further action required
Block 38-41	Ground	Corridor G01, Insulating board debris to brown carpet over timber board floor.	S AS001532	Insulating Board	N/A	N/A	No Asbestos detected	N/A	N/A	N/A	N/A	N/A	No further action required

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample


Appendix 3 – Survey Data Sheets



Service Type	Refurbishment Survey		
Report Revision Number	1	Surveyors	Chris Goodman
TEAMS Job Number	J024943	Survey Date	12 Mar 2020
Site Address:	Ty Ddewi (Scheme) Ton Pentre Pentre Mid Glamorgan CF41 7BG	Bulk Analysis Laboratory	Envirochem
		Sample Analysis Date	13 Mar 2020

Survey Data Sheets



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	12 Mar 2020	Chris Goodman	Refurbishment Survey	Ground	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	Block 38-41	Corridor G01	Insulating board panel to stud wall at end of corridor between flats 38 & 39, with non-suspect void containing bare copper pipework and plastered block walls beyond.	5m ²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	AS001530 (S)	Insulating Board (0)	Unsealed (2)	High Damage (3)	Easily disturbed (2)


Normal Occupancy	Score	Likelihood of disturbance	Score	Exposure Potential	Score	Maintenance Activity	Score
Main type of activity	N/A	Location	N/A	Number of occupants	N/A	Type of Maintenance	N/A
		Accessibility	N/A	Frequency of use	N/A	Frequency of maintenance	N/A
		Amount	N/A	Average Time	N/A		
Average Score	N/A	Average Score	N/A	Average Score	N/A	Average Score	N/A
Average of Priority	N/A						
Material Assessment Score	N/A						
Recommendation	No further action required						
Surveyor comments	N/A						

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	12 Mar 2020	Chris Goodman	Refurbishment Survey	Ground	Chrysotile (1)
	Building	Room	Item	Quantity	
	Block 38-41	Corridor G01	Textured coating to fixed plasterboard ceiling.	8m ²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	AS001531 (S)	Textured Coating (1)	Completely Sealed (0)	Good Condition (0)	Occasionally likely to be disturbed (1)

Normal Occupancy	Score	Likelihood of disturbance	Score	Exposure Potential	Score	Maintenance Activity	Score
Main type of activity	1	Location	2	Number of occupants	1	Type of Maintenance	1
		Accessibility	1	Frequency of use	3	Frequency of maintenance	1
		Amount	1	Average Time	0		
Average Score	1	Average Score	2	Average Score	2	Average Score	1
Average of Priority	6						
Material Assessment Score	2						
Recommendation	Manage in-situ or remove if affected by works						
Surveyor comments	N/A						

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	12 Mar 2020	Chris Goodman	Refurbishment Survey	Ground	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	Block 38-41	Corridor G01	Insulating board debris to brown carpet over timber board floor.	<2m ²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	AS001532 (S)	Insulating Board (0)	Unsealed (2)	High Damage (3)	Routinely disturbed (3)

Normal Occupancy	Score	Likelihood of disturbance	Score	Exposure Potential	Score	Maintenance Activity	Score
Main type of activity	N/A	Location	N/A	Number of occupants	N/A	Type of Maintenance	N/A
		Accessibility	N/A	Frequency of use	N/A	Frequency of maintenance	N/A
		Amount	N/A	Average Time	N/A		
Average Score	N/A	Average Score	N/A	Average Score	N/A	Average Score	N/A
Average of Priority	N/A						
Material Assessment Score	N/A						
Recommendation	No further action required						
Surveyor comments	N/A						

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Appendix 4 - Non-Asbestos Materials Register



Building	Floor	Room No:	Room Type	Item
Block 38-41				
Block 38-41	Ground Floor	G01	Corridor	Timber doors et within timber frames and architraves, timber skirtings.

Appendix 5 – Analysis Certificate(s)





Our Ref: J187323 FI: 3

Your Ref:

Date: 13/03/2020

ENVIROCHEM
Analytical Laboratories Ltd.
12 The Gardens
Broadcut, Fareham
Hampshire
PO16 8SS



Tel: (01329) 287777

Fax: (01329) 287755

www.envirochem.co.uk
office@envirochem.co.uk

Asbestos Fibre Identification Report

Client: Kovia Asbestos Management Consultancy
1 Davy Road, Derriford, Plymouth, PL6 8BX

Site Address: Ty Ddewi (Scheme), Ton Pentre, Pentre, Mid Glamorgan, CF41 7BG

Sampled By: Kovia Asbestos Management Consultancy

Date sampled/received: 13th March 2020

Date analysed: 13th March 2020

Analyst/s: Ella Hiron

Analysis Location: 12 The Gardens, Broadcut, Fareham, Hampshire, PO16 8SS

ANALYTICAL PROCEDURE

Fibre identification was carried out in accordance with the documented 'in-house' method (2.01) based on the HSE Guidance Note HSG 248. These employed stereo microscopy, polarized microscopy and dispersion staining techniques.

RESULTS

Sample No.	Sample Ref.	Location	Asbestos Detected	Asbestos Type
AS001530	BS608598	Ground Floor, Corridor, Insulating board panel	No	
AS001531	BS608599	Ground Floor, Corridor, Textured coating	Yes	Chrysotile
AS001532	BS608600	Ground Floor, Corridor, Insulating board debris	No	

NOTES:

1. Sample(s) were examined for the presence of 6 types of asbestos fibres: crocidolite (blue), amosite (brown), chrysotile (white), anthophyllite, actinolite and tremolite.
2. The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated and samples collected by the client are evaluated using information provided by the client. For samples collected by the client the date of receipt is deemed to be the same as the date sampled.
3. Envirochem is a UKAS accredited laboratory for sampling and identification of asbestos containing materials.
4. Comments, observations and opinions are outside the scope of UKAS accreditation.
5. The analytical method in the HSG248 does not quantify the amount of asbestos present, therefore UKAS accreditation does not permit quantification.
6. If, during fibre identification, only 1 or 2 fibres are seen and identified as asbestos, then the term 'trace asbestos identified' is used.
7. This report shall not be reproduced except in full, without written approval of Envirochem.

SIGNATURE: 

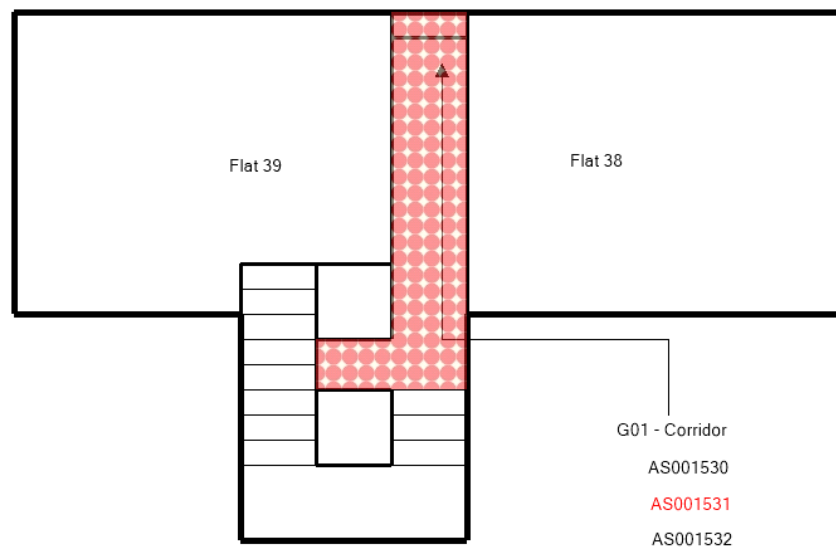
Authorised signatory

PRINT NAME: Ella Hiron

Reg. No. 2378228 England. Registered Office: Envirochem, 12 The Gardens, Broadcut, Fareham, Hampshire, PO16 8SS.

Appendix 6 – Plans



**Plan Key:**

Positive or Strongly Presumed Asbestos in area / room



No Access within or to area / room

Client: Wales & West Housing

Site: Ty Ddewi (Scheme)

Building: Block 38-41

Floor: Ground Floor

UPRN No: 0291-500

KOVIA[®]

CLIENT:

**WALES & WEST HOUSING
ASSOCIATION
3 ALEXANDRA GATE
FFORDD PENGAM
TREMORFA
CARDIFF
CF24 2UD**



INTERNATIONAL ENVIRONMENTAL CONSULTANTS

www.envirotec.com

UPRN NO: N/A

PROJECT NO: J180630

DATE: JUNE 2014

**ASBESTOS MANAGEMENT SURVEY TO SPECIFIC AREAS
TY DDEWI, ST DAVIDS CLOSE, PENTRE, CF41 7BG**



Office Locations Chelmsford • Newport • Mansfield • Brighouse • Newcastle upon Tyne • Hamilton • Aberdeen
Registered Address Envirotec Limited, Envirotec House, The Street, Hatfield Peverel, Chelmsford, Essex CM3 2EJ

Registered in England No. 2981693 • VAT No. 630 8944 29

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1.0 EXECUTIVE SUMMARY	3
2.0 INTRODUCTION	4
3.0 SURVEY TYPE	5
4.0 SPECIFIC SURVEY INFORMATION	7
5.0 CAVEATS	9
6.0 QUALITY ASSURANCE STATEMENT	10

APPENDICES

APPENDIX 1	ASBESTOS REGISTER
APPENDIX 2	PHOTOGRAPHS
APPENDIX 3	BULK ANALYSIS CERTIFICATE
APPENDIX 4	SKETCH/PLANS
APPENDIX 5	GENERAL SURVEY INFORMATION

1.0 EXECUTIVE SUMMARY

- 1.1 Asbestos containing materials have been identified or strongly presumed in the following locations

Location	Description	Priority/Risk	Recommendation
Electrical Switchboard Room / Ground Floor	Presumed asbestos containing materials within live electrical switch gear	Low	Conduct further investigation prior to relevant maintenance / refurbishment works
Store adjacent to Lift / 1st Floor	Textured coating to ceiling	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works
Store Room adjacent to Flat 24 / 2nd Floor	Textured coating to ceiling	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works
Telephone / CCTV Room / 2nd Floor	Textured coating to ceiling	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works

- 1.2 The following areas were not accessed during the survey and must be presumed to contain asbestos materials.

Location	No Access Area	Reason For No Access
There were no inaccessible areas recorded.		

- 1.2.1 The client should note that if demolition or refurbishment works are to be undertaken in any part of this property which was not included in the scope of this survey, or was physically and visually impossible to access, further investigations should be carried out before any works commence.

2.0 INTRODUCTION

- 2.1 Following evaluation of the clients requirements and considering the aim and purpose of the survey and detailed planning considerations we have undertaken an **Asbestos Management Survey** where reasonably practicable of ***Ty Ddewi, St Davids Close, Pentre CF41 7BG***
- 2.2 The building is a typical retirement scheme residential homes, built in the 1900's and constructed of a solid brickwork with a high pitched slate tiled roof.
- 2.3 The building consists of a ground with a further two floors of residential living accommodation.
- 2.4 The site survey has been undertaken and report compiled in accordance with the ***HSG 264: Asbestos: The Survey Guide***.

Priority Assessment is outside the scope of our UKAS accreditation to HSG264 Asbestos: The Survey Guide

The type of survey undertaken may vary, depending on the aim and purpose for which it is to be used. Surveys before demolition and refurbishment will continue to be required under ***Control of Asbestos Regulations (CAR) 2012*** and the ***Construction (Design & Management) Regulations 2007***. However, it is anticipated that most surveys will be undertaken to comply with the ***Duty to Manage Asbestos in Non-Domestic Premises Regulation 4 of the Control of Asbestos Regulations 2012***. In these cases, the aim of an asbestos survey is, as far as reasonably practical, to locate and assess all the Asbestos Containing Materials (ACMs) present in the building and its purpose is to present the information collected in a way which allows the employer to manage the risk.

- 2.5 This survey report is in a number of sections, the essential sections will be the Asbestos Register (Appendix 1) which is a detailed systematic diligent inspection and sampling report of each room with enhanced annotated Plans (Appendix 4) indicating where samples have been taken and asbestos positively identified.

3.0 SURVEY TYPE

3.1 Management Survey

- 3.1.1 A **management survey** is the standard survey. Its purpose is to locate as far as reasonably practicable, the presence and extent of any suspect Asbestos Containing Materials in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.
- 3.1.2 The purpose of the survey is to assist the client to comply with the ***Health and Safety at Work Act 1974*** and the ***Control of Asbestos Regulations 2012 (Regulation 4)*** which contains an explicit duty on the owners and occupiers of non domestic premises who have maintenance and repair responsibilities, to assess and manage the risks from the presence of asbestos.
- 3.1.3 Every effort has been made to identify all asbestos materials so far, as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.
- 3.1.4 Survey techniques used involves trained and experienced surveyors using the combined diligent approach with regard 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:
- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
 - 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. (This is covered in the scope of a Refurbishment and Demolition Survey)
- 3.1.5 Where suspected asbestos materials form a duct cover, false ceiling, etc. or where these materials would require disturbing to gain access to an area behind or below the suspect material, they have not been displaced, as any physical disturbance of these materials may have resulted in a release of airborne asbestos fibres which may pose a hazard to health. These areas have been no accessed and are detailed in section 1.2.1
- 3.1.6 A limited inspection only has been carried out of pipework concealed by overlying non-asbestos insulation. Inspection of pipework has been restricted primarily to areas where insulation was removed it is not practicable to inspect the entire pipework which would require the removal and replacement of all overlying non-asbestos insulation, therefore this has been considered outside

the scope of this survey.

- 3.1.7 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 another i.e. working in sensitive location or just simply no access as keys not available such as a sub-station.
- 3.1.8 Access for the survey may be restricted for many reasons beyond our control such as where electrical equipment is present and live. Our operatives have a duty of care under the Health and Safety at Work act (1974) for both themselves and others.
- 3.1.9 Certain materials contain asbestos to varying degrees and some may not be uniformed (textured coating for example). Where this is the case the samples will be taken in accordance with the sampling regime however this may not be representative of the whole product throughout.
- 3.1.10 This survey is purely an Asbestos Management survey which involves minor intrusive works. We have not inspected flues, ducts, risers, undercrofts, voids or any similarly enclosed areas, the access to which necessitated the use of specialist equipment or tools, or which would have caused damage to decoration, fixtures, fittings or the structure there may be asbestos concealed in these voids, risers, undercrofts etc. These areas will **not** be mentioned as a **no access** area in this report as the report will be misleading to the client as these areas and asbestos identified in these areas are outside the scope of an Asbestos Management Survey.
- 3.1.11 We have not inspected lift shafts, plant rooms or similar which require the attendance of a specialist engineer.

4.0 SITE SPECIFIC SURVEY INFORMATION

- 4.1 The report is the result of the analysis of suspect materials and a visual inspection.
- 4.2 The survey was undertaken and completed by an Environtec Ltd asbestos survey team.
- 4.3 Access was arranged with Jen Barton who enabled and provided all keys and access facilities to all necessary areas of the building.
- 4.4 The physical survey was undertaken on the 5th June 2014.

For buildings where positive asbestos materials have been identified, a further inspection will be required no later than 5th June 2015. For areas of high risk the Client should implement more regular inspections to assess the condition of the materials.

- 4.5 The site survey was undertaken by Haji Khamis, during normal business hours of 9.00 am to 5.00 pm.

- 4.6 The bulk analysis of suspect materials for asbestos content was undertaken as follows :-

Date Analysed	Laboratory Technician(s)
20/06/2014	Jonathan Baker

- 4.7 During the site survey work the building remained occupied.
- 4.8 Samples were taken of suspected materials and where possible photographs of the samples taken. Clearly it is not possible to sample every material encountered therefore, where common areas and features exist, representative samples were taken and extrapolations were made to the nature of the material.
- 4.9 Photographs have been included in the report to highlight particular instances or detail as required.
- 4.10 Plans of the premises were provided by the client/prepared by Environtec Ltd to assist in the location and designation of rooms for ease of reference. It must be noted that these plans are not

to be regarded as accurate but for assistance purposes only. These plans are located within the appendices of this report.

- 4.11 During the period of the survey electrical supplies and artificial illumination were operative in all areas of the building.
- 4.12 It must be noted that the information contained within this report is compiled and dealt with in a number of sections to enable and give a complete overall assessment and conclusion when considering the asbestos materials positively identified and possible potential hazards.

It is therefore recommended that when passing information onto third parties such as contractors etc that the complete report be issued to ensure that all information is available to such responsible parties that they may consider all options and actions to be undertaken to so far as is reasonably practicable.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves.

- 4.13 The survey included the following areas of the site:

Ground floor electrical switch room to block 1-35. First floor store adjacent to flat 24. First floor store adjacent to lift. Second floor telephone room.

- 4.14 The following areas were specifically excluded from the survey:

All other areas beyond those detailed in section 4.13

5.0 CAVEATS

- 5.1 We have not inspected any part requiring specialist access equipment other than stepladders. Any requirement for specialist access equipment has been specifically excluded unless otherwise stated.
- 5.2 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 i.e. if 5 out of 20 samples of visually identified ceiling tiles were analysed negative, there could be a possibility of one tile being asbestos but could easily be missed.
- 5.3 Accessible is defined as reasonably and safely reachable by foot or reachable from a step ladder up to 3m. Opening electrical equipment (e.g. switchboxes), plant (e.g. boilers, air handling units and ducted systems) and hazardous installation (e.g. chemical containers) are specifically excluded.
- 5.4 Where suspected asbestos materials form a duct cover, false ceiling, etc or where these materials would require disturbing to gain access to an area, they have not been displaced, as any physical disturbance of these materials may have resulted in a release of airborne asbestos fibres which may pose a hazard to health.
- 5.5 Due to the non uniform matrix of textured coatings, where some textured coatings have proved to be asbestos containing and further samples have given negative results, we would urge the Client to treat all textured coatings as asbestos containing and implement the relevant management of such materials.

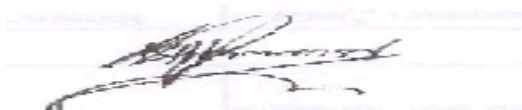
6.0 QUALITY ASSURANCE STATEMENT

Project Ref: J180630

This report has been compiled by the following authorised staff member of Environtec Ltd.

Name:Haji Khamis

Signed:



Date:
2 July 2014

Consultant

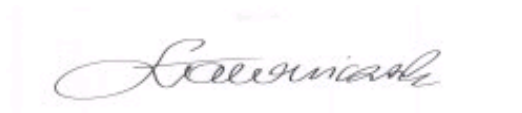
Designation:

The contents of this report have been checked by the Survey Quality Administrator.

The results are accurate and any conclusions and recommendations made are suitable and in line with current company policy.

Name:Sebastian Lawniczak

Signed:



Date: 2 July 2014

Quality Administrator

Designation:

APPENDIX 1

ASBESTOS REGISTER

The following are the summary of asbestos materials and priority rating assessments and should be read in conjunction with the attached plans and report

SITE ADDRESS: TY DDEWI, ST DAVIDS CLOSE, PENTRE, CF41 7BG								DATE: 05/06/2014		
SURVEY TYPE: MANAGEMENT SURVEY								PROJECT REF: J180630		
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
MAIN BUILDING										
Ground Floor / Electrical Switchboard Room (1)	1 - 3 (1)	Presumed asbestos containing materials within live electrical switch gear (2)	16no. (1)	Sealed (2)	Good Condition (0)	Rare (0)	Crocidolite (or unknown) (3)	7 + 3 = 10	Low	Conduct further investigation prior to relevant maintenance / refurbishment works
Ground Floor / Electrical Switchboard Room	-	All other areas visually no asbestos identified	-	-	-	-		-	-	No further action required
Ground Floor / Electrical Switchboard Room		Plasterboard panel to ceiling, concrete ceiling, solid walls, timber door, timber wall clad, steel cable trays, steel conduits and concrete floor beneath non suspect modern floor covering.								
1st Floor / Store adjacent to Lift (1)	1 - 3 (1)	Textured coating to ceiling (1)	2m² (1)	Sealed (0)	Good Condition (0)	Rare (0)	EE002868 / Chrysotile (1)	2 + 3 = 5	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works
1st Floor / Store adjacent to Lift	-	All other areas visually no asbestos identified	-	-	-	-		-	-	No further action required
1st Floor / Store adjacent to Lift		Plasterboard ceiling, solid walls, timber door, non suspect modern fibrous suspended ceiling to floor, timber skirting boards and concrete floor with beneath carpet.								
2nd Floor / Store Room adjacent to Flat 24 (1)	1 - 3 (1)	Textured coating to ceiling (1)	2m² (1)	Sealed (0)	Good Condition (0)	Rare (0)	EE002869 / Chrysotile (1)	2 + 3 = 5	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H					Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16		
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							


SITE ADDRESS: TY DDEWL, ST DAVIDS CLOSE, PENTRE, CF41 7BG								DATE: 05/06/2014		
SURVEY TYPE: MANAGEMENT SURVEY								PROJECT REF: J180630		
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
2nd Floor / Store Room adjacent to Flat 24	1 - 3	Riser boxing panels	2m	Partially Sealed	Good Condition	Medium	EE002870 / No Asbestos Detected	-	-	No further action required
2nd Floor / Store Room adjacent to Flat 24	1 - 3	Riser boxing panels	2m	Partially Sealed	Good Condition	Medium	EE002871 / No Asbestos Detected	-	-	No further action required
2nd Floor / Store Room adjacent to Flat 24	1 - 3	Riser boxing panels	1m	Partially Sealed	Good Condition	Medium	EE002872 / No Asbestos Detected	-	-	No further action required
2nd Floor / Store Room adjacent to Flat 24	-	All other areas visually no asbestos identified	-	-	-	-		-	-	No further action required
2nd Floor / Store Room adjacent to Flat 24		Plasterboard ceiling, solid walls, timber door, timber shelving, copper pipework, plastic cable trays, copper pipework, timber skirting boards and concrete floor beneath non suspect modern floor covering.								
2nd Floor / Telephone / CCTV Room (1)	1 - 3 (1)	Textured coating to ceiling (1)	3m² (1)	Sealed (0)	Good Condition (0)	Rare (0)	EE002873 / Chrysotile (1)	2 + 3 = 5	Very Low	Manage, label, monitor and inform maintenance personnel prior to relevant works
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H					Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16		
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							


SITE ADDRESS: TY DDEWI, ST DAVIDS CLOSE, PENTRE, CF41 7BG							DATE: 05/06/2014			
SURVEY TYPE: MANAGEMENT SURVEY							PROJECT REF: J180630			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
2nd Floor / Telephone / CCTV Room	-	All other areas visually no asbestos identified	-	-	-	-	EE002874 / No Asbestos Detected	-	-	No further action required
2nd Floor / Telephone / CCTV Room		Plasterboard ceiling, solid walls, timber door, timber shelving, copper pipework, plastic soilpipe, plastic cable trays, copper pipework, timber skirting boards and concrete floor beneath non suspect modern floor covering								
Roof Void / Loft Space above Store adjacent to Flat 24	-	Visually no asbestos identified	-	-	-	-		-	No further action required	
Roof Void / Loft Space above Store adjacent to Flat 24		Timber beams and joists, non suspect modern roof felt, loose MMMF insulation to floor, plastic soilpipe, timber loft hatch and plasterboard decking.								
Roof Void / Loft Space above Telephone / CCTV Room	1 - 3	Fire break to cavity wall	6m²	Unsealed	Good Condition	Rare		-	-	No further action required
Roof Void / Loft Space above Telephone / CCTV Room	-	All other areas visually no asbestos identified	-	-	-	-		-	-	No further action required
Roof Void / Loft Space above Telephone / CCTV Room		Timber beams and joists, non suspect modern roof felt, loose MMMF insulation to floor, plastic soilpipe, timber loft hatch and plasterboard decking.								
Indicates parameter for Material Assessment algorithm(MA)		Product type *C Surface Treatment *E Extent of damage *F Asbestos Type *H					Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16			
Indicates parameter for Priority Assessment algorithm(PA)		Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:		A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								


APPENDIX 2

PHOTO PAGES OF ASBESTOS OCCURENCES


ADDRESS:	Ty Ddewi, St Davids Close, Pentre, CF41 7BG
-----------------	--

FLOOR/LOCATION:	Ground Floor Electrical Switchboard Room	
DESCRIPTION:	Presumed asbestos containing materials within live electrical switch gear	
RECOMMENDATIONS:	Conduct further investigation prior to relevant maintenance / refurbishment works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	Presumed	
RESULT:	Presumed Crocidolite (or unknown)	

FLOOR/LOCATION:	1st Floor Store adjacent to Lift	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, label, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	EE002868	
RESULT:	Chrysotile	

FLOOR/LOCATION:	2nd Floor Store Room adjacent to Flat 24	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, label, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	EE002869	
RESULT:	Chrysotile	

ADDRESS:	Ty Ddewi, St Davids Close, Pentre, CF41 7BG
-----------------	--

FLOOR/LOCATION:	2nd Floor Telephone / CCTV Room	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Manage, label, monitor and inform maintenance personnel prior to relevant works	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	EE002873	
RESULT:	Chrysotile	

APPENDIX 3

BULK ANALYSIS CERTIFICATE

CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Wales & West Housing Association	Surveyor:	Haji Khamis
Client Address:	3 Alexandra Gate, Ffordd Pengam, Tremorfa, Cardiff, CF24 2UD	Analysis Report No:	J180630
Attention of:	Jen Barton	Report Date:	2 July 2014
Site Address:	Ty Ddewi, St Davids Close, Pentre, CF41 7BG	Site Reference No:	N/A
Date Samples Taken:	5th June 2014	No. of Samples:	7
Date Samples Received:	5th June 2014	Obtained:	7
Date of Analysis:	20th June 2014		
Analysed By:	Jonathan Baker		

Method Statement

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Environtec 'In House' documented technical method of transmitted/polarised light microscopy and centre stop dispersion staining, in accordance with our UKAS Accreditation, based on the HSG 248 Asbestos: The Analyst Guide. Calibration of equipment and general quality control procedures are in accordance with our in house quality control document. Sampling methods are in accordance with documented in-house procedures and UKAS Accreditation.

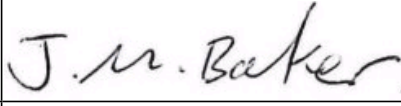
Disclaimer

If samples have been DELIVERED the site address and actual sample location or sample type is given by the client at the time of delivery. Environtec are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Environtec cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our UKAS Accreditation for sampling. Environtec takes responsibility of information reported, only when a staff member of Environtec takes the sample(s).

Sample Number	Client Ref	Sample Location / Sample Type	Fibre Type Detected
EE002868		1st Floor / Store adjacent to Lift / Textured coating to ceiling - Textured Coating	Chrysotile
EE002869		2nd Floor / Store Room adjacent to Flat 24 / Textured coating to ceiling - Textured Coating	Chrysotile
EE002870		2nd Floor / Store Room adjacent to Flat 24 / Riser boxing panels - Superlux	NADIS
EE002871		2nd Floor / Store Room adjacent to Flat 24 / Riser boxing panels - Superlux	NADIS
EE002872		2nd Floor / Store Room adjacent to Flat 24 / Riser boxing panels - Superlux	NADIS
EE002873		2nd Floor / Telephone / CCTV Room / Textured coating to ceiling - Textured Coating	Chrysotile
EE002874		Roof Void / Loft Space above Telephone / CCTV Room / Fire break to cavity wall - Superlux	NADIS

Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience. On rare occasions where there is an element of doubt for samples which are borderline or too insignificant to determine whether the material is asbestos insulation board or asbestos cement, you will be notified and offered a water absorption test. A water absorption test is a longer process undertaken to a supplement asbestos analysis and has a cost implication. We will advise you accordingly should this situation arise. Environtec Ltd cannot be held responsible for inaccuracies based on the material type opinion if a water absorption test has been offered and refused. Material type opinion falls outside the scope of our UKAS accreditation.

K	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
	CROCIDOLITE	= Typically Known as Blue Asbestos (Amphibole Group)
	AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
E	CHRYSTILE	= Typically Known as White Asbestos (Serpentine Group)
	ANTHOPHYLLITE	= Asbestos (Amphibole Group)
Y	ACTINOLITE	= Asbestos (Amphibole Group)
	TREMOLITE	= Asbestos (Amphibole Group)
All samples will be retained in the laboratory for a minimum of 6 Months.		

Typed By:	Jonathan Baker	Authorised Signatory:	
Position:	Laboratory Technician	Print Name:	Jonathan Baker
UKAS/New AFI/Statements/EA			

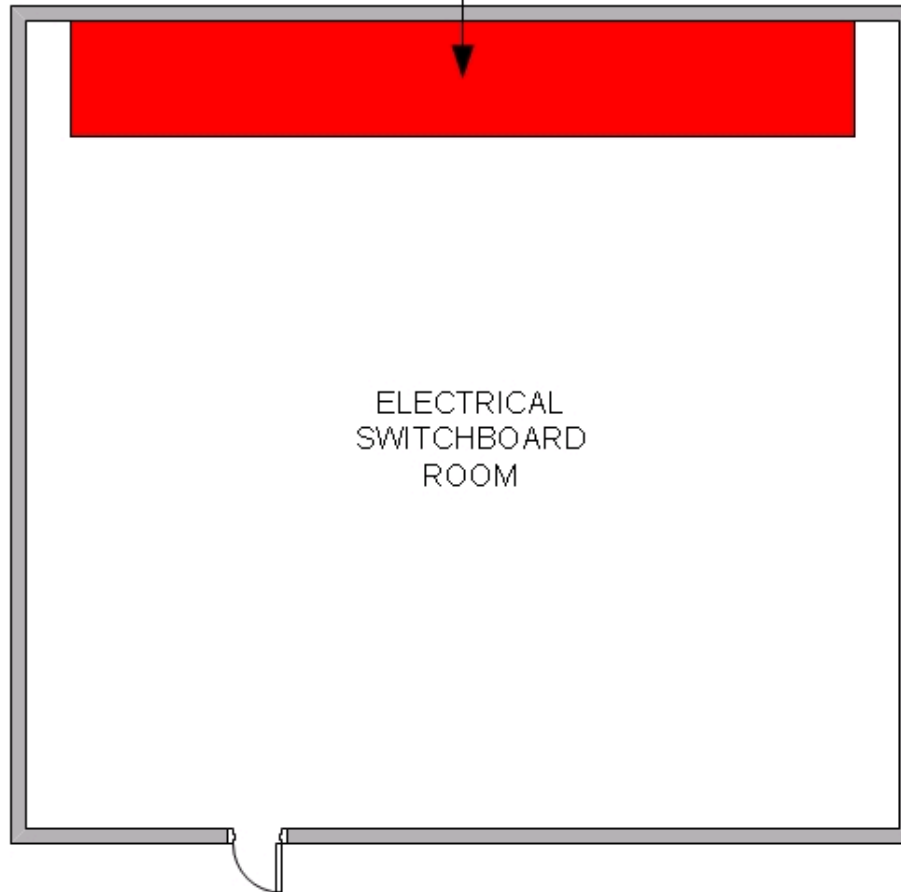
APPENDIX 4

SKETCH / PLANS

These plans are provided to assist in the location and designation of rooms etc

The accuracy of the plans / sketches cannot be guaranteed.


PRESUMED
SWITCH GEAR





ELECTRICAL
SWITCHBOARD
ROOM

Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

(S) = Sample Location

 = Identified, strongly presumed and presumed asbestos

 = No access - presumed asbestos within these rooms

 = Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

Project: J180630

Site: Ty Ddewi
St Davids Close
Pentre
CF41 7BG

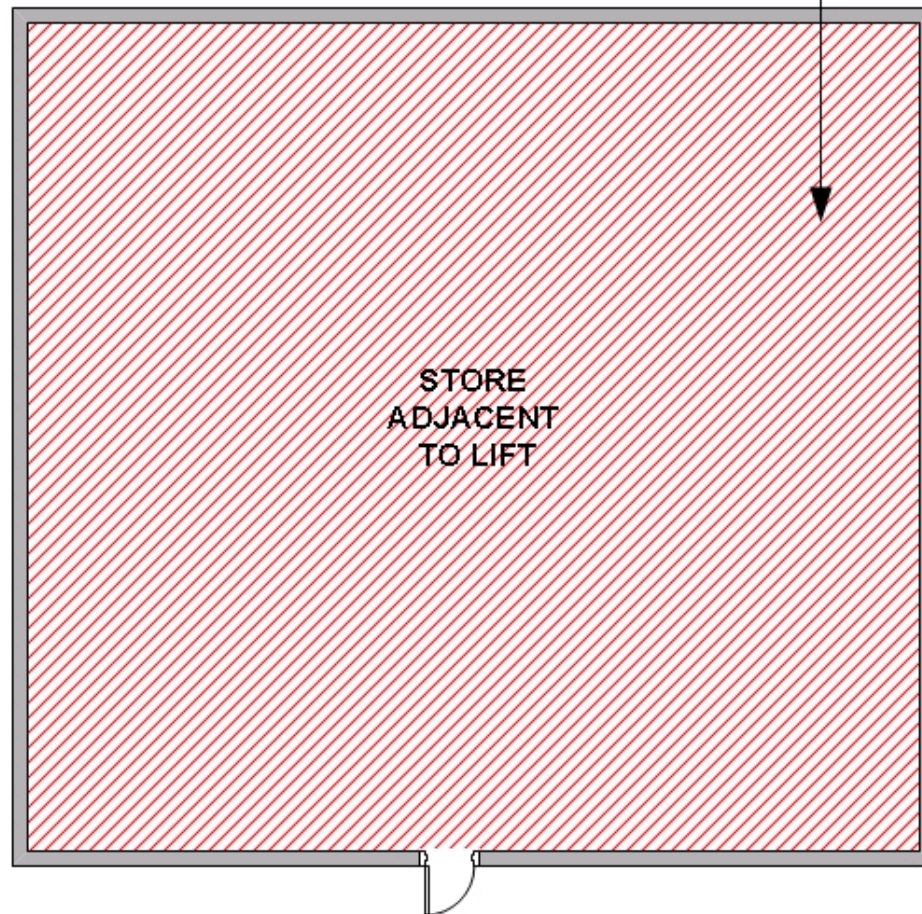
Building:

Floor: Ground Floor

N.T.S (Not To Scale)

"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Amanda Lewis



Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

S = Sample Location

= Identified, strongly presumed and presumed asbestos

= No access - presumed asbestos within these rooms

= Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

Project: J180630

Site: Ty Ddewi
St Davids Close
Pentre
CF41 7BG

Building:

Floor: 1st Floor

N.T.S (Not To Scale)

“This Plan Must Be Read In Conjunction With The Register”

Plan Generated by Amanda Lewis

Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

(S) = Sample Location

■ = Identified, strongly presumed and presumed asbestos

■ = No access - presumed asbestos within these rooms

■ = Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

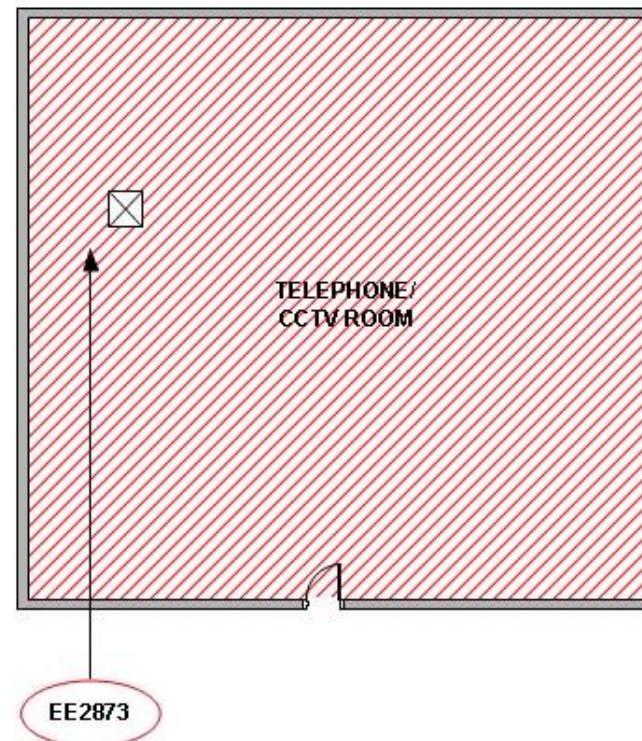
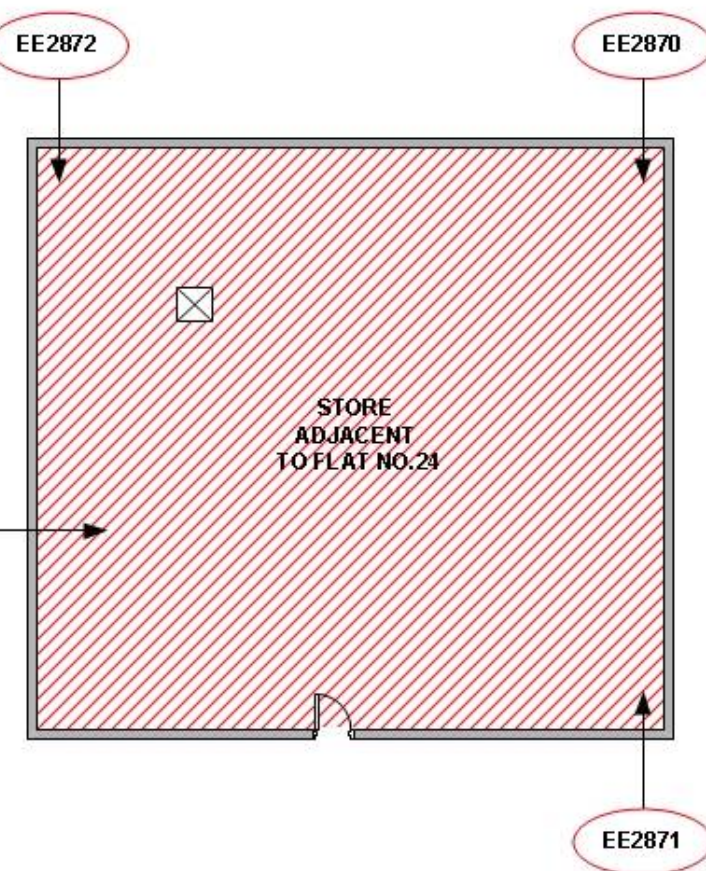
Project: J180630

Site: Ty Ddewi
St Davids Close
Pentre
CF41 7BG

Building:

Floor: 2nd Floor

N.T.S (Not To Scale)



"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Amanda Lewis

Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

(S) = Sample Location

■ = Identified, strongly presumed and presumed asbestos

■ = No access - presumed asbestos within these rooms

■ = Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

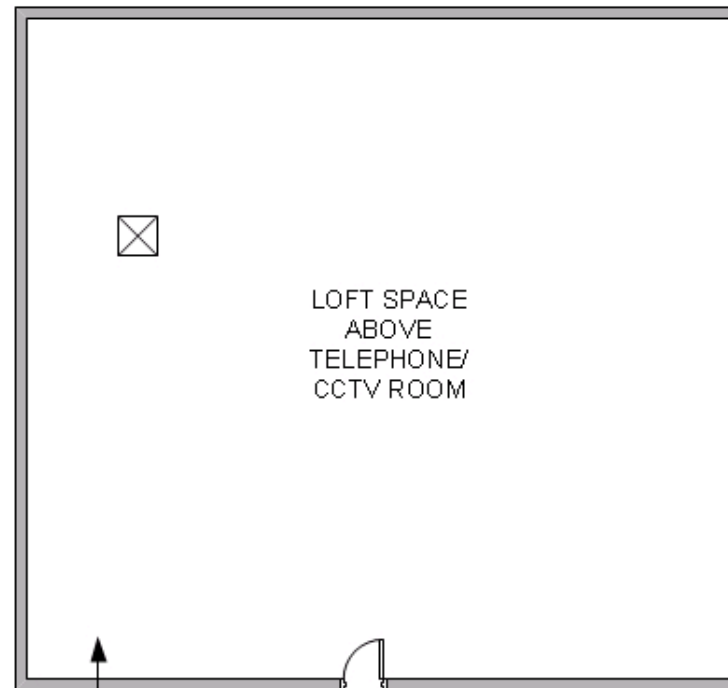
Project: J180630

Site: Ty Ddewi
St Davids Close
Pentre
CF41 7BG

Building:

Floor: Roof Void

N.T.S (Not To Scale)



EE2874

"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Amanda Lewis

APPENDIX 5

GENERAL SURVEY INFORMATION

GENERAL SURVEY INFORMATION

1.0 SURVEY METHOD

- 1.1 The survey was conducted by means of visual inspection and subsequent sampling of suspect bulk materials. Environtec Ltd is accredited by UKAS for surveying, this incorporates carrying out sampling of suspect asbestos bulk materials. Where the surveyor suspected a material of containing asbestos, a sample was taken for analysis. The samples taken were chosen as being representative of the material under investigation. Therefore, where there are visually similar materials, they have been regarded as being uniform composition.

1.2 Health & Safety

1.2.1 Working at Heights

All high-level survey work was undertaken in accordance with The Work at Height Regulations 2005 where a risk assessment is undertaken prior to the use of Step ladders where a second operative may have been required to assist in stabilising ladders, etc. In certain instances where the operative was at risk from falling a harness would be worn and / or scaffold platforms erected.

1.2.2 Entry into Confined Spaces

Entry into confined spaces was only permitted to staff holding a current confined space training certificate. All necessary equipment such as escape packs, gas monitors and intrinsically safe electrical equipment and then only after authorisation from the site/ building manager was given and investigating the atmosphere for fumes / oxygen deficiency, etc. Once the responsible person was satisfied that the confined space was safe for the inspection to take place, a second operative waited outside and kept in regular contact with the surveyor. For areas of particular concern and large duct systems the surveyor was provided with a harness and rope.

1.2.3 Loft Space and Roof Structures

Surveyors would only enter roof spaces and flat-roof structures when they were considered safe to do so. Surveyors would enter loft spaces if they were boarded across the joists or could be assured to remain on the timber joists if their strength permits. Environtec Ltd policy on loft spaces if not boarded, is to visually inspect the loft area from the loft hatch and make presumptive statements to any potential ACMs visible.

1.2.4 Inadequate Lighting

All surveyors would use torches for buildings with no natural or electrical illumination and would have full use of mobile phones in case of emergency. Surveyors would work in pairs in these circumstances.

1.2.5 **Construction and Demolition Sites**

When surveys or sampling was to take place on construction or demolition sites the operatives would wear hard hats, protective footwear and luminous jackets, all of which would have been provided. Surveyors would work in pairs and have had full use of mobile phones for case of emergency in these circumstances.

1.2.6 **Working on Machinery**

Working on machinery that was not guarded or that was functional was not permitted.

1.2.7 **Chemical Hazards**

Surveyors would access the premise's COSHH register and identify any chemical hazards that need the appropriate action to be taken prior to entering such areas.

1.2.8 **Biological Hazards**

Surveyors would only enter areas identified as biological hazards after donning the appropriate personal protective equipment in accordance with the client's instructions, training and warning signs when safe to access. Should other biological hazards such as pigeon excrement, rats or needles be encountered, surveyors would don the appropriate personal protective equipment; including overalls, gloves, boots and respiratory equipment.

1.2.9 **Noise Hazards**

Surveyors would don the appropriate ear defenders or plugs when entering areas that had a noise hazard in accordance with the client's instructions, training and warning signage.

1.2.10 **Sampling Safety**

All surveyors conducting sampling would don protective disposable overalls and overboots and wear suitable RPE; mostly an orinasal mask would be adequate, but higher protection may have been needed for severely contaminated buildings or higher risk materials e.g. sprayed coating.

Care would always be exercised when carrying out bulk sampling to ensure that the disturbance of the materials being sampled is minimised. When carrying out sampling it would be ensured that the area from which the sample was taken was repaired and no loose materials were spread around the area.

This would be undertaken by minimizing emission of asbestos fibres by use of a water spray or PVA/water mixture spray to damp down a panel or lagging. A polythene sheet laid under the sample point was used to collect any debris, this was wiped down with wet wipes before removing. An "H" type vacuum cleaner was used if available. All sampling tools were cleaned before moving on to the next sample, placing dirty wet wipes into a sealable sample bag, which upon filling would be double bagged and transferred to the asbestos waste bag in the laboratory.

Operatives undertaking the survey would have relevant Company identification and would undertake their duties discreetly without causing alarm or stress to occupants by unnecessary conversation or remarks.

Staff involved in taking samples of this nature would be fully acquainted with the environmental hazards and would take essential precautions for both their own protection and that of personnel in the vicinity. All samples would be taken while the area is not occupied, but explanations to personnel present what was being done would be undertaken, with as much honesty as the client and the situation demands. In an occupied building, sampling may have been undertaken during lunch breaks or after normal working hours.

Deviations from the above method may have been required where instances are such that wearing full protective clothing cannot be worn without being alarmist to occupants. It would have been suggested to the client that the sampling be conducted out of hours or alternatively recommended air monitoring been conducted whilst sampling was in progress to reassure occupants.

2.3 Sampling Techniques for Bulk Materials

When taking a sample care would be exercised to minimise the damage caused. Often it is possible to find a damaged area of boarding or insulation from which a sample would be removed without causing further damage. When it was necessary to make a fresh hole to take a sample this would be done with a sharp implement such as a stanley knife, bradawl, cork borer or a hand drill. The sample would be extracted and placed directly into self-seal plastic bags and double bagged. The sample reference number was allocated to each sample taken and recorded on the sample bag ensuring that the dust suppressant was sprayed within the vicinity and over the sampling surface.

The damaged material would be repaired with either polyfilla and/or fabric tape.

Labels indicating sample location were left in-situ if permitted by the client.

2.0 SAMPLING STRATEGY

- 2.1 The object of carrying out sampling was to identify the nature and extent of any visible asbestos bearing material.

All sampling was undertaken causing the minimum possible nuisance and potential risk to health of building occupants and visitors.

2.2 Sampling Strategies to Locate Asbestos

The strategy was based on a systematic diligent visual examination of a building, based on the procedures detailed in Environtec's Technical Procedures Manual and usually in conjunction with the scope of work and building plans supplied by the client.

When accessing voids, it was essential to inspect for debris from damaged asbestos either from

previous installation or careless removals. Floors would not usually contain asbestos but may well have debris of Asbestolux panels or cement sheets in existence.

Also inspections under existing non-asbestos insulation for asbestos residue from a previously inadequate asbestos removal operation would have been undertaken.

2.2.1 Visual Inspections

If the surveyor can confirm from a visual basis that the asbestos material was uniform then it is possible to extrapolate sampling information from identical locations to keep unnecessary sampling to a minimum.

2.2.2 Panels

Samples of every single ceiling panel was evidently not required but sufficient were needed to be sure of locating all the same installations of a particular type. It was recommended that at least one sample per room be taken or every 25 m² or increase the frequency should it be required. However, samples of each type of asbestos panel occurrence would be taken throughout each floor.

2.2.3 Doors and Windows

Doors would be inspected adjacent to the door furniture and if visible, a sample of the internal lining would be taken where exposed. For Refurbishment and Demolition Surveys, it is not reasonably practicable to remove all door and window frames, only a random selection will be removed to ascertain if there are any hidden asbestos packers or spacers in existence.

2.2.4 Floor Tiles

One sample of each obvious type of vinyl and colour floor tile. Should it be deemed that all floor tiles are the same then one sample per 25 m² sections would be sufficient.

2.2.5 Gaskets

One sample of each type of gasket was recommended.

2.2.6 Bitumen Products

The variation between each type of bitumen product is not uncommon therefore, for example, one sample of each bitumastic under sink was required.

2.2.7 Textured Coating

A 5cm² sample will be taken from 2 locations in the same room, both samples will be scrapped into one sample bag. Within larger buildings or areas more samples may be required. If the textured coating can be positively confirmed to be of the same batch and applied at the same time then samples may be cross referenced through a maximum of 3 rooms. Textured coating must never be cross referenced to another sample between different floors.

2.2.8 Cement Products

Cement products e.g. corrugated roofs, rain water goods etc. tend to be uniform, therefore for a large scale roof a maximum of 4 samples would be deemed sufficient. Samples should be taken by carefully removing pieces of approximately 5 cm². If panels are visibly different a sample from each different panel should be taken separately. Any other cement product should have a representative sample from each type.

2.2.9 Sprayed Coating

Different mixtures containing different materials may have been used in different areas and layers. Material may also have been removed, repaired or patched at various times. Samples would be taken by carefully removing pieces of approximately 5 cm², where the material appears uniform and consistent, two samples should usually be enough if taken at either end of the sprayed surface in installations exceeding 100m², one sample per 25-35 m². At least one sample would be taken from each patched area. Care would be taken to include all layers of sprayed coating through to the covered surface.

2.2.10 Lagging

The number of samples would depend on the intended treatment. If the entire boiler house has to be stripped, then it was probably only necessary to prove that one sample contains asbestos. In general one sample should be taken per 3m run of pipe with particular attention paid to different layers and functional items (valves etc). For long runs of pipe, eg > 20m, one sample per 6m item will usually be enough. If only a small part of the lagging was evidently asbestos, then it would have been necessary to inspect all branches of the pipework with particular attention to damaged/repaired lagging and extensions to the system.

Fibreglass lagging can be often found on straight portions of pipe runs, but the bends may be wound with asbestos chrysotile rope or packed with an asbestos composite insulation.

3.0 **SURVEY STRATEGY**

3.1 **Visual Inspection and Sampling**

3.1.1 The site survey and report has been undertaken in accordance with the latest version of **HSG 264: Asbestos: The Survey Guide** incorporating our procedures accredited by UKAS for surveying. A strategy has been established to keep to a minimum, the number of bulk/dust samples taken for analysis and hence minimise the cost of the survey. The strategy employed a combination of visual inspection and sampling of bulk materials thus:

3.1.2 Where the surveyor suspected a material containing asbestos, a bulk sample was taken for analysis. In areas where there were substantial quantities of visually uniform materials, then a small number of samples were taken as being representative of the whole area. Because of this strategy, the client must interpret the results such that where asbestos is detected in a material

(such as board or beam cladding) then all visually similar material in the same area must be assumed to contain asbestos.

- 3.1.3 Where the surveyor reports a material as **non asbestos** by visual inspection and with no analysis of samples (e.g. recently lagged pipework covered with metal cladding) then the client must exercise caution in interpreting the results. It is **IMPORTANT** to stress that in such circumstances, it is possible that there are residues of asbestos trapped under the newly applied lagging (e.g. from poor quality stripping methods carried out at some time in the past).

It is not practicable to detect such residues until substantial disturbance of the material takes place, e.g. during major alterations, and Environtec cannot accept liability for the detection of such residues in this survey. If the client undertakes major alterations in a specific area where it is possible that residual asbestos may be found, we recommend that a further investigation of the specific area be carried out before starting any works.

- 3.1.4 Where there are large numbers of identical items distributed in numerous locations throughout the site, e.g. cement flue pipes, oven door seals etc., a single analysis will have been carried out by the surveyor and the client must assume that all identical items have the same composition as the one specified.
- 3.1.5 Where a 'NO ACCESS' is used, it indicates that the area specified was not accessible to the Surveyor at the time of the survey, either because of locked rooms or because to gain entry, would require an unreasonable degree of dismantling of the structure of the building. The client is advised to be alert to the possibility of there being asbestos materials in such areas.

4.0 **PRIORITY RATING/RISK ASSESSMENT**

- 4.1 For ease of reference of this report and easy use where asbestos bearing material has been identified a priority rating system has been implemented based on condition, which will allow the client the opportunity to plan any requirement for the remedial action and expenditure. This system operates as follows:
- 4.2 A priority rating has been assigned to each sample taken and is based on a method of summarising the surveyor's estimate of the condition of the material examined. It is included to assist the client in determining priorities when drawing up a programme of action for asbestos abatement, however, it must be stressed that priorities for action must be drawn up using the priority together with a consideration of the location of the material and any work methods and schedules which may result in disturbance of the material. To assist, a material risk assessment score has been applied to each sample based on the likelihood of asbestos fibres being released into the breathing zone of persons at risk. A single example can be used to illustrate this point; a partition consisting of asbestos insulating board containing amosite observed at the time of the survey to be in good physical condition with no breaks or abrasions would be given a priority rating of **Low**, i.e. low hazard not requiring urgent attention. If the location of the board is such that it is not subjected to impact or abrasions by normal work activities then the priority for action is also low. The priority would, of course, change to priority **High** if it is decided to carry out works such as upgrading, which would require substantial disturbance of the material.
- 4.3 To summarise, the priority assessment is also the priority for action in cases where the material

remains undisturbed through normal work activities. Changes in priorities can be assessed only by the client's representative on site in the light of planned or unscheduled maintenance requirements or changes in normal working patterns as they arise.

- 4.4 The priorities are defined as follows:
- 4.5 **No priority has been assigned - for a material where no asbestos has been detected.**
- 4.6 **VERY LOW (Score 9 or lower)** - indicates a composite asbestos material which has a very low potential to release asbestos fibres in its normal occupation unless damage occurs.
- 4.7 **LOW (Score 10-12)** - indicates a more friable material that contains asbestos but is in a condition and/or location which does not give rise to a significant health risk, **PROVIDED IT REMAINS UNDISTURBED** either by routine maintenance or by personnel carrying out routine daily work activities which could cause impact or abrasion of the material. Priority **Low** is valid as a priority rating only if this proviso is maintained. Minor remedial action such as very minor encapsulation may be required in order that the material may remain in-situ. Clients are advised to be alert to any changes in work activities in areas where priority **Low** material is located. Permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.
- 4.8 **MEDIUM (Score 13-15)** - indicates the material contains asbestos and is in a location and/or condition which requires some remedial action. The remedial action may be relatively simple such as applying a sealant coat to the surfaces of boards. Priority **Medium** materials may be encapsulated by appropriate remedial action but it is recommended that they be stripped or cleaned as appropriate as soon as resources become available.
- 4.9 **HIGH (Score ≥16)** - indicates materials which contain asbestos and which are in a condition and/or location which requires urgent attention. Priority **High** materials are usually not suited to any form of containment programme and should be stripped or cleaned as appropriate as soon as possible.

4.10 Material Assessment Algorithm (MA)

Each of the parameters given below are assessed during material risk assessment.

Variable	Score	Examples
Product type* (or debris from product)	1 (Low)	Composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, paints, decorative finishes, cement, textured coating etc.
	2 (Medium)	AIB, textiles, gaskets, ropes paper etc.
	3 (High)	Lagging, spray coatings, loose asbestos etc.
Surface Treatment*	0	Non-friable composite asbestos/ encapsulated cement
	1 (Low)	Enclosed sprays/ lagging/ board or bare cement/ textured coating
	2 (Medium)	Bare AIB or encapsulated lagging/ spray material/ rope
	3 (High)	Unsealed lagging/ spray material/ loose asbestos.
Extent of damage*	0 (None)	No visible damage
	1 (Low)	Few scratches/ marks, broken edges etc.
	2 (Medium)	Significant breakage of non-friable materials or several small areas of damage to friable material
	3 (High)	High damage/ visible debris.
Asbestos Type*	0	No asbestos detected.
	1	Chrysotile
	2	Amphibole asbestos excluding Crocidolite.
	3	Crocidolite.

The Material Assessment score is calculated by adding the parameters above and the potential for releasing fibres assigned as detailed below.

Material Assessment Score	Fibre Release Potential
10 or higher	High
7 - 9	Medium
5 - 6	Low
4 or lower	Very Low

4.11 Priority Assessment Algorithm (PA)

Each of the parameters given below are assessed during priority risk assessment.

Variable	Score	Examples
Vulnerability to damage ✓	0	Rare disturbance activity - Only during structural alteration.
	1	Low disturbance activity - Office type activity
	2	Periodic disturbance activity - e.g. Industrial or vehicular activity which may contact ACMs.
	3	High levels of disturbance - e.g. Fire door with A.I.B. sheet in constant use
Extent ✓	0	Small amounts or items (e.g. strings, gaskets)
	1	< 10 m ² / pipe run
	2	> 10 - 50 m ² / pipe run
	3	> 50 m ² / pipe run
Location ✓	0	External
	1	Internal
	2	Heating - Boiler Rooms
	4	Air Conditioning
Number of occupants ✓	0	None
	1	1 - 3
	2	4 - 10
	3	> 10

Priority Assessment + Material Assessment Score	Total Risk Assessment (Priority Rating)
≥ 16	High
13 - 15	Medium
10 - 12	Low
9 or lower	Very Low

The total risk assessment score is calculated by adding the priority assessment and material assessment score.

- 4.12 We have assigned a priority rating in accordance with the algorithm. The priority rating risk assessment is established by adding the material assessment and priority assessment to provide a total risk assessment score.
- 4.13 The Risk Assessment Algorithm is purely guidance to establishing a priority rating which can be adapted to allow for other factors. The survey shall take into account other parameters making adjustment to the priority rating as required to ensure the priority rating is appropriate.
- 4.14 To minimise the risk of exposure to fibres and damage to decorations or fabric, not all asbestos containing materials were sampled. Some were strongly presumed or presumed to contain asbestos.

"Strongly presumed" is where the surveyor has confirmed by Laboratory Analysis the presence of asbestos or non asbestos in a material and the surveyor has used this information by extrapolating the results for the material of similar construction. Also this terminology will be used where asbestos has been known to have been commonly used in manufacturing and where access restricts the possibility of sampling eg. corrugated cement roofs.

"Presumed" asbestos is a *default situation* where there is insufficient evidence to confirm that it is asbestos free ie where there is no samples taken during a survey as requested by the client or where an area cannot be inspected or accessed. In both cases the areas must be presumed to contain asbestos unless there is strong evidence to prove otherwise.

"Presumed" or "Strongly presumed" asbestos containing materials are scored as Crocidolite (3) unless analysis of similar samples from the building shows a different asbestos type.

- 4.15 The priority assigned to a specific material to remain in-situ is representative and transient, hence, routine periodic audits must be conducted to reassess the condition on a regular basis at least annually or sooner if there is a particular concern or problem highlighted.
- 4.16 A permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.

4.17 Management Plan

A management plan should be developed based on this risk assessment. The management plan may include the following :-

- .. Clean up debris
- .. Repair
- .. Encapsulate
- .. Enclosed
- .. Remove
- .. Maintain and update log of asbestos containing materials
- .. Monitor condition
- .. Restrict access

- “ Label or colour code
- “ Inform
- “ Train
- “ Define safe systems of work
- “ Operate a permit to work system

To manage the risk effectively you will need to:

- “ Keep and maintain an up to date record of the location, condition, maintenance and removal of all asbestos materials on your premises
- “ Repair, seal or remove if there is a risk of exposure
- “ Maintain in a good state of repair and regularly monitor the condition
- “ Inform anyone likely to disturb asbestos of its location and condition
- “ Have arrangements in place so that work which disturbs asbestos complies with the Control of Asbestos Regulations (CAR)
- “ Review the plan at regular intervals and update if circumstances change

- 4.18 Generally, work with asbestos insulation, insulating board and spray coating **must not** be carried out without a licence from the HSE although there are exceptions for very minor works - more information is available in Managing and working with asbestos Control of Asbestos Regulations 2012 Approved Code of Practice and guidance L143 (Second edition) Published 2013. As a general guideline, work on these materials should be carried out inside full enclosures incorporating negative pressure and decontamination facilities although minor works may be carried out in accordance with the "*Asbestos Essentials Task Manual*" (HSG210).
- 4.19 The removal of asbestos insulation, insulating board and spray coating is subject to a statutory 14 day notification to the Health and Safety Executive. The notification period is a condition of the removal contractor's licence. Note, also there may be additional restrictions placed on a licence at the discretion of the HSE.
- 4.20 Following the introduction of The *Hazardous Waste (England & Wales) Regulations 2005 as amended by the Hazardous Waste (England & Wales) Regulations 2009*, all materials with an asbestos content greater than 0.1% by weight - including asbestos cement where applicable - are now classified as a Hazardous Waste and must be disposed of at a site licensed to accept such waste. An appropriate consignment note is also required.
- 4.21 Although not a legal requirement, it is recommended that a licensed asbestos contractor is engaged for any work with asbestos - including cement products - to ensure full compliance with all current legislation.

5.0 UKAS

- 5.1 In accordance with current legislation as of August 1999, as an employer, you must only engage laboratories to carry out air monitoring, clearance sampling and analysis who can demonstrate that they conform to *European Standard ISO 17025* by accreditation with a recognised accreditation body.
- 5.2 Environtec Ltd are accredited by *UKAS (United Kingdom Accreditation Service)* for fibre

counting, clearance sampling, bulk sampling and bulk analysis (**Testing 2030**) thereby assuring our audit system, quality system, calibration and testing operations are in compliance with the relevant requirements and are regularly assessed both internally and externally. Environtec Ltd is a UKAS accredited inspection body for asbestos surveying in complying with the standard **ISO 17020 (Inspection 197)**.

- 5.3 Environtec Ltd has a wealth of experience and knowledge to ensure maximum standards are maintained and that the reporting to the client is of the highest quality achievable. Views and interpretations expressed within the content of this report are outside the scope of UKAS.

6.0 AIR SAMPLE ANALYSIS RESULTS

- 6.1 If required, air tests were taken in accordance with **HSG 248** and our UKAS accreditation for fibre counting and sampling. Air test filters were cleared using acetone/triacetin and read using phase contrast microscopy.

Environtec Ltd are participants, with current satisfactory performance in the RICE scheme (The Regular Inter-Laboratory Counting Exchange), which formally established in 1984 as the UK National Proficiency Testing Scheme for laboratories using the membrane filter method.

7.0 DISCLAIMER

- 7.1 This consultancy contract was completed by Environtec Ltd on the basis of a defined programme of work and terms and conditions agreed with the Client. This report was compiled with all reasonable care and attention, bearing in mind the project objectives, the agreed scope of works, prevailing site conditions and the degree of manpower and resources allocated to the project, as agreed.
- 7.2 Environtec Ltd cannot accept responsibility to any parties whatsoever, following the issue of this report, for any matters arising which may be considered outside of the agreed scope of works.
- 7.3 This report is issued in confidence to the client and Environtec Ltd cannot accept responsibility to any third parties to whom this report may be circulated, in part or in full, and any such parties rely on the contents of the report solely at their own risk.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves

8.0 CONCLUSION

8.1 General

- 8.1.1 Where asbestos materials have been positively identified to this property remedial action may be required to be completed to render them safe. Some asbestos materials may remain in-situ in their present condition to fulfil their life expectancy, providing they remain undisturbed and undamaged.
- 8.1.2 Careful consideration must be given to all maintenance and associated operations that will or are likely to disturb any asbestos bearing materials that remain in-situ.
- 8.1.3 It must be considered that whilst asbestos materials remain in-situ a primary source of contamination will exist with secondary contamination by air movement and traffic through which will continue to spread asbestos contamination over a wider extensive area with risk to health and cost implications to the client.
- 8.1.4 It must be noted that demolition works prior to refurbishment or similar may expose asbestos materials that were physically and visually impossible to locate and identify within the restraints of this survey. Caution should therefore always be adopted where there is a question of doubt.
- 8.1.5 Caution must therefore be adopted when maintenance works are conducted, should any suspect materials be revealed then the works must stop immediately and expert advice sought.
- 8.1.6 The test results set out within the appendices show the nature and condition of the asbestos present in the building. Should the building be programmed for major demolition and redevelopment works all asbestos materials positively identified must be removed under controlled conditions by a registered licensed asbestos removal contractor and disposed of as special waste, prior to the commencement of such works.

9.0 RECOMMENDATIONS

- 9.1.1 This survey report and recommendations detailed shall form part of the asbestos management plan in accordance with **regulation 4 of the (CAR 2012)**.
- 9.1.2 To comply with and ensure that the requirements of ***Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance, Health and Safety at Work Act 1974, The Management of the Health & Safety at Work Regulations 1999 and Construction (Design and Management) Regulations 2007*** It is proposed and recommended that the following are implemented and actioned:-
- 9.1.3 That access and disturbance to all areas containing loose or substantially damaged/ deteriorated asbestos materials with a priority **High** be restricted immediately.
- 9.1.4 That all asbestos materials listed under priority **High** be the subject of removal/ remedial action to be implemented immediately to render them safe. This action to include all necessary environmental decontamination and cleaning as necessary.

- 9.1.5 That those items listed under priority **Medium** which are vulnerable to damage be removed and replaced with a non-asbestos substitute or if the ACM is not vulnerable to damage then the ACM must be encapsulated within 12 months of the date of this report.
- 9.1.6 That all individual recommendations relating to ACM occurrences listed within the asbestos register are implemented within 12 months or sooner of the date of this report, depending on the individual circumstances. The prefix word "Programme for removal" shall indicate a less urgent ACM occurrence that requires remedial action to be implemented at a later date depending upon budget restraints.
- 9.1.7 That those items listed under priority **Low/Very Low** may remain in situ unless there is a high vulnerability to damage and/or disturbance as a result of routine occupational activity or maintenance/refurbishment.
- 9.1.8 That all asbestos containing materials that are to remain in place are clearly labelled with statutory warning labels. Labelling of ACMs that are in good condition and may remain in-situ is purely a recommendation. We appreciate in certain circumstances asbestos can be an emotive subject and labelling of asbestos may draw unwanted attention to the said material. Other warning systems can be applied to the ACMs for example a colour coding and/or permit to work scheme should be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area. Environtec Ltd can provide full details of a comprehensive permit to work scheme upon request.
- 9.1.9 Consideration should be given to future proposed refurbishment work and the asbestos removal abatement works programmed in to take advantage of that opportunity. If during refurbishment of a building it becomes necessary for asbestos materials to be worked upon or disturbed in any way there is a requirement under the **CAR 2012** to carry out a risk assessment.
- 9.1.10 That all removal, encapsulation and abatement works are undertaken and completed in compliance with a detailed specification and method statement for asbestos works.
- 9.1.11 That where asbestos materials are to remain insitu then regular, at least annual periodic audit inspections are carried out to monitor and maintain the condition of the asbestos materials such that the risks to health are reduced to the minimum possible so far as is reasonably practicable.
- 9.1.12 That those employed in management positions directly or indirectly having control of the building (dutyholder) and/or any works within these premises are made fully aware of this report and all asbestos materials identified. Those management have a responsibility to provide awareness training for all personnel, site and office based.
- 9.1.13 Those who have repair and maintenance responsibilities for the premises because of a contract or tenancy or those in control of the premises if no such contract or tenancy exists are the "duty holder". The dutyholder shall adopt all liabilities for management of ACMs.
- 9.1.14 That all contractors and those who visit site to undertake any works be notified and made aware of this report and that asbestos materials are present prior to the undertaking of such works to

enable suitable precautionary actions to maintain and reduce the risk to health.

- 9.1.15 That asbestos airborne fibre monitoring be completed to all areas where asbestos materials have been listed under priority **High or Medium** which are programmed for removal at a later date, to identify if airborne fibres are being generated under prevailing conditions. It is considered that this monitoring exercise will act as a reassurance confirmation as it is not expected that airborne fibres will be generated.

This monitoring should be maintained periodically until the said asbestos materials are made safe by removal or abatement works.

- 9.1.16 That all asbestos removal/abatement works are undertaken by a licensed asbestos removal contractor under the direct supervision of Environtec Ltd appointed by the client and that all analytical attendance and monitoring be completed by Environtec Ltd in accordance with our UKAS accreditation.
- 9.1.17 That competitive quotations/tendering procedures are employed to achieve the most economically favourable costings and programme.

10.0 CLIENT OPTIONS

- 10.1 Environtec Limited, on the basis of the survey report can assist the duty holder in compiling a detailed management plan and asbestos policy on behalf of the client which shall incorporate involve asbestos remedial works. If necessary, together with future updates to the register, asbestos awareness training together with our comprehensive popular permit to work scheme.
- 10.2 Environtec Ltd can also undertake annual inspections/re-surveys of premises on behalf of clients to assess in-situ asbestos containing materials and inspect areas originally omitted from the survey with the purpose of updating the asbestos register especially when remedial works or maintenance works take place. The register shall be issued with updates on a regular basis one copy to the client and one for the premises.
- 10.3 Where remedial works are identified, Environtec Ltd can prepare a detailed specification or method statement for the safe removal/containment and any decontamination of all asbestos identified. The specification will encompass all current legislation, extent of works and any site restrictions.
- 10.4 The works can be programmed to progress in phases in order to keep staff disturbance to a minimum. All works to be managed and monitored by Environtec Limited who will provide all necessary certification upon successful completion of the works.
- 10.5 Environtec Limited have been involved as Project Managers on asbestos projects acting as principles for clients for some years, and as such, have compiled a list of reputable Licensed Asbestos Contractors. The contractors are familiar with our Specification and are usually selected for their particular experience or location to the particular site.
- 10.6 Returned tenders will be vetted by Environtec Limited to ensure that contractors have demonstrated a thorough understanding of the proposed works and provided all necessary

supporting information. From the details returned, a recommendation will be made of the most suitable tender received. The tenderers and recommendations will be submitted to the client in the form of a tender summary report.

- 10.7 Budget prices based on our knowledge and experience in the industry can be prepared if requested.
- 10.8 The client should consider undertaking asbestos surveys of other properties under their control and management to formulate and generate an asbestos risk register for their portfolio of buildings so that the asbestos can be effectively controlled and managed. This should be undertaken prior to future projects enabling the client to account for any additional costs/timescale additions necessary on such projects as well as locating previously unidentified asbestos material. Current legislation has placed a statutory obligation on the dutyholder to manage ACMs in non-domestic premises. The asbestos register will form part of the management plan. It is a requirement that all properties controlled by the dutyholder have a management plan that incorporates an asbestos register.
- 10.9 Environtec Ltd can provide a computer web-based database system so that asbestos risk registers for various buildings can be properly managed and updated accordingly incorporating current legislation.

11.0 REGULATIONS ON ASBESTOS IN BUILDINGS

11.1 General

- 11.1.1 Prior to any work involving the disturbance or removal of asbestos containing materials, points that must be noted:

In accordance with the **Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance**, all work with asbestos falls within the scope of the Code of Practice and guidance therein. In general terms, if the code applies, various provisions and regulations have to be complied with. Although failure to observe any provision of this code is not in itself an offence, that failure may be taken by a court in criminal proceedings as proof that a person has contravened a regulation to which the provision relates.

- 11.1.2 Guidance within Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance is aimed at those who have repair and maintenance responsibilities for non-domestic premises.

11.1.3 Definitions

- a) Control Limits: The single control limit for all asbestos types is 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

For further reference, please refer to the following Guidance Notes:-

- 1) *HSG248 - Asbestos: The analyst's guide for sampling, analysis & clearance procedures*,

published by the Health and Safety Executive.

- 11.1.4 Every effort has been made to identify all asbestos materials so far, as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard 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:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes i.e. paint, over boarding, disguising etc. where this is the case then its detection will be impaired.
- 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.
- 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.
- Where an area has been previously 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 at Work Regulations (1987) 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.
- 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 another i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- 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 act (1974) for both themselves and others.
- 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 densely contaminated at certain locations (textured coating for example). Where this is the case the

sample taken may not be representative of the whole product throughout.

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

- Environtec Limited cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report. Environtec Limited 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.

As a general guide:

- a) Asbestos materials which are sound, undamaged and not releasing dusts, should not be disturbed unless for refurbishment works and then, all necessary precautions must be taken and in accordance with Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance.

- b) Those activities that are likely to produce a release of asbestos dust should be avoided as far as possible.

- c) The concentration of airborne asbestos in occupied areas should be reduced to the lowest, reasonably practicable level.

11.2 Specific

11.2.1 *Section 2(d) of the Health and Safety at Work Act 1974 (Chapter 37)*, places a general duty on employers to:

'So far as is reasonably practicable as regards any place of work under the employers control, the maintenance of it in a condition that is safe and without risk to health, and adequate as regards facilities and arrangement for their welfare at work'.

Section 3 of the Act places general duties on employers and the self employed persons other than their employees:

'It shall be the duty of every employer to conduct his undertaking in such a way to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected, thereby are not exposed to such risks to their health or safety'.

Section 4 places general duties on persons concerned with premises to persons other than their employees in non-domestic premises:

'... to take such measures as it is reasonably practicable, that the premises, and any plant or substance in the premises or, as the case may be, provided for use there, is or are safe and without risk to health'.

11.2.2 The *Control of Asbestos Regulations 2012 (CAR)* requires employers to prevent the exposure of employees to asbestos. If this is not reasonably practicable the law says their exposure should

be controlled to the lowest possible level. Before any work with asbestos is carried out, the Regulations require employers to make an assessment of the likely exposure of employees to asbestos dust. The assessment should include a description of the precautions that are to be taken to control dust release and to protect workers and others who may be affected by that work. If you are employing a contractor to work in your building make sure that either the work will not lead to asbestos exposures or that they have carried out this assessment and identified work practices to reduce exposures.

11.2.3 The ***Construction (Design and Management) Regulations 2007*** require the client to provide the CDM co-ordinator with information about the project that is relevant to health and safety. This information might, for instance, include previous surveys of the building for asbestos. The Regulations cover all projects but an F10 notification to the HSE is required for projects where the construction phase is more than 30 days in duration or greater than 500 person days. These Regulations place duties on clients, clients' agents (where appointed), designers and contractors to ensure that the health and safety aspects of the work are taken into account, and then co-ordinated and managed effectively throughout all the stages of a construction project. This includes all stages in the life cycle of a project, from conception, design and planning through to the execution of works on site and subsequent construction, maintenance and repair.

11.2.4 These Regulations apply to the planning and execution of much construction work that involves asbestos cement. Where CDM applies, the following conditions apply:

- clients should provide information about the location, type and condition of asbestos cement;
- designers should take account of this information by altering their designs to remove or reduce the need to work with asbestos cement;
- CDM co-ordinators should ensure information about asbestos, relevant to the work in hand, is available to designers and the principal contractor;
- the principal contractor should ensure that individual contractors are aware of the relevant information, and workers should be briefed;
- anyone arranging for someone to undertake construction work should be reasonably satisfied that their appointees are competent to undertake the work safely and without risk to health;
- where work with asbestos cement is part of the construction work, anyone arranging for someone to do work should be reasonably satisfied that they are competent in work of that type;
- at the end of a project, a health and safety file should be prepared which includes relevant information about asbestos.

11.2.5 Assessment of work which exposes employees to asbestos (as detailed in regulation 6 of the ***Control of Asbestos Regulations 2012***):

Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance place strict duties on those who have repair and maintenance responsibilities for premises, because of a contract or tenancy, to manage the risk from asbestos

in those premises. Where there is no contract or tenancy the person in control will be the duty holder. There is also a duty of co-operation on other parties under the Approved Code of Practice and guidance.

Who has a duty to Manage asbestos?

A wide range of people potentially have obligations under this regulation, including employers and the self-employed, if they have responsibilities for maintaining or repairing non-domestic premises, and the owner of those premises, whether they are occupied or vacant. In all these cases, regulation 4 of CAR may apply, but the extent of the practical duties will be determined by contractual and other existing legal obligations towards the property.

Specific legal duties under regulation 4 of CAR 2012

The broad requirements on employers and others are to:

- Take reasonable steps to find materials likely to contain asbestos;
- Presume materials contain asbestos, unless there is strong evidence to suppose they do not;
- Assess the risk of the likelihood of anyone being exposed to asbestos from these materials;
- Make a written record of the location and the condition of the ACMs and presumed ACMs and keep it up to date;
- Repair or remove any material the contains or is presumed to contain asbestos, is necessary, because of the likelihood of disturbance, and its location or condition;
- Prepare a plan to manage that risk and put it into effect to ensure that;
 - Information on the location and condition of ACMs is given to people who may disturb them;
 - any material known or presumed to contain asbestos is kept in a good state of repair;
- Monitor the condition of ACMs and presumed ACMs; and
- Review and monitor the action plan and the arrangements made to put it in place;

11.2.6 Information, Instruction and Training (as detailed in Regulation 10 of CAR 2012):

Every employer shall ensure that adequate information, instruction and training is given to his employees who are liable to be exposed to asbestos so that they are aware of the risks and the precautions that should be observed.

11.2.7 Use of *Control Measures (as detailed in Regulation 12 of CAR 2012):*

Every employer who provides personal protective equipment shall ensure that it is properly used. Every employer shall make full and proper use of any personal protective equipment and if he

discovers any defect he shall report it to his employer.

11.2.8 Maintenance of ***Control Measures (as detailed in Regulation 13 of CAR 2012):***

Every employer who provides any personal protective equipment shall ensure that it is maintained in a clean and efficient state, in efficient working order and in good repair.

11.2.9 ***Provision and Cleaning of Protective Clothing (as detailed in Regulation 14 of CAR 2012):***

Every employer shall provide adequate and suitable protective clothing for his employees who are exposed to asbestos. The employer shall ensure that any protective clothing provided, is either disposed of as asbestos waste or adequately cleaned.

11.3 **Removal**

11.3.1 When it is not possible to seal an asbestos material effectively and it is likely to release dust, it may be decided to remove it completely. If it is necessary to disturb asbestos materials frequently, for example, for maintenance purposes, the cost of the precautions required may make it more cost effective to replace them. However, it should be recognised that removal often leads to higher short-term dust levels than sealing the material in place, and appropriate precautions must be taken.

Removal may involve complete removal of board or lagging for example, or simply removal of a small vulnerable area from an installation. Temporary repair, sealing or enclosure may be required to render asbestos material safe pending removal. When asbestos fire protection material is removed, it must be immediately replaced with materials having at least an equivalent fire rating.

Removal of sprayed asbestos, lagging and asbestos insulating board should generally be carried out by a Contractor licensed by the Health and Safety Executive (HSE).

Work with materials in which the asbestos fibres are firmly linked in a matrix do not require to be conducted by a licensed contractor. The definition of licensable work is given in paragraph 30 Managing and working with asbestos. The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance, although it is recommended that all such works are undertaken by a licensed contractor.

11.3.2 The ***Control of Asbestos Regulations 2012, entitled 'Asbestos:*** sets down a single control limit for the level of airborne asbestos fibres for all asbestos types, this being 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

It should be noted, however, that this level refers to those who would expect to come into contact with asbestos as part of their employment. There are currently no levels set for the general public. However, in terms of non-occupation exposure, airborne fibre levels should be controlled to as low as reasonably practicable. For most practicable purposes, this effectively means less than 0.01 fibres/ml.

Should one wish to disturb this material, the above level must not be exceeded.

- 11.3.3 Any intended de-contamination/removal work should be undertaken in accordance with a detailed specification.

The specification should include for:-

a)The continued operational requirements.

b)The continuation of the current refurbishment works and the following legislation:-

- 1) *Managing and working with asbestos, The Control of Asbestos Regulations 2012 Approved Code of Practice and guidance L143 (Second edition) Published 2013*
- 2) *Health and Safety at Work etc Act 1974.*
- 3) *HSG248: Asbestos: The analysts' guide for the sampling, analysis and clearance procedures.*
- 4) *Construction (Design and Management) Regulations 2007.*
- 5) *Control of Substances Hazardous to Health Regulations 2002.*
- 6) *HSG247 Asbestos: The Licensed Contractors' Guide*
- 7) *Respiratory Protective Equipment at Work; A Practical Guide HSG53.*
- 8) *A comprehensive guide to Managing Asbestos in Buildings HSG227.*
- 9) *HSG 264: Asbestos: The Survey Guide*
- 10) *Asbestos Essentials Task Manual HSG210.*
- 11) *The Hazardous Waste (England & Wales) Regulations 2005 as amended by the Hazardous Waste (England & Wales) Regulations 2009*

c)Further reading:

- *Asbestos MS13.*

CLIENT:

**WALES & WEST HOUSING
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TREMORFA
CARDIFF
CF24 2UD**



INTERNATIONAL ENVIRONMENTAL CONSULTANTS

www.envirotec.com

UPRN NO: 0291-500

PROJECT NO: J160490

DATE: FEBRUARY 2014

**ASBESTOS REFURBISHMENT SURVEY TO THE COMMUNAL GUEST ROOM AND
WET ROOM
OF
TY DEWI, ST DAVIDS CLOSE, PENTRE, CARDIFF, CF41 7BG**



Office Locations Chelmsford • Newport • Mansfield • Brighouse • Newcastle upon Tyne • Hamilton • Aberdeen

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Registered in England No. 2981693 • VAT No. 630 8944 29

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APPENDICES

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APPENDIX 5	GENERAL SURVEY INFORMATION

1.0 EXECUTIVE SUMMARY

- 1.1 Asbestos containing materials have been identified or strongly presumed in the following locations

Location	Description	Priority/Risk	Recommendation
Guest Room (202) / 2nd Floor	Textured coating to ceiling		Remove under controlled conditions
Wet Room (201) / 2nd Floor	Textured coating to ceiling		Remove under controlled conditions

- 1.2 The following areas were not accessed during the survey and must be presumed to contain asbestos materials.

Location	No Access Area	Reason For No Access
There were no inaccessible areas recorded.		

- 1.2.1 The client should note that if demolition or refurbishment works are to be undertaken in any part of this property which was not included in the scope of this survey, or was physically and visually impossible to access, further investigations should be carried out before any works commence.

2.0 INTRODUCTION

- 2.1 Following evaluation of the clients requirements and considering the aim and purpose of the survey and detailed planning considerations we have undertaken an **Asbestos Refurbishment Survey** where reasonably practicable of *Ty Dewi, St Davids Close, Pentre, Cardiff CF41 7BG*
- 2.2 The property is a typical residential homes, built in the 1900's and constructed of solid brickwork with slate tiled roof.
- 2.3 The building consists of a ground with a further two floors of residential living accommodation.
- 2.4 The site survey has been undertaken and report compiled in accordance with the **HSG 264: Asbestos: The Survey Guide**.

Priority Assessment is outside the scope of our UKAS accreditation to HSG264 Asbestos: The Survey Guide.

The type of survey undertaken may vary, depending on the aim and purpose for which it is to be used. Surveys before demolition and refurbishment will continue to be required under **Control of Asbestos Regulations (CAR) 2012** and the **Construction (Design & Management) Regulations 2007**. However, it is anticipated that most surveys will be undertaken to comply with the **Duty to Manage Asbestos in Non-Domestic Premises Regulation 4 of the Control of Asbestos Regulations 2012**. In these cases, the aim of an asbestos survey is, as far as reasonably practical, to locate and assess all the Asbestos Containing Materials (ACMs) present in the building and its purpose is to present the information collected in a way which allows the employer to manage the risk.

- 2.5 This survey report is in a number of sections, the essential sections will be the Asbestos Register (Appendix 1) which is a detailed systematic diligent inspection and sampling report of each room with enhanced annotated Plans (Appendix 4) indicating where samples have been taken and asbestos positively identified.

3.0 SURVEY TYPE

3.1 Refurbishment Survey

- 3.1.1 A **refurbishment** survey is needed before any refurbishment is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place. The survey will be fully intrusive and involve some destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment survey may also be required in other circumstances, eg when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.
- 3.1.2 The purpose of the survey report is to enable the client to comply with the *Control of Asbestos Regulations 2012*, the *Defective Premises Act 1972*, the *Health and Safety at Work Act 1974*, the *Management of Health and Safety at Work Regulations 1999* and the *Construction (Design and Management) Regulations 2007*.
- 3.1.3 There is a specific requirement in **CAR 2012 (regulation 7)** for all ACM's to be removed as far as reasonably practicable before major refurbishment or final demolition. Removing ACMs is also appropriate in other smaller refurbishment situations which will involve structural layout changes to buildings (eg removal of partitions, walls, units etc). Under CDM, the survey information should be used to help tendering process for removal of ACMs from the building before works start. On this basis the objective of this survey and report is to enable the client in addition to the aforementioned to confirm the location, type, condition and extent of Asbestos Containing Materials within the property surveyed .There is no requirement to complete Material and Priority Assessments as it is assumed the asbestos will be removed therefore there is no requirement for management unless the client requests otherwise.
- 3.1.4 A refurbishment survey can only be effectively undertaken in unoccupied buildings/premises.
- 3.1.5 A Refurbishment survey will be fully intrusive and involve some destructive inspection, as necessary, to gain access to all areas covered by the scope of work, including those difficult to reach.
- 3.1.6 Environtec Limited 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 the intrusive works and sampling for asbestos some damage is unavoidable and will be limited to the areas of inspection.

- 3.1.7 We have not reported on concealed spaces, which may exist within the fabric of the building where the extent and presence of these is not evident due to insufficient knowledge of the structure at the time of the survey.
- 3.1.8 Intrusive holes for inspections purposes are created within voids but it is not reasonably practicable to completely dismantle the building to identify all ACMs. As asbestos was used as a convenience piece of board it is not uncommon for asbestos to be used randomly as packing etc. No responsibility is accepted for the presence of asbestos in voids (under floor, floor, wall or ceiling) other than those opened up during the investigation. Eg a small area of asbestos bitumen may be concealed by floor screed.
- 3.1.9 A refurbishment survey does not include full dismantling of the concrete floor slabs/solid walls which need to be undertaken in conjunction with a demolition contractor. (Unless this has been previously arranged and agreed with the client)

4.0 SITE SPECIFIC SURVEY INFORMATION

- 4.1 The report is the result of the analysis of suspect materials and a visual inspection.
- 4.2 The survey was undertaken and completed by an Environtec Ltd asbestos survey team.
- 4.3 Access was arranged with Jen Barton who enabled and provided all keys and access facilities to all necessary areas of the building.
- 4.4 The physical survey was undertaken on the 25th February 2014.

For buildings where positive asbestos materials have been identified and are to remain insitu, a further inspection will be required no later than 25th February 2015. For areas of high risk the Client should implement more regular inspections to assess the condition of the materials.

- 4.5 The site survey was undertaken by Haji Khamis, during normal business hours of 9.00 am to 5.00 pm.

- 4.6 The bulk analysis of suspect materials for asbestos content was undertaken as follows :-

Date Analysed	Laboratory Technician(s)
06/03/2014	Sara Marks

- 4.7 During the site survey work the building remained occupied.
- 4.8 Samples were taken of suspected materials and where possible photographs of the samples taken. Clearly it is not possible to sample every material encountered therefore, where common areas and features exist, representative samples were taken and extrapolations were made to the nature of the material.
- 4.9 Where suspected asbestos materials form a duct cover, false ceiling, etc. or where these materials would require disturbing to gain access to an area behind or below the suspect material, they have not been displaced, as any physical disturbance of these materials may have resulted in a release of airborne asbestos fibres which may pose a hazard to health. These areas have been no accessed and are detailed in section 1.2.1

- 4.10 Photographs have been included in the report to highlight particular instances or detail as required.
- 4.11 Plans of the premises were provided by the client/prepared by Environtec Ltd to assist in the location and designation of rooms for ease of reference. It must be noted that these plans are not to be regarded as accurate but for assistance purposes only. These plans are located within the appendices of this report.
- 4.12 During the period of the survey electrical supplies and artificial illumination were operative in all areas of the building.
- 4.13 It must be noted that the information contained within this report is compiled and dealt with in a number of sections to enable and give a complete overall assessment and conclusion when considering the asbestos materials positively identified and possible potential hazards.

It is therefore recommended that when passing information onto third parties such as contractors etc that the complete report be issued to ensure that all information is available to such responsible parties that they may consider all options and actions to be undertaken to so far as is reasonably practicable.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves.

- 4.14 The survey included the following areas of the site:

Targeted refurbishment survey to the communal guest room and adjoining wet room.

- 4.15 The following areas were specifically excluded from the survey:

All other areas of the site beyond those detailed within section 4.14

5.0 CAVEATS

- 5.1 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 i.e. if 5 out of 20 samples of visually identified ceiling tiles were analysed negative, there could be a possibility of one tile being asbestos but could easily be missed.
- 5.2 Due to the non uniform matrix of textured coatings, where some textured coatings have proved to be asbestos containing and further samples have given negative results, we would urge the Client to treat all textured coatings as asbestos containing and implement the relevant management of such materials.

6.0 QUALITY ASSURANCE STATEMENT

Project Ref: J160490

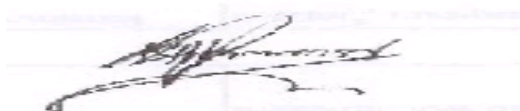
This report has been compiled by the following authorised staff member of Environtec Ltd.

Name: Haji Khamis

Date: 11 March 2014

Signed:

Designation: Consultant



The contents of this report have been checked by the Survey Quality Administrator.

The results are accurate and any conclusions and recommendations made are suitable and in line with current company policy.

Name: Sebastian
Lawniczak

Signed:



Date: 11 March 2014

Designation: Quality Administrator

APPENDIX 1

ASBESTOS REGISTER

The following are the summary of asbestos materials and priority rating assessments and should be read in conjunction with the attached plans and report

SITE ADDRESS: TY DEWI, ST DAVIDS CLOSE, PENTRE, CARDIFF, CF41 7BG								DATE: 25/02/2014		
SURVEY TYPE: REFURBISHMENT / DEMOLITION SURVEY								PROJECT REF: J160490		
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
MAIN BUILDING										
2nd Floor / Wet Room (201)		Textured coating to ceiling	3m²	Sealed	Good Condition	Rare	EE001816 / Chrysotile			Remove under controlled conditions
2nd Floor / Wet Room (201)		Boxing panels	2m	Unsealed	High Damage	Medium	EE001817 / No Asbestos Detected			No further action required
2nd Floor / Wet Room (201)		All other areas visually no asbestos identified	-	-	-	-				No further action required
2nd Floor / Wet Room (201)		Plasterboard ceiling, solid walls, timber door, metal radiator, copper / plastic pipeworks, plastic soilpipe within boxing void and concrete floor with non suspect modern floor covering,								
2nd Floor / Guest Room (202)		Textured coating to ceiling	9m²	Sealed	Good Condition	Rare	EE001818 / Chrysotile			Remove under controlled conditions
2nd Floor / Guest Room (202)		All other areas visually no asbestos identified	-	-	-	-				No further action required
2nd Floor / Guest Room (202)		Plasterboard ceiling, solid walls, timber door, UPVC window frames, timber window sill, metal radiator, copper pipeworks, timber shelving, timber skirting boards and concrete floor beneath carpet.								
Indicates parameter for Material Assessment algorithm(MA)		Product type *C Surfacetreatment *E Extent of damage *F Asbestostype *H				Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16				
Indicates parameter for Priority Assessment algorithm(PA)		Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:		A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								


SITE ADDRESS: TY DEWI, ST DAVIDS CLOSE, PENTRE, CARDIFF, CF41 7BG								DATE: 25/02/2014			
SURVEY TYPE: REFURBISHMENT / DEMOLITION SURVEY								PROJECT REF: J160490			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations	
2nd Floor / Store Room (203)		Visually no asbestos identified	-	-	-	-	EE001819 / No Asbestos Detected			No further action required	
2nd Floor / Store Room (203)		Plasterboard ceiling, solid walls, timber door, MMMF insulation to pipeworks, metal cable tray, timber kick board, timber skirting boards and concrete floor.									
Roof Void / Loft Space (A001)		Fixed Panel to wall	<1m²	Unsealed	Medium Damage	Rare				EE001819 / No Asbestos Detected	No further action required
Roof Void / Loft Space (A001)		Fire break panel to wall	2m	Unsealed	Medium Damage	Rare				EE001820 / No Asbestos Detected	No further action required
Roof Void / Loft Space (A001)		Sarking roof felt	3m²	Composite Material	Good Condition	Rare				EE001821 / No Asbestos Detected	No further action required
Roof Void / Loft Space (A001)		All other areas visually no asbestos identified	-	-	-	-					No further action required
Roof Void / Loft Space (A001)		Timber / steel beams, timber joists, loose MMMF insulation to floor, MMMF insulation to cavity walls, solid brickwork walls, timber loft hatch, steel conduits, copper pipeworks and plasterboard decking. Note: This is a ceiling void above water room.									
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surfacetreatment *E Extent of damage *F Asbestostype *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16					
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D								
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels								


SITE ADDRESS: TY DEWI, ST DAVIDS CLOSE, PENTRE, CARDIFF, CF41 7BG							DATE: 25/02/2014			
SURVEY TYPE: REFURBISHMENT / DEMOLITION SURVEY							PROJECT REF: J160490			
Location ✓ A	No. of Occupants ✓ B	Description (product type) *C	Approx Extent of Material ✓ D	Condition (Surface Treatment *E	Condition (Damage/ Deterioration) *F	Vulnerability to Damage ✓ G	Sample No/ Analytical Result (Asbestos Type) *H	Total Score MA +PA = * ✓	Priority/Risk	Recommendations
Roof Void / Loft Space (A002)		Sarking roof felt	30m²	Composite Material	Good Condition	Rare	EE001822 / No Asbestos Detected			No further action required
Roof Void / Loft Space (A002)		All other areas visually no asbestos identified	-	-	-	-				No further action required
Roof Void / Loft Space (A002)		Timber / steel beams, timber joists, loose MMMF insulation to floor, MMMF insulation to cavity walls, MMMF insulation to pipeworks, solid brickwork walls, timber loft hatch, steel conduits, copper pipeworks and plasterboard decking. This is a ceiling void above guest room and adjoining to the store room.								
Indicates parameter for Material Assessment algorithm(MA)			Product type *C Surfacetreatment *E Extent of damage *F Asbestostype *H			Priority Rating: Very low <9 Low 10-12 Medium 13-15 High ≥16				
Indicates parameter for Priority Assessment algorithm(PA)			Location ✓ A No.of Occupants ✓ B Vulnerability to damage ✓ G Extent of materials ✓ D							
All the following areas have been checked:			A: Roof/external eaves and soffits B: Boilers/vessels pipes C: Ceilings D: Ducts E: Flooring F: Air handling systems G: Industrial appliances H: Heating system I: Interior walls panels							

APPENDIX 2

PHOTO PAGES OF ASBESTOS OCCURENCES

ADDRESS:	Ty Dewi, St Davids Close, Pentre, Cardiff, CF41 7BG
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FLOOR/LOCATION:	2nd Floor Wet Room (201)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Remove under controlled conditions	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	EE001816	
RESULT:	Chrysotile	

FLOOR/LOCATION:	2nd Floor Guest Room (202)	
DESCRIPTION:	Textured coating to ceiling	
RECOMMENDATIONS:	Remove under controlled conditions	
EXTENT:	<10m² or <10m pipe run	
SAMPLE REF:	EE001818	
RESULT:	Chrysotile	

APPENDIX 3

BULK ANALYSIS CERTIFICATE

CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Wales & West Housing Association	Surveyor:	Haji Khamis
Client Address:	3 Alexandra Gate, Ffordd Pengam, Tremorfa, Cardiff, CF24 2UD	Analysis Report No:	J160490
Attention of:	Jen Barton	Report Date:	11th March 2014
Site Address:	Ty Dewi, St Davids Close, Pentre, Cardiff, CF41 7BG	Site Reference No:	0291-500
Date Samples Taken:	25th February 2014	No. of Samples:	7
Date Samples Received:	25th February 2014	Obtained:	7
Date of Analysis:	6th March 2014		
Analysed By:	Sara Marks		

Method Statement

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Environtec 'In House' documented technical method of transmitted/polarised light microscopy and centre stop dispersion staining, in accordance with our UKAS Accreditation, based on the HSG 248 Asbestos: The Analyst Guide. Calibration of equipment and general quality control procedures are in accordance with our in house quality control document. Sampling methods are in accordance with documented in-house procedures and UKAS Accreditation.


Disclaimer

If samples have been DELIVERED the site address and actual sample location or sample type is given by the client at the time of delivery. Environtec are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Environtec cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our UKAS Accreditation for sampling. Environtec takes responsibility of information reported, only when a staff member of Environtec takes the sample(s).

Sample Number	Client Ref	Sample Location / Sample Type	Fibre Type Detected
EE001816		2nd Floor / Wet Room (201) / Textured coating to ceiling - Textured Coating	Chrysotile
EE001817		2nd Floor / Wet Room (201) / Boxing panels - Superlux	NADIS
EE001818		2nd Floor / Guest Room (202) / Textured coating to ceiling - Textured Coating	Chrysotile
EE001819		Roof Void / Loft Space (A001) / Fixed Panel to wall - Superlux	NADIS
EE001820		Roof Void / Loft Space (A001) / Fire break panel to wall - Superlux	NADIS
EE001821		Roof Void / Loft Space (A001) / Sarking roof felt - Roofing Felts	NADIS
EE001822		Roof Void / Loft Space (A002) / Sarking roof felt - Roofing Felts	NADIS

Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience. On rare occasions where there is an element of doubt for samples which are borderline or too insignificant to determine whether the material is asbestos insulation board or asbestos cement, you will be notified and offered a water absorption test. A water absorption test is a longer process undertaken to a supplement asbestos analysis and has a cost implication. We will advise you accordingly should this situation arise. Environtec Ltd cannot be held responsible for inaccuracies based on the material type opinion if a water absorption test has been offered and refused. Material type opinion falls outside the scope of our UKAS accreditation.

K	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
	CROCIDOLITE	= Typically Known as Blue Asbestos (Amphibole Group)
	AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
E	CHRYSTOTILE	= Typically Known as White Asbestos (Serpentine Group)
	ANTHOPHYLLITE	= Asbestos (Amphibole Group)
Y	ACTINOLITE	= Asbestos (Amphibole Group)
	TREMOLITE	= Asbestos (Amphibole Group)
All samples will be retained in the laboratory for a minimum of 6 Months.		

Typed By:	Sara Marks	Authorised Signatory:	
Position::	Laboratory Manager	Print Name:	Sara Marks
UKAS/New AFI/Statements/EA			

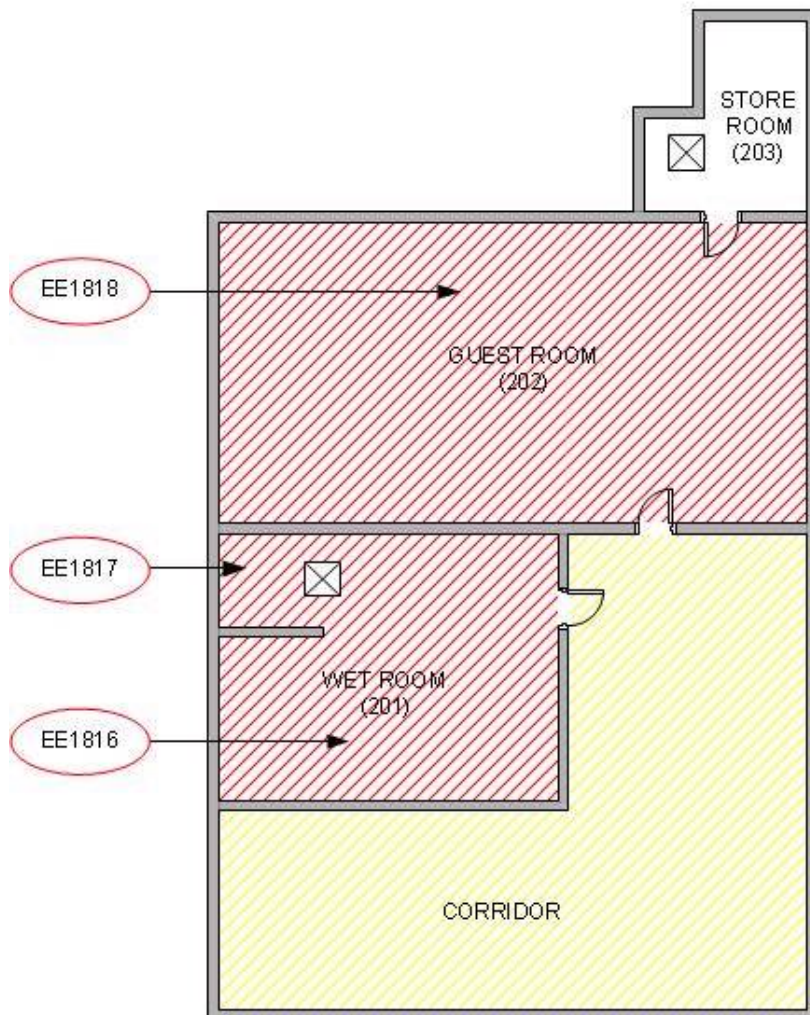
APPENDIX 4

SKETCH / PLANS

These plans are provided to assist in the location and designation of rooms etc

The accuracy of the plans / sketches cannot be guaranteed.

Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666



"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Amanda Lewis

S = Sample Location

Red = Identified, strongly presumed and presumed asbestos

Blue = No access - presumed asbestos within these rooms

Yellow = Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

Project: J160490

Site: Ty Dewi
St Davids Close
Pentre
Cardiff
CF41 7BG

Building:

Floor: 2nd Floor

N.T.S (Not To Scale)

Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

S = Sample Location

= Identified, strongly presumed and presumed asbestos

= No access - presumed asbestos within these rooms

= Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

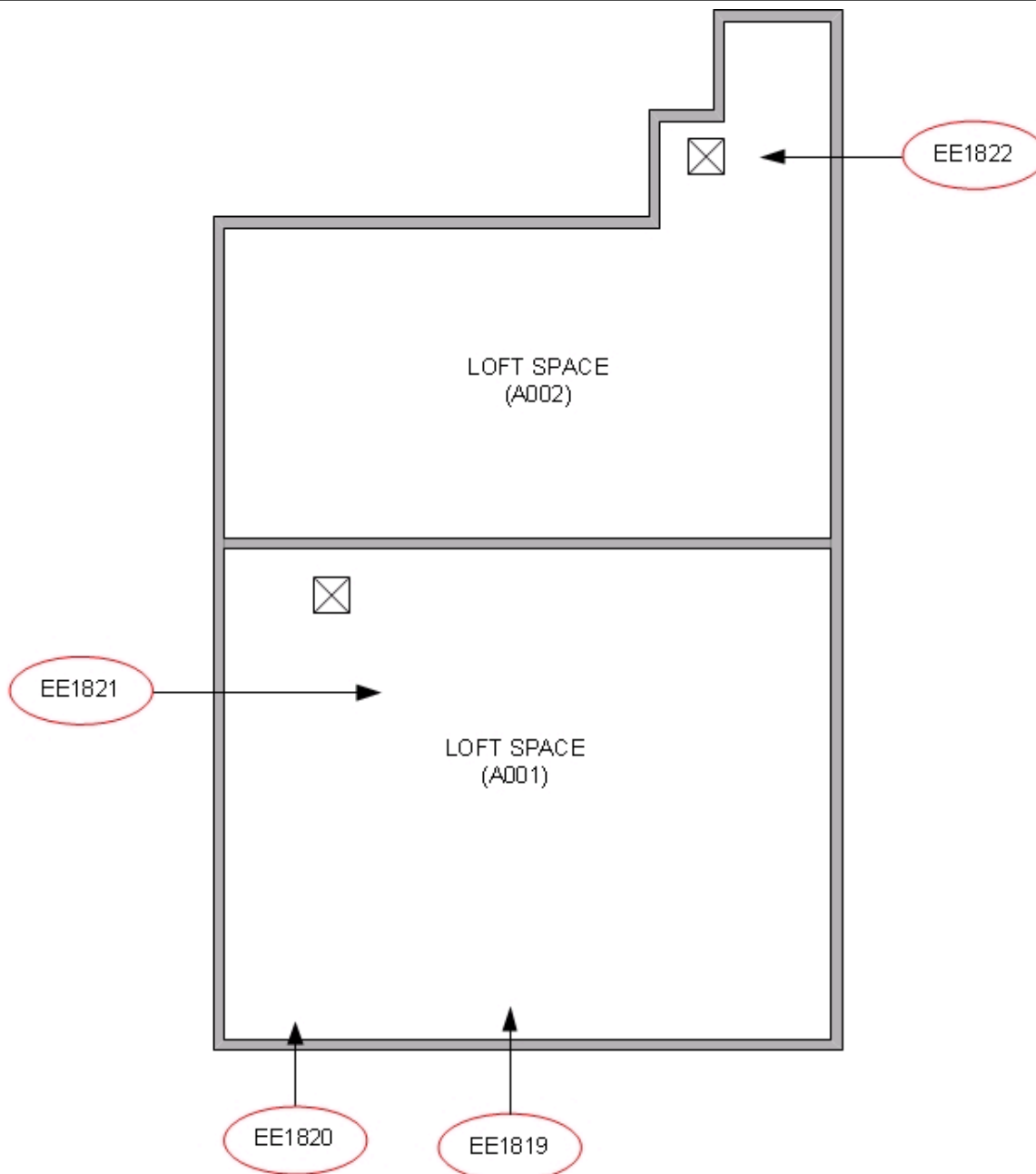
Project: J160490

Site: Ty Dewi
St Davids Close
Pentre
Cardiff
CF41 7BG

Building:

Floor: Roof Void

N.T.S (Not To Scale)



"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Amanda Lewis

APPENDIX 5

GENERAL SURVEY INFORMATION

GENERAL SURVEY INFORMATION

1.0 SURVEY METHOD

- 1.1 The survey was conducted by means of visual inspection and subsequent sampling of suspect bulk materials. Environtec Ltd is accredited by UKAS for surveying, this incorporates carrying out sampling of suspect asbestos bulk materials. Where the surveyor suspected a material of containing asbestos, a sample was taken for analysis. The samples taken were chosen as being representative of the material under investigation. Therefore, where there are visually similar materials, they have been regarded as being uniform composition.

1.2 Health & Safety

1.2.1 Working at Heights

All high-level survey work was undertaken in accordance with the Working at Heights Regulations 2005 where a risk assessment is undertaken prior to the use of Step ladders where a second operative may have been required to assist in stabilising ladders, etc. In certain instances where the operative was at risk from falling a harness would be worn and / or scaffold platforms erected.

1.2.2 Entry into Confined Spaces

Entry into confined spaces was only permitted to staff holding a current confined space training certificate. All necessary equipment such as escape packs, gas monitors and intrinsically safe electrical equipment and then only after authorisation from the site/ building manager was given and investigating the atmosphere for fumes / oxygen deficiency, etc. Once the responsible person was satisfied that the confined space was safe for the inspection to take place, a second operative waited outside and kept in regular contact with the surveyor. For areas of particular concern and large duct systems the surveyor was provided with a harness and rope.

1.2.3 Loft Space and Roof Structures

Surveyors would only enter roof spaces and flat-roof structures when they were considered safe to do so. Surveyors would enter loft spaces if they were boarded across the joists or could be assured to remain on the timber joists if their strength permits.

1.2.4 Inadequate Lighting

All surveyors would use torches for buildings with no natural or electrical illumination and would have full use of mobile phones in case of emergency. Surveyors would work in pairs in these circumstances.

1.2.5 Construction and Demolition Sites

When surveys or sampling was to take place on construction or demolition sites the operatives

would wear hard hats, protective footwear and luminous jackets, all of which would have been provided. Surveyors would work in pairs and have had full use of mobile phones for case of emergency in these circumstances.

1.2.6 **Working on Machinery**

Working on machinery that was not guarded or that was functional was not permitted.

1.2.7 **Chemical Hazards**

Surveyors would access the premise's COSHH register and identify any chemical hazards that need the appropriate action to be taken prior to entering such areas.

1.2.8 **Biological Hazards**

Surveyors would only enter areas identified as biological hazards after donning the appropriate personal protective equipment in accordance with the client's instructions, training and warning signs when safe to access. Should other biological hazards such as pigeon excrement, rats or needles be encountered, surveyors would don the appropriate personal protective equipment; including overalls, gloves, boots and respiratory equipment.

1.2.9 **Noise Hazards**

Surveyors would don the appropriate ear defenders or plugs when entering areas that had a noise hazard in accordance with the client's instructions, training and warning signage.

1.2.10 **Sampling Safety**

All surveyors conducting sampling would don protective disposable overalls and overboots and wear suitable RPE; mostly an orinasal mask would be adequate, but higher protection may have been needed for severely contaminated buildings or higher risk materials e.g. sprayed coating.

Care would always be exercised when carrying out bulk sampling to ensure that the disturbance of the materials being sampled is minimised. When carrying out sampling it would be ensured that the area from which the sample was taken was repaired and no loose materials were spread around the area.

This would be undertaken by minimizing emission of asbestos fibres by use of a water spray or PVA/water mixture spray to damp down a panel or lagging. A polythene sheet laid under the sample point was used to collect any debris, this was wiped down with wet wipes before removing. An "H" type vacuum cleaner was used if available. All sampling tools were cleaned before moving on to the next sample, placing dirty wet wipes into a sealable sample bag, which upon filling would be double bagged and transferred to the asbestos waste bag in the laboratory.

Operatives undertaking the survey would have relevant Company identification and would undertake their duties discreetly without causing alarm or stress to occupants by unnecessary conversation or remarks.

Staff involved in taking samples of this nature would be fully acquainted with the environmental hazards and would take essential precautions for both their own protection and that of personnel in the vicinity. All samples would be taken while the area is not occupied, but explanations to personnel present what was being done would be undertaken, with as much honesty as the client and the situation demands. In an occupied building, sampling may have been undertaken during lunch breaks or after normal working hours.

Deviations from the above method may have been required where instances are such that wearing full protective clothing cannot be worn without being alarmist to occupants. It would have been suggested to the client that the sampling be conducted out of hours or alternatively recommended air monitoring been conducted whilst sampling was in progress to reassure occupants.

2.3 Sampling Techniques for Bulk Materials

When taking a sample care would be exercised to minimise the damage caused. Often it is possible to find a damaged area of boarding or insulation from which a sample would be removed without causing further damage. When it was necessary to make a fresh hole to take a sample this would be done with a sharp implement such as a stanley knife, bradawl, cork borer or a hand drill. The sample would be extracted and placed directly into self-seal plastic bags and double bagged. The sample reference number was allocated to each sample taken and recorded on the sample bag ensuring that the dust suppressant was sprayed within the vicinity and over the sampling surface.

The damaged material would be repaired with either polyfilla and/or fabric tape.

Labels indicating sample location were left in-situ if permitted by the client.

2.0 SAMPLING STRATEGY

2.1 The object of carrying out sampling was to identify the nature and extent of any visible asbestos bearing material.

All sampling was undertaken causing the minimum possible nuisance and potential risk to health of building occupants and visitors.

2.2 Sampling Strategies to Locate Asbestos

The strategy was based on a systematic diligent visual examination of a building, based on the procedures detailed in Environtec's Technical Procedures Manual and usually in conjunction with the scope of work and building plans supplied by the client.

When accessing voids, it was essential to inspect for debris from damaged asbestos either from previous installation or careless removals. Floors would not usually contain asbestos but may well have debris of Asbestolux panels or cement sheets in existence.

Also inspections under existing non-asbestos insulation for asbestos residue from a previously

inadequate asbestos removal operation would have been undertaken.

2.2.1 Visual Inspections

If the surveyor can confirm from a visual basis that the asbestos material was uniformed then it is possible to extrapolate sampling information from identical locations to keep unnecessary sampling to a minimum.

2.2.2 Panels

Samples of every single ceiling panel was evidently not required but sufficient were needed to be sure of locating all the same installations of a particular type. It was recommended that at least one sample per room be taken or every 25 m² or increase the frequency should it be required. However, samples of each type of asbestos panel occurrence would be taken throughout each floor.

2.2.3 Doors

Doors would be inspected adjacent to the door furniture and if visible, a sample of the internal lining would be taken where exposed.

2.2.4 Floor Tiles

One sample of each obvious type of vinyl and colour floor tile. Should it be deemed that all floor tiles are the same then one sample per 25 m² sections would be sufficient.

2.2.5 Gaskets

One sample of each type of gasket was recommended.

2.2.6 Bitumen Products

The variation between each type of bitumen product is not uncommon therefore, for example, one sample of each bitumastic under sink was required.

2.2.7 Textured Coating

A 5cm² sample will be taken from 2 locations in the same room, both samples will be scrapped into one sample bag. Within larger buildings or areas more samples may be required. If the textured coating can be positively confirmed to be of the same batch and applied at the same time then samples may be cross referenced through a maximum of 3 rooms. Textured coating must never be cross referenced to another sample between different floors.

2.2.8 Cement Products

Cement products e.g. corrugated roofs, rain water goods etc. tend to be uniform, therefore for a large scale roof a maximum of 4 samples would be deemed sufficient. Samples should be taken

by carefully removing pieces of approximately 5 cm². If panels are visibly different a sample from each different panel should be taken separately. Any other cement product should have a representative sample from each type.

2.2.9 Spray Coating

Different mixtures containing different materials may have been used in different areas and layers. Material may also have been removed, repaired or patched at various times. Samples would be taken by carefully removing pieces of approximately 5 cm², where the material appears uniform and consistent, two samples should usually be enough if taken at either end of the sprayed surface in installations exceeding 100m², one sample per 25-35 m². At least one sample would be taken from each patched area. Care would be taken to include all layers of sprayed coating through to the covered surface.

2.2.10 Lagging

The number of samples would depend on the intended treatment. If the entire boiler house has to be stripped, then it was probably only necessary to prove that one sample contains asbestos. In general one sample should be taken per 3m run of pipe with particular attention paid to different layers and functional items (valves etc). For long runs of pipe, eg > 20m, one sample per 6m item will usually be enough. If only a small part of the lagging was evidently asbestos, then it would have been necessary to inspect all branches of the pipework with particular attention to damaged/repaired lagging and extensions to the system.

Fibreglass lagging can be often found on straight portions of pipe runs, but the bends may be wound with asbestos chrysotile rope or packed with an asbestos composite insulation.

3.0 SURVEY STRATEGY

3.1 Visual Inspection and Sampling

- 3.1.1 The site survey and report has been undertaken in accordance with the latest version of **HSG 264: Asbestos: The Survey Guide** incorporating our procedures accredited by UKAS for surveying. A strategy has been established to keep to a minimum, the number of bulk/dust samples taken for analysis and hence minimise the cost of the survey. The strategy employed a combination of visual inspection and sampling of bulk materials thus:
- 3.1.2 Where the surveyor suspected a material containing asbestos, a bulk sample was taken for analysis. In areas where there were substantial quantities of visually uniform materials, then a small number of samples were taken as being representative of the whole area. Because of this strategy, the client must interpret the results such that where asbestos is detected in a material (such as board or beam cladding) then all visually similar material in the same area must be assumed to contain asbestos.
- 3.1.3 Where the surveyor reports a material as **non asbestos** by visual inspection and with no analysis of samples (e.g. recently lagged pipework covered with metal cladding) then the client must exercise caution in interpreting the results. It is **IMPORTANT** to stress that in such

circumstances, it is possible that there are residues of asbestos trapped under the newly applied lagging (e.g. from poor quality stripping methods carried out at some time in the past).

It is not practicable to detect such residues until substantial disturbance of the material takes place, e.g. during major alterations, and Environtec cannot accept liability for the detection of such residues in this survey. If the client undertakes major alterations in a specific area where it is possible that residual asbestos may be found, we recommend that a further investigation of the specific area be carried out before starting any works.

- 3.1.4 Where there are large numbers of identical items distributed in numerous locations throughout the site, e.g. cement flue pipes, oven door seals etc., a single analysis will have been carried out by the surveyor and the client must assume that all identical items have the same composition as the one specified.
- 3.1.5 Where a 'NO ACCESS' is used, it indicates that the area specified was not accessible to the analyst at the time of the survey, either because of locked rooms or because to gain entry, would require an unreasonable degree of dismantling of the structure of the building. The client is advised to be alert to the possibility of there being asbestos materials in such areas.

4.0 PRIORITY RATING/RISK ASSESSMENT

- 4.1 For ease of reference of this report and easy use where asbestos bearing material has been identified a priority rating system has been implemented based on condition, which will allow the client the opportunity to plan any requirement for the remedial action and expenditure. This system operates as follows:
- 4.2 A priority rating has been assigned to each sample taken and is based on a method of summarising the surveyor's estimate of the condition of the material examined. It is included to assist the client in determining priorities when drawing up a programme of action for asbestos abatement, however, it must be stressed that priorities for action must be drawn up using the priority together with a consideration of the location of the material and any work methods and schedules which may result in disturbance of the material. To assist, a material risk assessment score has been applied to each sample based on the likelihood of asbestos fibres being released into the breathing zone of persons at risk. A single example can be used to illustrate this point; a partition consisting of asbestos insulating board containing amosite observed at the time of the survey to be in good physical condition with no breaks or abrasions would be given a priority rating of **Low**, i.e. low hazard not requiring urgent attention. If the location of the board is such that it is not subjected to impact or abrasions by normal work activities then the priority for action is also low. The priority would, of course, change to priority **High** if it is decided to carry out works such as upgrading, which would require substantial disturbance of the material.
- 4.3 To summarise, the priority assessment is also the priority for action in cases where the material remains undisturbed through normal work activities. Changes in priorities can be assessed only by the client's representative on site in the light of planned or unscheduled maintenance requirements or changes in normal working patterns as they arise.
- 4.4 The priorities are defined as follows:

- 4.5 **No priority has been assigned - for a material where no asbestos has been detected.**
- 4.6 **VERY LOW (Score 9 or lower)** - indicates a composite asbestos material which has a very low potential to release asbestos fibres in its normal occupation unless damage occurs.
- 4.7 **LOW (Score 10-12)** - indicates a more friable material that contains asbestos but is in a condition and/or location which does not give rise to a significant health risk, **PROVIDED IT REMAINS UNDISTURBED** either by routine maintenance or by personnel carrying out routine daily work activities which could cause impact or abrasion of the material. Priority **Low** is valid as a priority rating only if this proviso is maintained. Minor remedial action such as very minor encapsulation may be required in order that the material may remain in-situ. Clients are advised to be alert to any changes in work activities in areas where priority **Low** material is located. Permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.
- 4.8 **MEDIUM (Score 13-15)** - indicates the material contains asbestos and is in a location and/or condition which requires some remedial action. The remedial action may be relatively simple such as applying a sealant coat to the surfaces of boards. Priority **Medium** materials may be encapsulated by appropriate remedial action but it is recommended that they be stripped or cleaned as appropriate as soon as resources become available.
- 4.9 **HIGH (Score ≥16)** - indicates materials which contain asbestos and which are in a condition and/or location which requires urgent attention. Priority **High** materials are usually not suited to any form of containment programme and should be stripped or cleaned as appropriate as soon as possible.

4.10 Material Assessment Algorithm (MA)

Each of the parameters given below are assessed during material risk assessment.

Variable	Score	Examples
Product type* (or debris from product)	1 (Low)	Composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, paints, decorative finishes, cement, textured coating etc.
	2 (Medium)	AIB, textiles, gaskets, ropes paper etc.
	3 (High)	Lagging, spray coatings, loose asbestos etc.
Surface Treatment*	0	Non-friable composite asbestos/ encapsulated cement
	1 (Low)	Enclosed sprays/ lagging/ board or bare cement/ textured coating
	2 (Medium)	Bare AIB or encapsulated lagging/ spray material/ rope
	3 (High)	Unsealed lagging/ spray material/ loose asbestos.
Extent of damage*	0 (None)	No visible damage
	1 (Low)	Few scratches/ marks, broken edges etc.
	2 (Medium)	Significant breakage of non-friable materials or several small areas of damage to friable material
	3 (High)	High damage/ visible debris.
Asbestos Type*	0	No asbestos detected.
	1	Chrysotile
	2	Amphibole asbestos excluding Crocidolite.
	3	Crocidolite.

The Material Assessment score is calculated by adding the parameters above and the potential for releasing fibres assigned as detailed below.

Material Assessment Score	Fibre Release Potential
10 or higher	High
7 - 9	Medium
5 - 6	Low
4 or lower	Very Low

4.11 Priority Assessment Algorithm (PA)

Each of the parameters given below are assessed during priority risk assessment.

Variable	Score	Examples
Vulnerability to damage ✓	0	Rare disturbance activity - Only during structural alteration.
	1	Low disturbance activity - Office type activity
	2	Periodic disturbance activity - e.g. Industrial or vehicular activity which may contact ACMs.
	3	High levels of disturbance - e.g. Fire door with A.I.B. sheet in constant use
Extent ✓	0	Small amounts or items (e.g. strings, gaskets)
	1	< 10 m ² / pipe run
	2	> 10 - 50 m ² / pipe run
	3	> 50 m ² / pipe run
Location ✓	0	External
	1	Internal
	2	Heat
	4	Air Conditioning
Number of occupants ✓	0	None
	1	1 - 3
	2	4 - 10
	3	> 10

Priority Assessment + Material Assessment Score	Total Risk Assessment (Priority Rating)
≥ 16	High
13 - 15	Medium
10 - 12	Low
9 or lower	Very Low

The total risk assessment score is calculated by adding the priority assessment and material assessment score.

- 4.12 We have assigned a priority rating in accordance with the algorithm. The priority rating risk assessment is established by adding the material assessment and priority assessment to provide a total risk assessment score.
- 4.13 The Risk Assessment Algorithm is purely guidance to establishing a priority rating which can be adapted to allow for other factors. The survey shall take into account other parameters making adjustment to the priority rating as required to ensure the priority rating is appropriate.
- 4.14 To minimise the risk of exposure to fibres and damage to decorations or fabric, not all asbestos containing materials were sampled. Some were strongly presumed or presumed to contain asbestos.

"Strongly presumed" is where the surveyor has confirmed by Laboratory Analysis the presence of asbestos or non asbestos in a material and the surveyor has used this information by extrapolating the results for the material of similar construction. Also this terminology will be used where asbestos has been known to have been commonly used in manufacturing and where access restricts the possibility of sampling eg. corrugated cement roofs.

"Presumed" asbestos is a *default situation* where there is insufficient evidence to confirm that it is asbestos free ie where there is no samples taken during a survey as requested by the client or where an area cannot be inspected or accessed. In both cases the areas must be presumed to contain asbestos unless there is strong evidence to prove otherwise.

"Presumed" or "Strongly presumed" asbestos containing materials are scored as Crocidolite (3) unless analysis of similar samples from the building shows a different asbestos type.

- 4.15 The priority assigned to a specific material to remain in-situ is representative and transient, hence, routine periodic audits must be conducted to reassess the condition on a regular basis at least annually or sooner if there is a particular concern or problem highlighted.
- 4.16 A permit to work scheme must be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area.

4.17 Management Plan

A management plan should be developed based on this risk assessment. The management plan may include the following :-

- .. Clean up debris
- .. Repair
- .. Encapsulate
- .. Enclosed
- .. Remove
- .. Maintain and update log of asbestos containing materials
- .. Monitor condition
- .. Restrict access

- “ Label or colour code
- “ Inform
- “ Train
- “ Define safe systems of work
- “ Operate a permit to work system

To manage the risk effectively you will need to:

- “ Keep and maintain an up to date record of the location, condition, maintenance and removal of all asbestos materials on your premises
- “ Repair, seal or remove if there is a risk of exposure
- “ Maintain in a good state of repair and regularly monitor the condition
- “ Inform anyone likely to disturb asbestos of its location and condition
- “ Have arrangements in place so that work which disturbs asbestos complies with the Control of Asbestos Regulations (CAR)
- “ Review the plan at regular intervals and update if circumstances change

- 4.18 Generally, work with asbestos insulation, insulating board and spray coating **must not** be carried out without a licence from the HSE although there are exceptions for very minor works - more information is available in "*Work with materials containing asbestos - L143*". As a general guideline, work on these materials should be carried out inside full enclosures incorporating negative pressure and decontamination facilities although minor works may be carried out in accordance with the "*Asbestos Essentials Task Manual*" (HSG210).
- 4.19 The removal of asbestos insulation, insulating board and spray coating is subject to a statutory 14 day notification to the Health and Safety Executive. The notification period is a condition of the removal contractor's licence. Note, also there may be additional restrictions placed on a licence at the discretion of the HSE.
- 4.20 Following the introduction of the *Hazardous Waste (England & Wales) Regulations 2005*, all materials with an asbestos content greater than 0.1% by weight - including asbestos cement where applicable - is now classified as a Special Waste and must be disposed of at a site licensed to accept such waste. An appropriate consignment note is also required.
- 4.21 Although not a legal requirement, it is recommended that a licensed asbestos contractor is engaged for any work with asbestos - including cement products - to ensure full compliance with all current legislation.

5.0 UKAS

- 5.1 In accordance with current legislation as of August 1999, as an employer, you must only engage laboratories to carry out air monitoring, clearance sampling and analysis who can demonstrate that they conform to *European Standard ISO 17025* by accreditation with a recognised accreditation body.
- 5.2 Environtec Ltd are accredited by *UKAS (United Kingdom Accreditation Service)* for fibre counting, clearance sampling, bulk sampling and bulk analysis (**Testing 2030**) thereby assuring our audit system, quality system, calibration and testing operations are in compliance with the

relevant requirements and are regularly assessed both internally and externally. Environtec Ltd is a UKAS accredited inspection body for asbestos surveying in complying with the standard **ISO 17020 (Inspection 197)**.

- 5.3 Environtec Ltd has a wealth of experience and knowledge to ensure maximum standards are maintained and that the reporting to the client is of the highest quality achievable. Views and interpretations expressed within the content of this report are outside the scope of UKAS.

6.0 AIR SAMPLE ANALYSIS RESULTS

- 6.1 If required, air tests were taken in accordance with **HSG 248** and our UKAS accreditation for fibre counting and sampling. Air test filters were cleared using acetone/triacetin and read using phase contrast microscopy.

Environtec Ltd are participants, with current satisfactory performance in the RICE scheme (The Regular Inter-Laboratory Counting Exchange), which formally established in 1984 as the UK National Proficiency Testing Scheme for laboratories using the membrane filter method.

7.0 DISCLAIMER

- 7.1 This consultancy contract was completed by Environtec Ltd on the basis of a defined programme of work and terms and conditions agreed with the Client. This report was compiled with all reasonable care and attention, bearing in mind the project objectives, the agreed scope of works, prevailing site conditions and the degree of manpower and resources allocated to the project, as agreed.
- 7.2 Environtec Ltd cannot accept responsibility to any parties whatsoever, following the issue of this report, for any matters arising which may be considered outside of the agreed scope of works.
- 7.3 This report is issued in confidence to the client and Environtec Ltd cannot accept responsibility to any third parties to whom this report may be circulated, in part or in full, and any such parties rely on the contents of the report solely at their own risk.

The measurements given within this report for all sampled asbestos/non asbestos materials are approximations only. Environtec Ltd cannot accept responsibility for discrepancies on these measurements. Any future asbestos removal projects should be priced on the basis that the material has been accurately measured by the removing party themselves

8.0 CONCLUSION

8.1 General

- 8.1.1 Where asbestos materials have been positively identified to this property remedial action may be required to be completed to render them safe. Some asbestos materials may remain in-situ in their present condition to fulfil their life expectancy, providing they remain undisturbed and undamaged.
- 8.1.2 Careful consideration must be given to all maintenance and associated operations that will or are likely to disturb any asbestos bearing materials that remain in-situ.
- 8.1.3 It must be considered that whilst asbestos materials remain in-situ a primary source of contamination will exist with secondary contamination by air movement and traffic through which will continue to spread asbestos contamination over a wider extensive area with risk to health and cost implications to the client.
- 8.1.4 It must be noted that demolition works prior to refurbishment or similar may expose asbestos materials that were physically and visually impossible to locate and identify within the restraints of this survey. Caution should therefore always be adopted where there is a question of doubt.
- 8.1.5 Caution must therefore be adopted when maintenance works are conducted, should any suspect materials be revealed then the works must stop immediately and expert advice sought.
- 8.1.6 The test results set out within the appendices show the nature and condition of the asbestos present in the building. Should the building be programmed for major demolition and redevelopment works all asbestos materials positively identified must be removed under controlled conditions by a registered licensed asbestos removal contractor and disposed of as special waste, prior to the commencement of such works.

9.0 RECOMMENDATIONS

- 9.1.1 This survey report and recommendations detailed shall form part of the asbestos management plan in accordance with **regulation 4 of the (CAR 2012)**.
- 9.1.2 To comply with and ensure that the requirements of ***The Control of Asbestos Regulations 2012, Health and Safety at Work Act 1974, The Management of the Health & Safety at Work Regulations 1999, Construction (Design and Management) Regulations 2007 and ACoP The Management of Asbestos in Non Domestic Premises*** - It is proposed and recommended that the following are implemented and actioned:-
- 9.1.3 That access and disturbance to all areas containing loose or substantially damaged/ deteriorated asbestos materials with a priority **High** be restricted immediately.
- 9.1.4 That all asbestos materials listed under priority **High** be the subject of removal/ remedial action to be implemented immediately to render them safe. This action to include all necessary environmental decontamination and cleaning as necessary.

- 9.1.5 That those items listed under priority **Medium** which are vulnerable to damage be removed and replaced with a non-asbestos substitute or if the ACM is not vulnerable to damage then the ACM must be encapsulated within 12 months of the date of this report.
- 9.1.6 That all individual recommendations relating to ACM occurrences listed within the asbestos register are implemented within 12 months or sooner of the date of this report, depending on the individual circumstances. The prefix word "Programme for removal" shall indicate a less urgent ACM occurrence that requires remedial action to be implemented at a later date depending upon budget restraints.
- 9.1.7 That those items listed under priority **Low/Very Low** may remain in situ unless there is a high vulnerability to damage and/or disturbance as a result of routine occupational activity or maintenance/refurbishment.
- 9.1.8 That all asbestos containing materials that are to remain in place are clearly labelled with statutory warning labels. Labelling of ACMs that are in good condition and may remain in-situ is purely a recommendation. We appreciate in certain circumstances asbestos can be an emotive subject and labelling of asbestos may draw unwanted attention to the said material. Other warning systems can be applied to the ACMs for example a colour coding and/or permit to work scheme should be operated ensuring contractors, building occupants and maintenance operatives who need to know about asbestos are effectively alerted to its presence before undertaking any works in the area. Environtec Ltd can provide full details of a comprehensive permit to work scheme upon request.
- 9.1.9 Consideration should be given to future proposed refurbishment work and the asbestos removal abatement works programmed in to take advantage of that opportunity. If during refurbishment of a building it becomes necessary for asbestos materials to be worked upon or disturbed in any way there is a requirement under the **CAR 2012** to carry out a risk assessment.
- 9.1.10 That all removal, encapsulation and abatement works are undertaken and completed in compliance with a detailed specification and method statement for asbestos works.
- 9.1.11 That where asbestos materials are to remain insitu then regular, at least annual periodic audit inspections are carried out to monitor and maintain the condition of the asbestos materials such that the risks to health are reduced to the minimum possible so far as is reasonably practicable.
- 9.1.12 That those employed in management positions directly or indirectly having control of the building (dutyholder) and/or any works within these premises are made fully aware of this report and all asbestos materials identified. Those management have a responsibility to provide awareness training for all personnel, site and office based.
- 9.1.13 Those who have repair and maintenance responsibilities for the premises because of a contract or tenancy or those in control of the premises if no such contract or tenancy exists are the "duty holder". The dutyholder shall adopt all liabilities for management of ACMs.
- 9.1.14 That all contractors and those who visit site to undertake any works be notified and made aware of this report and that asbestos materials are present prior to the undertaking of such works to

enable suitable precautionary actions to maintain and reduce the risk to health.

- 9.1.15 That asbestos airborne fibre monitoring be completed to all areas where asbestos materials have been listed under priority **High or Medium** which are programmed for removal at a later date, to identify if airborne fibres are being generated under prevailing conditions. It is considered that this monitoring exercise will act as a reassurance confirmation as it is not expected that airborne fibres will be generated.

This monitoring should be maintained periodically until the said asbestos materials are made safe by removal or abatement works.

- 9.1.16 That all asbestos removal/abatement works are undertaken by a licensed asbestos removal contractor under the direct supervision of Environtec Ltd appointed by the client and that all analytical attendance and monitoring be completed by Environtec Ltd in accordance with our UKAS accreditation.
- 9.1.17 That competitive quotations/tendering procedures are employed to achieve the most economically favourable costings and programme.

10.0 CLIENT OPTIONS

- 10.1 Environtec Limited, on the basis of the survey report can assist the duty holder in compiling a detailed management plan and asbestos policy on behalf of the client which shall incorporate involve asbestos remedial works. If necessary, together with future updates to the register, asbestos awareness training together with our comprehensive popular permit to work scheme.
- 10.2 Environtec Ltd can also undertake annual inspections/re-surveys of premises on behalf of clients to assess in-situ asbestos containing materials and inspect areas originally omitted from the survey with the purpose of updating the asbestos register especially when remedial works or maintenance works take place. The register shall be issued with updates on a regular basis one copy to the client and one for the premises.
- 10.3 Where remedial works are identified, Environtec Ltd can prepare a detailed specification or method statement for the safe removal/containment and any decontamination of all asbestos identified. The specification will encompass all current legislation, extent of works and any site restrictions.
- 10.4 The works can be programmed to progress in phases in order to keep staff disturbance to a minimum. All works to be managed and monitored by Environtec Limited who will provide all necessary certification upon successful completion of the works.
- 10.5 Environtec Limited have been involved as Project Managers on asbestos projects acting as principles for clients for some years, and as such, have compiled a list of reputable Licensed Asbestos Contractors. The contractors are familiar with our Specification and are usually selected for their particular experience or location to the particular site.
- 10.6 Returned tenders will be vetted by Environtec Limited to ensure that contractors have demonstrated a thorough understanding of the proposed works and provided all necessary

supporting information. From the details returned, a recommendation will be made of the most suitable tender received. The tenderers and recommendations will be submitted to the client in the form of a tender summary report.

- 10.7 Budget prices based on our knowledge and experience in the industry can be prepared if requested.
- 10.8 The client should consider undertaking asbestos surveys of other properties under their control and management to formulate and generate an asbestos risk register for their portfolio of buildings so that the asbestos can be effectively controlled and managed. This should be undertaken prior to future projects enabling the client to account for any additional costs/timescale additions necessary on such projects as well as locating previously unidentified asbestos material. Current legislation has placed a statutory obligation on the dutyholder to manage ACMs in non-domestic premises. The asbestos register will form part of the management plan. It is a requirement that all properties controlled by the dutyholder have a management plan that incorporates an asbestos register.
- 10.9 Environtec Ltd can provide a computer web-based database system so that asbestos risk registers for various buildings can be properly managed and updated accordingly incorporating current legislation.

11.0 REGULATIONS ON ASBESTOS IN BUILDINGS

11.1 General

- 11.1.1 Prior to any work involving the disturbance or removal of asbestos containing materials, points that must be noted:

In accordance with the *Approved Code of Practice, (ACoP), entitled 'Work materials containing asbestos - L143*, all work with asbestos falls within the scope of the Code of Practice and guidance therein. In general terms, if the code applies, various provisions and regulations have to be complied with. Although failure to observe any provision of this code is not in itself an offence, that failure may be taken by a court in criminal proceedings as proof that a person has contravened a regulation to which the provision relates.

- 11.1.2 An additional *ACoP entitled The Management of Asbestos in Non-Domestic Premises (second edition November 2012) - L127* is aimed at those who have repair and maintenance responsibilities for non-domestic premises.

11.1.3 Definitions

- a) Control Limits: The single control limit for all asbestos types is 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

For further reference, please refer to the following Guidance Notes:-

- 1) *HSG248 - Asbestos: The analyst's guide for sampling, analysis & clearance procedures*, published by the Health and Safety Executive.

- 11.1.4 Every effort has been made to identify all asbestos materials so far, as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard 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:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes i.e. paint, over boarding, disguising etc. where this is the case then its detection will be impaired.
- 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.
- 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.
- Where an area has been previously 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 at Work Regulations (1987) 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.
- 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 another i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- 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 act (1974) for both themselves and others.
- 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 densely contaminated at certain locations (textured coating for example). Where this is the case the sample taken may not be representative of the whole product throughout.

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

- Environtec Limited cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report. Environtec Limited 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.

As a general guide:

- a) Asbestos materials which are sound, undamaged and not releasing dusts, should not be disturbed unless for refurbishment works and then, all necessary precautions must be taken and in accordance with the ACoP document, entitled '**Work with materials containing asbestos**' - **L143**.

- b) Those activities that are likely to produce a release of asbestos dust should be avoided as far as possible.

- c) The concentration of airborne asbestos in occupied areas should be reduced to the lowest, reasonably practicable level.

11.2 Specific

11.2.1 **Section 2(d) of the Health and Safety at Work Act 1974 (Chapter 37)**, places a general duty on employers to:

'So far as is reasonably practicable as regards any place of work under the employers control, the maintenance of it in a condition that is safe and without risk to health, and adequate as regards facilities and arrangement for their welfare at work'.

Section 3 of the Act places general duties on employers and the self employed persons other than their employees:

'It shall be the duty of every employer to conduct his undertaking in such a way to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected, thereby are not exposed to such risks to their health or safety'.

Section 4 places general duties on persons concerned with premises to persons other than their employees in non-domestic premises:

'... to take such measures as it is reasonably practicable, that the premises, and any plant or substance in the premises or, as the case may be, provided for use there, is or are safe and without risk to health'.

11.2.2 The **Control of Asbestos Regulations 2012 (CAR)** requires employers to prevent the exposure of employees to asbestos. If this is not reasonably practicable the law says their exposure should be controlled to the lowest possible level. Before any work with asbestos is carried out, the

Regulations require employers to make an assessment of the likely exposure of employees to asbestos dust. The assessment should include a description of the precautions that are to be taken to control dust release and to protect workers and others who may be affected by that work. If you are employing a contractor to work in your building make sure that either the work will not lead to asbestos exposures or that they have carried out this assessment and identified work practices to reduce exposures.

11.2.3 The ***Construction (Design and Management) Regulations 2007*** require the client to provide the CDM co-ordinator with information about the project that is relevant to health and safety. This information might, for instance, include previous surveys of the building for asbestos. Not all projects come within the scope of these Regulations. These Regulations place duties on clients, clients' agents (where appointed), designers and contractors to ensure that the health and safety aspects of the work are taken into account, and then co-ordinated and managed effectively throughout all the stages of a construction project. This includes all stages in the life cycle of a project, from conception, design and planning through to the execution of works on site and subsequent construction, maintenance and repair.

11.2.4 These Regulations apply to the planning and execution of much construction work that involves asbestos cement. Where CDM applies, the following conditions apply:

- clients should provide information about the location, type and condition of asbestos cement;
- designers should take account of this information by altering their designs to remove or reduce the need to work with asbestos cement;
- CDM co-ordinators should ensure information about asbestos, relevant to the work in hand, is available to designers and the principal contractor;
- the principal contractor should ensure that individual contractors are aware of the relevant information, and workers should be briefed;
- anyone arranging for someone to undertake construction work should be reasonably satisfied that their appointees are competent to undertake the work safely and without risk to health;
- where work with asbestos cement is part of the construction work, anyone arranging for someone to do work should be reasonably satisfied that they are competent in work of that type;
- at the end of a project, a health and safety file should be prepared which includes relevant information about asbestos.

11.2.5 Assessment of work which exposes employees to asbestos (as detailed in regulation 6 of the ***Control of Asbestos Regulations 2012***):

The ***Control of Asbestos Regulations 2012*** place strict duties on those who have repair and maintenance responsibilities for premises, because of a contract or tenancy, to manage the risk from asbestos in those premises. Where there is no contract or tenancy the person in control will be the duty holder. There is also a duty of co-operation on other parties. The duty is supported by an ***Approved Code of Practice -The Management of Asbestos in Non-Domestic Premises -***

L124.

Who has a duty to Manage asbestos?

A wide range of people potentially have obligations under this regulation, including employers and the self-employed, if they have responsibilities for maintaining or repairing non-domestic premises, and the owner of those premises, whether they are occupied or vacant. In all these cases, regulation 4 of CAR may apply, but the extent of the practical duties will be determined by contractual and other existing legal obligations towards the property.

Specific legal duties under regulation 4 of CAR 2012

The broad requirements on employers and others are to:

- Take reasonable steps to find materials likely to contain asbestos;
- Presume materials contain asbestos, unless there is strong evidence to suppose they do not;
- Assess the risk of the likelihood of anyone being exposed to asbestos from these materials;
- Make a written record of the location and the condition of the ACMs and presumed ACMs and keep it up to date;
- Repair or remove any material the contains or is presumed to contain asbestos, is necessary, because of the likelihood of disturbance, and its location or condition;
- Prepare a plan to manage that risk and put it into effect to ensure that;
 - Information on the location and condition of ACMs is given to people who may disturb them;
 - any material known or presumed to contain asbestos is kept in a good state of repair;
- Monitor the condition of ACMs and presumed ACMs; and
- Review and monitor the action plan and the arrangements made to put it in place;

11.2.6 Information, Instruction and Training (as detailed in Regulation 10 of CAR 2012):

Every employer shall ensure that adequate information, instruction and training is given to his employees who are liable to be exposed to asbestos so that they are aware of the risks and the precautions that should be observed.

11.2.7 Use of *Control Measures* (as detailed in Regulation 12 of CAR 2012):

Every employer who provides personal protective equipment shall ensure that it is properly used. Every employer shall make full and proper use of any personal protective equipment and if he discovers any defect he shall report it to his employer.

11.2.8 Maintenance of *Control Measures (as detailed in Regulation 13 of CAR 2012)*:

Every employer who provides any personal protective equipment shall ensure that it is maintained in a clean and efficient state, in efficient working order and in good repair.

11.2.9 *Provision and Cleaning of Protective Clothing (as detailed in Regulation 14 of CAR 2012)*:

Every employer shall provide adequate and suitable protective clothing for his employees who are exposed to asbestos. The employer shall ensure that any protective clothing provided, is either disposed of as asbestos waste or adequately cleaned.

11.3 **Removal**

- 11.3.1 When it is not possible to seal an asbestos material effectively and it is likely to release dust, it may be decided to remove it completely. If it is necessary to disturb asbestos materials frequently, for example, for maintenance purposes, the cost of the precautions required may make it more cost effective to replace them. However, it should be recognised that removal often leads to higher short-term dust levels than sealing the material in place, and appropriate precautions must be taken.

Removal may involve complete removal of board or lagging for example, or simply removal of a small vulnerable area from an installation. Temporary repair, sealing or enclosure may be required to render asbestos material safe pending removal. When asbestos fire protection material is removed, it must be immediately replaced with materials having at least an equivalent fire rating.

Removal of sprayed asbestos, lagging and asbestos insulating board should generally be carried out by a Contractor licensed by the Health and Safety Executive (HSE).

Work with materials in which the asbestos fibres are firmly linked in a matrix do not require to be conducted by a licensed contractor as long as the conditions set out in Regulation 3(2) are fulfilled (Refer to paragraphs 34-39 of ACoP L127), although it is recommended that all such works are undertaken by a licensed contractor.

- 11.3.2 The *Control of Asbestos Regulations 2012, entitled 'Asbestos'* sets down a single control limit for the level of airborne asbestos fibres for all asbestos types, this being 0.1 fibres per cubic centimeter averaged over a continuous 4 hour period.

It should be noted, however, that this level refers to those who would expect to come into contact with asbestos as part of their employment. There are currently no levels set for the general public. However, in terms of non-occupation exposure, airborne fibre levels should be controlled to as low as reasonably practicable. For most practicable purposes, this effectively means less than 0.01 fibres/ml.

Should one wish to disturb this material, the above level must not be exceeded.

- 11.3.3 Any intended de-contamination/removal work should be undertaken in accordance with a

detailed specification.

The specification should include for:-

a)The continued operational requirements.

b)The continuation of the current refurbishment works and the following legislation:-

- 1) *The Control of Asbestos Regulations (CAR) 2012. Approved Code of Practice's - Work with materials containing asbestos - L143 and The Management in Non-Domestic Premises - L127.*
- 2) *Health and Safety at Work etc Act 1974.*
- 3) *HSG248: Asbestos: The analysts' guide for the sampling, analysis and clearance procedures.*
- 4) *Construction (Design and Management) Regulations 2007.*
- 5) *Control of Substances Hazardous to Health Regulations 2002.*
- 6) *HSG247 Asbestos: The Licensed Contractors' Guide*
- 7) *Respiratory Protective Equipment at Work; A Practical Guide HSG53.*
- 8) *A comprehensive guide to Managing Asbestos in Buildings HSG227.*
- 9) *HSG 264: Asbestos: The Survey Guide*
- 10) *Asbestos Essentials Task Manual HSG210.*
- 11) *Introduction to Asbestos Essentials HSG213.*
- 12) *The Hazardous Waste Regulations 2005*

c)Further reading:

- *Working with asbestos cement HSG 189/2.*
- *Asbestos MS13.*

OUR REF: J186713

DATE: JULY 2014



INTERNATIONAL ENVIRONMENTAL CONSULTANTS

www.envirotec.com

**BULK SAMPLING REPORT
OF SAMPLES TAKEN FROM THE RISER BOXING IN THE HAIRDRESSERS ROOM AT
TY DEWI
ST DAVIDS CLOSE
PENTRE
CARDIFF
CF41 7BG**

**FOR AND ON BEHALF OF
WALES & WEST HOUSING ASSOCIATION
3 ALEXANDRA GATE
FFORDD PENGAM
TREMORFA
CARDIFF
CF24 2UD**



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Registered in England No. 2981693 • VAT No. 630 8944 29

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1.0	ASBESTOS FIBRE IDENTIFICATION REPORT
2.0	PLANS

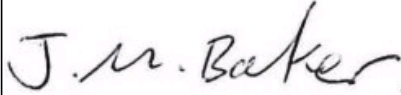
CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Wales & West Housing Association	Surveyor:	David Milligan
Client Address:	3 Alexandra Gate, Ffordd Pengam, Tremorfa, Cardiff, CF24 2UD	Analysis Report No:	J186713
Attention of:	Jen Barton	Report Date:	18 July 2014
Site Address:	Ty Dewi, St Davids Close, Pentre, Cardiff, CF41 7BG	Site Reference No:	0291-500
Date Samples Taken:	3rd July 2014	No. of Samples:	1
Date Samples Received:	3rd July 2014	Obtained:	1
Date of Analysis:	11th July 2014		
Analysed By:	Jonathan Baker		

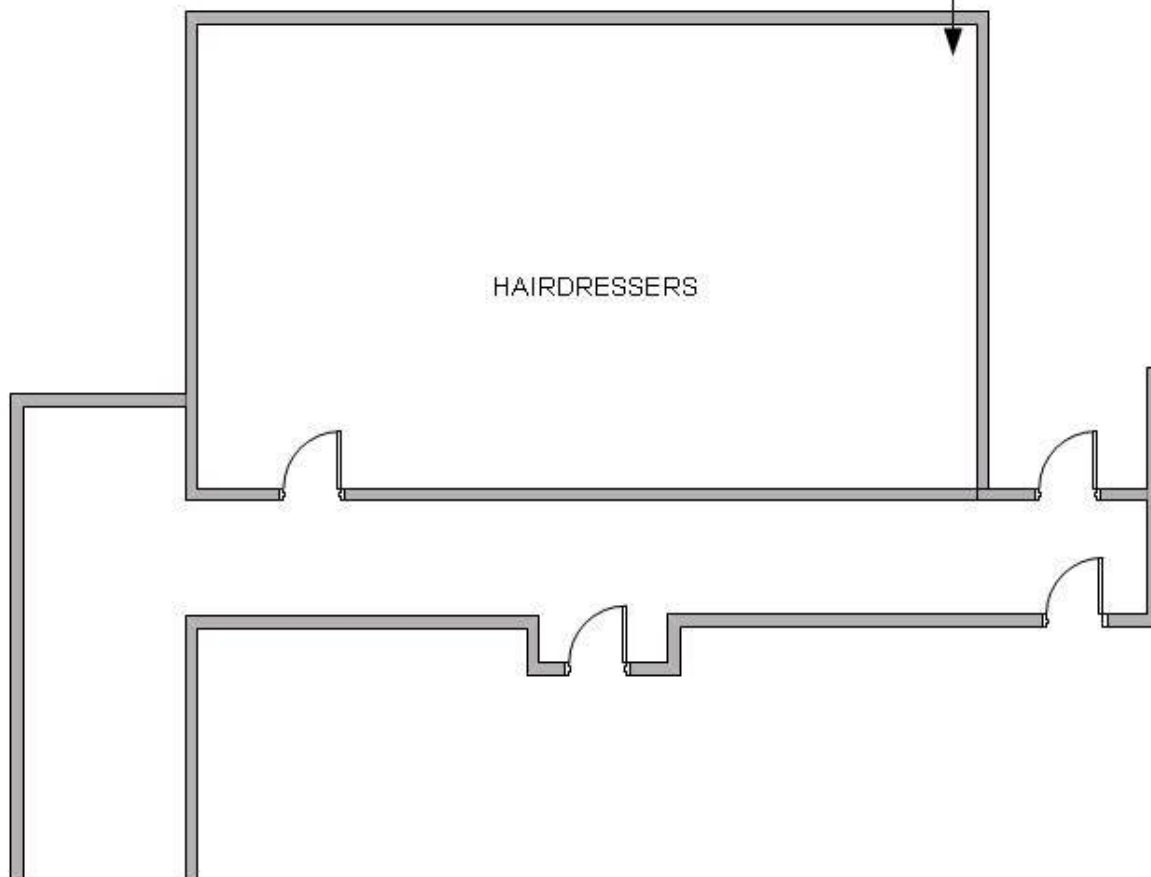
Method Statement
Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Environtec 'In House' documented technical method of transmitted/polarised light microscopy and centre stop dispersion staining, in accordance with our UKAS Accreditation, based on the HSG 248 Asbestos: The Analyst Guide. Calibration of equipment and general quality control procedures are in accordance with our in house quality control document. Sampling methods are in accordance with documented in-house procedures and UKAS Accreditation.
Disclaimer
If samples have been DELIVERED the site address and actual sample location or sample type is given by the client at the time of delivery. Environtec are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Environtec cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our UKAS Accreditation for sampling. Environtec takes responsibility of information reported, only when a staff member of Environtec takes the sample(s).

Sample Number	Client Ref	Sample Location / Sample Type	Fibre Type Detected
DU004897		1st Floor / Hairdressers / Vertical boxing - Superlux	NADIS

Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience. On rare occasions where there is an element of doubt for samples which are borderline or too insignificant to determine whether the material is asbestos insulation board or asbestos cement, you will be notified and offered a water absorption test. A water absorption test is a longer process undertaken to a supplement asbestos analysis and has a cost implication. We will advise you accordingly should this situation arise. Environtec Ltd cannot be held responsible for inaccuracies based on the material type opinion if a water absorption test has been offered and refused. Material type opinion falls outside the scope of our UKAS accreditation.	K	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
		CROCIDOLITE	= Typically Known as Blue Asbestos (Amphibole Group)
	E	AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
		CHRYSTOTILE	= Typically Known as White Asbestos (Serpentine Group)
	Y	ANTHOPHYLLITE	= Asbestos (Amphibole Group)
		ACTINOLITE	= Asbestos (Amphibole Group)
		TREMOLITE	= Asbestos (Amphibole Group)
All samples will be retained in the laboratory for a minimum of 6 Months.			

Typed By:	Jonathan Baker	Authorised Signatory:	
Position:	Laboratory Technician	Print Name:	Jonathan Baker
UKAS/New AFI/Statements/EA			

DU4897



Environtec House
The Street
Hatfield Peverel
Chelmsford ESSEX
CM3 2EJ
Tel:01245 381900
Fax:01245 381666

S = Sample Location

= Identified, strongly presumed and presumed asbestos

= No access - presumed asbestos within these rooms

= Outside Scope of Survey

Client: Wales & West Housing Association
3 Alexandra Gate
Ffordd Pengam
Tremorfa
Cardiff
CF24 2UD

Project: J186713

Site: Ty Dewi
St Davids Close
Pentre
Cardiff
CF41 7BG

Building:

Floor: 1st Floor

N.T.S (Not To Scale)

"This Plan Must Be Read In Conjunction With The Register"

Plan Generated by Tyrone Deabreu