



Refurbishment Survey

Survey Reference Number: X-01069

Survey Date: 13 December 2017

Client Specified Areas

17 Garrison Lane Hugh Town St Marys Isles of Scilly TR21 0JD



Address Allium Environmental Ltd, Baldhu House, Wheal Jane Earth Science Park, Baldhu, Truro, TR3 6EH Company Reg No. 09391161 Tel: Email: enquiries@allium.uk.net





Report Authorised by

Name: Samantha Whitham

Signed:

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Section 1.0: Executive Summary

An Asbestos Refurbishment Survey was carried out in accordance with in-house asbestos surveying procedures and HSE guidance documentation *HSG 264: Asbestos: The Survey Guide* to client specified areas at 17 Garrison Lane.

The Survey was carried out by Allium Environmental Ltd on behalf of Currie & Brown on 13 December 2017.

The purpose of this survey was to locate as far as reasonably practicable the presence and extent of all suspected Asbestos Containing Materials (ACMs) in the building survey area which could be damaged or disturbed during planned refurbishment activities.

During the survey 3 samples were taken for analysis.

A Refurbishment Survey aims to locate all ACMs within the survey area. There is no requirement to assess the condition or 'Priority' information for management purposes. This is because it is presumed that all ACMs found will be removed as part of the planned refurbishment works. However, should any material remain in situ or if the related works are not undertaken then all ACMs identified should be re-assessed and managed in accordance with the recommended action set out in HSG 264 or CAR 2012. To manage the risk from ACMs, it is the Duty Holder's responsibility to keep and maintain an up-to-date record of the location, condition, maintenance and removal of all ACMs on the premises. If there is a risk of exposure due to the condition or location of the ACMs then they should be repaired, encapsulated and labelled, or removed. It is the responsibility of the Duty Holder to maintain ACMs in a good state of repair and regularly monitor the condition; the Duty Holder should inform anyone who is liable to disturb the ACMs about their location and condition.

ltem No.	Room No. & Name	Asbestos Containing Product Recommended Action		Risk
2	External	Cement Profiled Sheets - Roof	Remove if affected by proposed refurbishment works	Low
3	External Cement Downpipe – Rainwater Goods		Remove if affected by proposed refurbishment works	Very Low
1	External Cement Roof Tiles - Roof		Remove if affected by proposed refurbishment works	Very Low

Inaccessible areas encountered during the time of the survey, for which no information was obtained, along with areas where access was limited:

o None





Section 2.0: Introduction

Allium Environmental Ltd was instructed by Paul Chamings of Currie & Brown to undertake an Asbestos Refurbishment Survey to ascertain the presence of any Asbestos Containing Materials (ACMs) within: 17 Garrison Lane.

The site consists of:

• 1980's 2 storey block built mid-terrace house with a manmade tiled pitched roof.

The survey was carried out on 13 December 2017 by Matthew Roberts of Allium Environmental Ltd.

Section 2.1: Survey Scope

The scope of the survey as defined by Currie & Brown is to carry out a Refurbishment Survey to client specified areas of 17 Garrison Lane:

- Areas included in the survey:
 - Internal and External areas affected by the installation of solar panels including the roof, internals of the roof space and the cabling route back to the consumer unit within 17 Garrison Lane were included in the survey.
- Agreed areas of exclusion from the survey scope:
 - All other areas of 17 Garrison Lane were excluded from the survey.





Section 2.2: Limitations

During the course of the survey all reasonable efforts were made to identify the presence of Asbestos Containing Materials within the surveyed areas. However, Asbestos Containing Materials (ACMs) are sometimes concealed within the fabric of a building or sealed building voids, and so it is not always possible to regard the findings of a survey as being definitive. Therefore, it must always remain a possibility that further Asbestos Containing Materials may be found during any alterations, refurbishment or demolition works. Asbestos Containing Materials (ACMs) may be hidden within the fabric of a building and may not be visible until the building is dismantled; it is therefore recommended that a complete review of the Asbestos register is undertaken before commencement of any works. Where areas have been identified as inaccessible within the report, it indicates that the area specified was not accessible to the surveyor at the time of the inspection either because such areas were locked despite requests for access to be arranged, or to gain entry would require an unreasonable degree of dismantling to the structure of the building. The client is therefore advised to the possibility of there being Asbestos Containing Materials in such areas.

HSE guidance: HSG 264: Asbestos: the survey guide states it is now recognised that even with 'complete' access demolition surveys, all ACMs may not be identified and this only becomes apparent during demolition itself. Therefore in buildings that are occupied, due to be re-occupied or due to extenuating circumstances, following the completion of the survey it may be required to undertake additional inspections or sampling prior to/during proposed refurbishment works to account for all hidden Asbestos Containing Materials (ACMs). Where this is likely a provision may need to be made to allow for a possible revisit, this may include inaccessible areas that will be listed in this report.

- Inaccessible areas encountered during the survey:
 - o None
- Agreed Variations or Deviations from the standard HSG 264 method:
 - \circ \quad Intrusions were kept to a minimum due to the continued occupation of the tenant





Section 2.3: Details

Site Address:

 \circ 17 Garrison Lane, Hugh Town, St Marys, Isles of Scilly, TR21 OJD

Client Name & Address:

o Currie & Brown, Currie & Brown, 69 Old Broad Street, London, EC2M 1QS

Client Contact:

o David Kingston

Survey Start Date:

o 13 December 2017

Survey Completion Date:

o 13 December 2017

Survey Conducted by:

o Matthew Roberts

Assisted by:

o N/A

Report Produced:

o 21 December 2017

Section 2.4: Survey Type

The nature of the survey is a Refurbishment Asbestos Survey as detailed in HSE publication: *HSG 264 Asbestos: The Survey Guide*. HSE guidance publication *HSG 264: Asbestos: The Survey Guide* describes a Refurbishment survey as a fully intrusive survey. A full sampling programme is undertaken to identify possible ACMs and estimates of volume and surface area made. A Refurbishment survey is required for all work which disturbs the fabric of the building in areas where the management survey has not been intrusive. The survey is designed to be used as a guide for tendering the removal of ACMs from the building(s) prior to refurbishment.

This report presents the findings of the survey and analysis reports of any bulk samples taken.





Section 3.0: Survey Method

Allium Environmental Ltd conducts Refurbishment surveys in accordance with our in-house Asbestos Surveying procedures and HSE guidance publication *HSG 264: Asbestos: The Survey Guide.* While the survey is fully intrusive, disruptive and non-destructive, it may involve penetrating all parts of the building structure, using aggressive inspection techniques to lift carpets and tiles, break through walls, ceilings cladding and partitions, and open up floors.

A Refurbishment survey uses a combination of visual inspection and bulk sampling to confirm the presence of Asbestos. Any area(s) inaccessible at the time of the survey must be presumed to contain Asbestos, and any inaccessible area(s) must have access restricted, and should be inspected prior to access or the commencement of any works.

All samples taken during the survey were done so by Allium Environmental Ltd competent surveyors and sent to an independent UKAS Accredited Laboratory for analysis by polarised light microscopy (PLM), in accordance with the method prescribed in HSE guidance publication: *HSG 248 Asbestos: The Analysts' Guide for Sampling, analysis and clearance procedures*. Completed Fibre Identification Report for all samples taken can be found in Appendix 2. (Representative samples were also taken of any materials that may be mistaken for potential ACMs). Sampling location stickers, bearing the individual samples unique identification number, have been applied to all sample points where practicable, for future reference.

Products that are very unlikely to contain Asbestos were not sampled (e.g. wallpaper, plasterboard, chipboard, wood etc.).

An item record is completed for each suspect sample taken; for materials strongly presumed to contain Asbestos (i.e. materials visually similar to positively identified ACMs); for areas presumed to contain Asbestos (i.e. areas where no access could be gained at the time of the survey; and non-accessed items of (electrical) equipment and plant).

Each item record contains a colour photograph, individual material assessment scores (as prescribed under HSG 264), management recommendations and general observations / comments (where appropriate).

The item records are combined together to form a site-specific Asbestos Register.





Section 4.0: General Comments

This report relates to the situation on the day(s) of the inspection and cannot take into account subsequent changes in circumstances. Samples were taken of any materials historically known or presumed to contain Asbestos. This report contains findings based upon visual inspection and results of laboratory analysis

All figures and measurements quoted in the Asbestos Register detailing the extent of ACMs are estimates, based upon visual inspection on the day of the survey and should be used as a guide. It is the responsibility of contractors quoting for Asbestos Removal Works to take their own measurements to determine the exact extent of Asbestos to be removed. Unless otherwise stated pipework insulation and heating plant was not inspected in their entirety. Representative samples were taken at random intervals where suspect material was observed. The scope of the works did not permit complete exposure and assessment of all pipework and heating plant.

No responsibility can be taken for any misinterpretation of this report by third parties.

A limited inspection of pipework concealed by overlying non-Asbestos insulation has been conducted. Inspection of pipework has been restricted primarily to insulation visible. The presence of Asbestos debris to pipework, which is not readily visible or would require the full removal and replacement of overlying insulation, has therefore not been investigated.

No responsibility will be accepted for the presence of Asbestos in voids (under floor, or behind wall or ceiling) or pipework ducts other than those opened up during the survey.

The survey is limited to those areas accessed at the time of the survey.

We have not reported on concealed spaces, which may exist within the fabric of the building, and where the extent and presence of these is not evident, due to inaccessibility or insufficient knowledge of the structure at the time of the survey.

Due to the nature and variety of Asbestos used in building construction and the complex nature of some buildings, especially where modified over the years, it is possible that some ACMs may not have been identified in the survey. Where refurbishment is to follow a refurbishment Survey, it would be prudent in any contract to allow a contingency sum to provide for such possibility.





Section 4.0: General Comments (Continued)

Certain 'Artex' type textured coatings and decorative plasters may contain very small quantities of Asbestos. In situ, these coatings are often composed of different batches of product or may have been repaired / patched at different times. It is, therefore possible that any 'Artex' samples taken may not be representative of the entire coating. Recent research suggests that in some cases, the fibres may have diameters below 0.1 um. These may not be visible by the optical microscopy method described in HSE guidance publication *HSG 248: Asbestos: The Analysts' Guide for Sampling, Analysis and Clearance Procedures.*

At the time of the survey no access was gained to materials and/or void areas located above, behind or attached to suspect Asbestos Containing Materials sampled or presumed throughout the site. To do so would have required surveyors to break through suspect ACMs, such as textured coating and insulating board, potentially contaminating themselves and the work area with Asbestos. Therefore, it is recommended that site operatives are made aware of this survey limitation and instructed to exercise caution when breaking through materials and/or areas located above, behind or attached to suspect ACMs that have been found to contain Asbestos following laboratory analysis.





Section 5.0: Terminology

Asbestos – A term used for the fibrous form of several naturally occurring silicate minerals, used primarily because of its low thermal conductivity, high tensile strength, resistance to chemical attack, flexibility and incombustibility. *The Control of Asbestos Regulations 2012* defines and regulates asbestos as the fibrous forms of the following minerals or any mixture containing them. "Asbestos" means the following fibrous silicates;

Chrysotile (White Asbestos) Crocidolite (Blue Asbestos) Fibrous Grunerite - commonly known as Amosite (Brown Asbestos) Fibrous Tremolite Fibrous Anthophyllite Fibrous Actinolite

ACM(s) - Asbestos Containing Material(s). Any material, substance or product that contains or has been made with Asbestos.

SPNTCA - Strongly Presumed Not To Contain Asbestos

- **SPTCA -** Strongly Presumed To Contain Asbestos.
- PTCA Presumed To Contain Asbestos.
- NAD No Asbestos Detected.
- AD Asbestos Detected.
- **SP** Strongly Presumed





Section 5.1: Material Assessment Score Algorithm & Risk rating

Sample Variable	Score	Example of Scores
	1	Asbestos-Reinforce Composite (Plastic, Resin, Mastic, Roofing Felts, Vinyl Floor Tiles, Semi-Rigid Paints or Decorative Finishes, Asbestos Cement)
Product Type (including debris from product)	2	Asbestos Insulating Board (AIB), Millboards, Other Low-Density Insulating Boards, Asbestos Textile, Gasket, Ropes and Woven Textile, Asbestos Paper and Felt
	3	Thermal Insulation (e.g. Pipe and Boiler Lagging), Sprayed Asbestos, Loose Asbestos, Asbestos Mattresses and Packing.
	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks, broken edges on board, tiles etc.
Extent of damage/deterioration	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose fibres.
	3	High damage or delamination of materials, Sprays and Thermal Insulation. Visible Asbestos debris
	0	Composite materials containing Asbestos: Reinforced Plastic, Resins, Vinyl Tiles.
Surface treatment	1	Enclosed Sprays and Lagging, AIB (with exposed face painted or encapsulated), Asbestos Cement Sheets etc.
	2	Unsealed AIB, or encapsulated Lagging and Sprays.
	3	Unsealed Lagging and Sprays.
	1	Chrysotile
Asbestos type	2	Amphibole (Amosite) Asbestos excluding Crocidolite
	3	Crocidolite

Potential to release Asbestos Fibres

- Materials with an assessment score of 10 or more are deemed to have a high risk and potential to release fibres, if subject to minor disturbance, e.g. walking in the vicinity of the material.
- Materials with an assessment score between; 7-9 are deemed to have a medium risk and potential to release fibres.
- Materials with an assessment score between; 5-6 are deemed to have a low risk and potential to release fibres.
- Materials with an assessment score of 4 or less are deemed to have a very low risk and potential to release fibres.





Section 5.2: Recommended Actions Explained

Monitor Condition - This material can stay in situ and be managed accordingly. Monitor condition regularly and record condition.

Label - Label the ACM with approved warning signs

Encapsulate - Use suitable encapsulating material to seal surface. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012.*

Repair - This material requires repair. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012.*

Restrict Access - Restrict access to area and communicate with employees, contractors and others to keep area free from personnel. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012.*

Protect/Enclose - Use suitable material to protect / enclose ACM to minimise risk of impact damage.

Remove if Affected - If this material is likely to be disturbed by/during the proposed refurbishment works then material will need to be removed prior to work commencing. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012.*

Remove - This material requires removal. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012.*

No Access/Exercise Caution - Surveyors were unable to obtain access to material, item, room, area or building to conduct inspection for potential ACMs. Therefore, the area is assumed to contain Asbestos and the Duty Holder should exercise caution.

Please Note:

- Allium Environmental Ltd cannot be held responsible for the way in which the client may interpret or act upon the results of this report.
- Please refer to HSE Publication: *The Control of Asbestos Regulation 2012* prior to undertaking any remedial works on ACMs.
- In some instances more than one recommendation may be used.





Section 6.0: Survey Findings & Room Construction

Please note

• Where areas were inspected and no ACMs were identified or presumed an entry has been placed into the report findings stating "No Asbestos Detected" within the respective area.





Room/Area Name & No: 001 - Porch Floor: Ground Floor

Room Construction / Description						
Ceiling	Modern Fibreboard	N/A				
Firebreak	N/A	Voids	N/A			
Walls	Block	Pipework	N/A			
Doors	UPVC & Timber	Plant/Equipment	Modern Electrical Switchgear			
Windows/Sills	N/A	Staircases	N/A			
Floor	Carpet, Concrete	Other	N/A			
Under Floor Ducts	N/A	Comments				

No suspect ACMs were identified within 001 - Porch





Room/Area Name & No: 101 - Bedroom Floor: First Floor

Room Construction / Description				
Ceiling	Modern Fibreboard	Riser/Boxing	N/A	
Firebreak	N/A	Voids	N/A	
Walls	Block, Modern Fibreboard	Pipework	N/A	
Doors	Timber	Plant/Equipment	N/A	
Windows/Sills	UPVC & Glass	Staircases	N/A	
Floor	Carpet, Timber	Other	N/A	
Under Floor Ducts	N/A	Comments		

No suspect ACMs were identified within 101 - Bedroom





Room/Area Name & No: A01 - Roof Space Floor: First Floor

Room Construction / Description						
Ceiling	Roofing Felt	Riser/Boxing	N/A			
Firebreak	N/A	Voids	N/A			
Walls	N/A	Pipework	Fibreglass Pipe Insulation, Metal & Plastic			
Doors	Timber	Plant/Equipment	Plastic Tank			
Windows/Sills	N/A	Staircases	N/A			
Floor	Fibreglass, Modern Fibreboard	Other	N/A			
Under Floor Ducts	N/A	Comments				

Positive Survey Findings & No Access Areas - None Identified Negative Survey Findings

Reference	4	Product Type (A)	N/A		
Sample No	01069/MR/003	Condition (B)	N/A	A A A A A A A A A A A A A A A A A A A	
Description	Roofing Felt - Ceiling	Surface Treatment (C)	N/A		
Accessibility	Low	Asbestos Type (D)	N/A		
Risk Rating	N/A	Material Score (A+B+C+D)	N/A		
Extent	60m²	Identification	NAD		
Recommendation	No Action				
Comments	Roofing Felt to the ceiling.				





Room/Area Name & No: Main Building Floor: External

Room Construction / Description					
Walls	Block	Ducts/Pipe Runs	N/A		
Cladding	N/A	DPM	N/A		
Roof	Cement Profiled Sheets, Cement Roof Tiles	Loose Sheeting	N/A		
Rainwater Goods	Plastic, Cement Downpipe	Soffit Fascia's	UPVC		
Soil Stacks	N/A	Staircases	N/A		
Flues/Cowls	N/A	Other	N/A		
		Comments			

Positive Survey Findings & No Access Areas

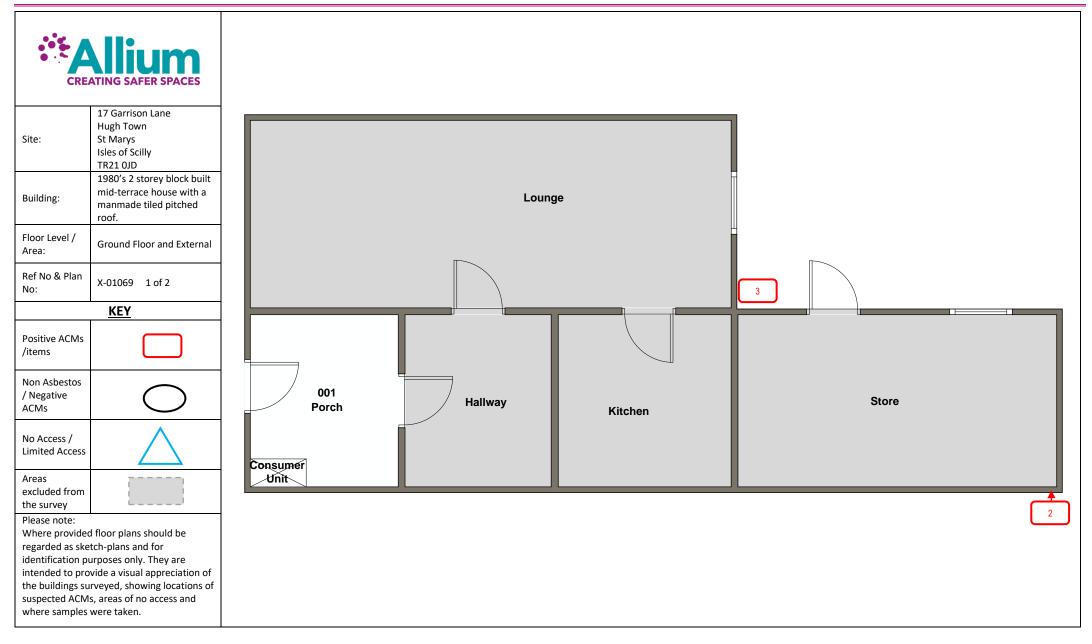
Reference	1	Product Type (A)	1		
Sample No	01069/MR/001	Condition (B)	1	and the second second	
Description	Cement Roof Tiles - Roof	Surface Treatment (C)	1	and the second	
Accessibility	Low	Asbestos Type (D)	1		
Risk Rating	Very Low	Material Score (A+B+C+D)	4		
Extent	70m²	Identification	AD		
Recommendation	Remove if affected by proposed refurbishment works – See section 5.2				
Comments	Cement roof tiles.				

Reference	2	Product Type (A)	1		
Sample No	01069/MR/002	Condition (B)	1		
Description	Cement Profiled Sheets - Roof	Surface Treatment (C)	1		
Accessibility	Low	Asbestos Type (D)	3		
Risk Rating	Low	Material Score (A+B+C+D)	6		
Extent	12m²	Identification	AD	·	
Recommendation	Remove if affected by proposed refurbishment works – See section 5.2				
Comments	Cement profiled sheets to the roof.				

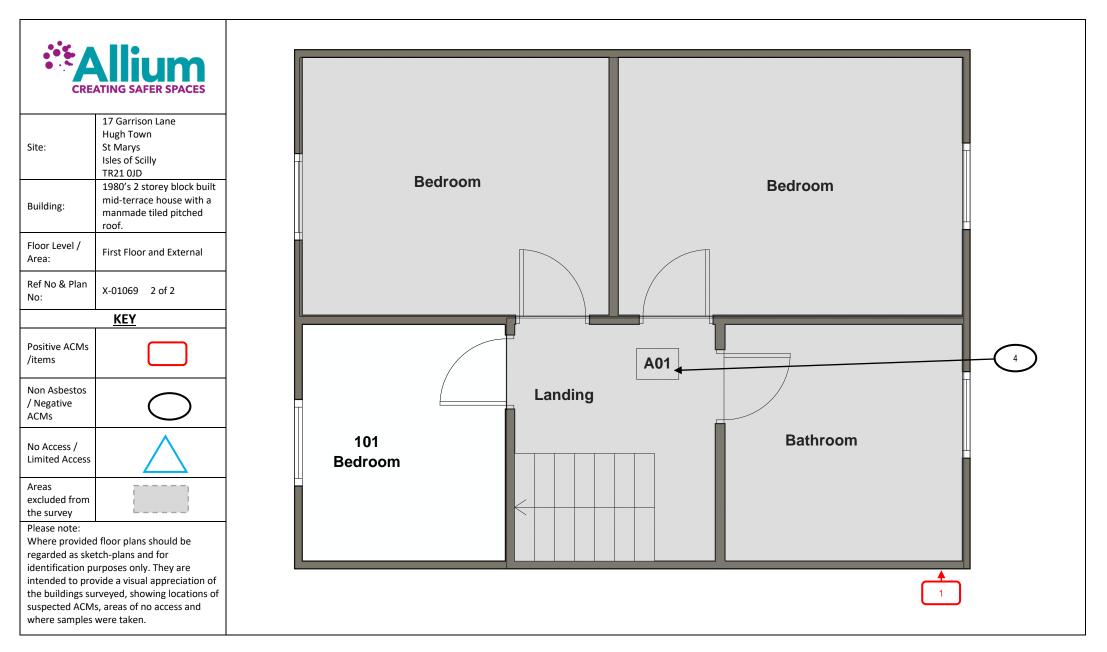
Reference	3	Product Type (A)	1	
Sample No	No Sample Taken	Condition (B)	1	
Description	Cement Downpipe – Rainwater Goods	Surface Treatment (C)	1	
Accessibility	Low	Asbestos Type (D)	1	
Risk Rating	Very Low	Material Score (A+B+C+D)	4	
Extent	6lm	SPTCA		
Recommendation	Remove if affected by proposed refurbishment works – See section 5.2			
Comments	Visually inspection only cement down pipe due to damage limitations.			

Negative Survey Findings - Not Applicable









THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE MAIN BODY OF THE REPORT AND INDIVIDUAL ITEM RECORDS





Appendix 2: Certificate of Bulk Sample Analysis



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Allium Environmental Ltd Balhu House Wheal Jane Earth Science Park Baldhu Truro TR3 6EH

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LABORATORY REPORT

Report No.: 17/13521 Page 1 of 1 18 December 2017

SAMPLES

SAMPLES			
Location	17 Garrison Lane, Isles of Scilly	N° of samples	3
Collected by	P Perkins	Date	15/12/2017
Sampled by	M Roberts	Date	14/12/2017
Tested by	M Pereir	Date	18/12/2017
Your Order N°	11149		

Analysis of the samples was carried out in accordance with standard laboratory procedure FDE/T02 and HSG 248

RESULTS

Lab Ref.	Client Identification	Description	Asbestos content
53820	X-01069/MR/001- external	roof tile	chrysotile
53821	X-01069/MR/002- external	profiled sheet	chrysotile / crocidolite
53822	X-01069/MR/003- roof space A01	felt	nad

Notes:

1. 2.

Appendix 2 of HSE document HSG264 is a table showing typical asbestos percentages in standard products. Common asbestos minerals are also known by trivial names;

3

Crocidolite = blue asbestos Amosite = brown asbestos

Chrysotile = white asbestos

4. Opinions and interpretations expressed herein including the sample description are outside the scope of our UKAS accreditation.

The report is presented in good faith based on the samples and information provided. No responsibility can be accepted for the acts or omissions of others.

For Falmouth Docks & Engineering Company

Mike Pereir Environmental Manager

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