

ALL ASBESTOS & INSULATION LTD

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06/12/2014

Victoria University
C/o Wareham Cameron and co
PO Box 3531
WELLINGTON

Attn: Andrew Croskery

Asbestos survey carried out at 314 The Terrace Wellington



As requested we have undertaken an Asbestos survey and sampling of suspect materials at the above facility. Our report and findings are as follows.

Introduction

A Type 2 Non-Destructive Asbestos Survey, based on the standard MDHS100 HSE UK2001, was conducted at the above premises on the 1ST December 2014.

A comprehensive inspection of the building was undertaken, and samples of any suspect materials were collected (if possible) and taken back to the laboratory for analysis. Where it was not possible, or practical to sample all suspect material observations were recorded and notes made.

Asbestos is the name given to a group of six naturally occurring fibrous minerals: Amosite, Chrysotile and Crocidolite which are the three main commercial varieties and most prevalent; and Tremolite, Actinolite, and Anthophyllite which are often found as contaminants in other mineral deposits. Chrysotile belongs to the serpentine family of minerals, while all of the others belong to the amphibole family.

All forms of asbestos are hazardous and all can cause illness; Asbestos is classified as an A1 carcinogen. Asbestos minerals consist of thin, separable fibres that have a parallel arrangement. Amphibole asbestos fibres are generally brittle and have a rod or needle-like shape, whereas Chrysotile asbestos fibres are flexible and curved. Chrysotile (White asbestos), is currently the predominant commercial form of Asbestos, while Amosite (Brown asbestos) and Crocidolite (Blue asbestos) have been used extensively in the past. Asbestos fibres do not have any detectable odour or taste. They do not dissolve in water or evaporate and are resistant to heat, fire, chemical and biological degradation. Because of these properties, asbestos has been mined for use in a wide range of manufactured products, mostly in building materials, friction products, and heat-resistant fabrics. Such materials were in use in New Zealand from the early 1900's till the late 1980's.

You are most likely to be exposed to asbestos by breathing in asbestos fibres that are suspended in air. These fibres can come from naturally occurring deposits of asbestos or from the wearing down or disturbance of manufactured products including insulation, automotive brakes and clutches, ceiling and floor tiles, dry wall, roof shingles, and cement sheet.

Asbestos containing materials have been known to be used in boilers/boiler rooms and associated pipe lagging rope and gaskets, exterior cladding and soffit materials; older internal plaster and textured coatings, roofing material and tanking, flooring material, electrical switchboards, passive fire protection to services and steel. All such accessible materials of this nature were inspected, sampled and tested if deemed appropriate or suspect.

Methodology

The survey method undertaken was a Type 2 Non-Destructive Survey which is based upon the *HSE UK MDHS100 Surveying, Sampling and Assessment of Asbestos Containing Materials, July 2001*, standard.

Identification and collection of samples was undertaken by All Asbestos and insulation Limited and testing of these samples was undertaken by Capital environmental services an IANZ accredited laboratory.

This survey standard uses a Materials Assessment Algorithm to aid in assessing the risk to health presented by the asbestos materials identified in the survey at the time of sampling/surveying.

The Materials Assessment Algorithm used is that which is described in the HSE UK HSG264 Asbestos: The Survey Guide 2010.

PLEASE NOTE that any disturbance or change in condition of the identified asbestos materials may increase the risk status.

Reference Documents

Health and Safety in Employment (Asbestos) Regulations 1998

Guidelines for the Management and Removal of Asbestos 2011..... (Please note an updated version is shortly to be released)

Material Assessment algorithm

Sample variable	Score	Example 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 etc.
	2	All millboard, other low density insulation boards, asbestos textiles gaskets, ropes, asbestos paper and felts.
	3	Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattress 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 fibers.
	3	High Damage or delaminating 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 laggings, AIB with exposed face painted or encapsulated lagging and sprays.
	2	Unsealed AIB, or encapsulated lagging and sprays
	3	Unsealed lagging and sprays
Asbestos Type	1	Chrysotile
	2	Amphiboles excluding Crocidolite
	3	Crocidolite
Total		
Score	Potential to release asbestos fibres	
10 or more	High	
7-9	Medium	
5-6	Low	
4 or less	very low	
NON-asbestos materials have no potential to release asbestos fibres		

Taken from "Asbestos: the survey guide" HSE UK

Descriptions of Materials found on site

Asbestos sheet compressed

Used on this site

Internal and External cladding, external Soffits, Internal Electrical panels,

Asbestos type and approximated content

Chrysotile, Amosite and Crocidolite

Commonly 10 to 20% Asbestos content but some softer boards such as Mill board are known to have a far higher Asbestos content.

Friability

Most hard compressed sheets are relatively stable if left alone.

Breaking will cause minor fibre release.

Sawing sanding and other abrasive action will cause elevated fibre release.

Asbestos roofing is known to release dust over time and you will find most roof cavities will have some level of contamination. The same applies to open truss building with various levels of contamination regularly found on trusses.

Softer compressed Asbestos board is usually more friable when subjected to breaking, sawing, sanding or other abrasive action.

Asbestos bitumen roofing materials.

The most common locations and uses

Flat roofing usually over a concrete, ply or sand base

Asbestos type and approximated content

Chrysotile and Amosite

Commonly contains up to 20% Asbestos content.

The asbestos is usually associated with the backing papers used before the tar is laid as opposed to the tar itself.

Friability

When in situ there is little if any fibre release however any repair or removal will cause elevated fibre release.

Note

Any work undertaken on Asbestos product likely to result in the release of Asbestos fibre should be undertaken under the direct supervision of a COC holder (Certificate of competence in Asbestos removal).

Sample 1 Internal lining to riser backing lounge unit 115
(CES REPORT No 132356 Attached) No Asbestos detected.



Board Not Asbestos (1)

Sample 2 Panel under windows to exterior balcony
(CES REPORT No 132357 Attached) Amosite Asbestos detected.



Asbestos sheet (2)

Hazard algorithm score 4(very low) while not disturbed

Sample 3 Vinyl to Kitchen floor unit 115.
(CES REPORT No 132358 Attached) No Asbestos detected.



Vinyl flooring not Asbestos (3)

Sample 4 Hatch cover to fire escape above entrance unit 115.
(CES REPORT No 132359 Attached) Amosite Asbestos detected.



Asbestos sheet (4)

Hazard algorithm score 4(very low) while not disturbed

Sample 5 Textured coating to ceiling unit 115.
(CES REPORT No 132360 Attached) No Asbestos detected.



Textured coating not Asbestos (5)

Sample 6 Lining to Electrical riser level 1 Stairs south. (Refer to photo below)
(CES REPORT No 132361 Attached) No Asbestos detected.

Sample 7 Electrical board panelling.
(CES REPORT No 132362 Attached) Positive for Chrysotile Asbestos.



Asbestos sheet (6)

Asbestos sheet to power board (7)

Hazard algorithm score 3(very low) while not disturbed (for power board only)

Sample 8 Vinyl to toilet unit 215.
(CES REPORT No 132363 Attached) No Asbestos detected.



Vinyl flooring not Asbestos (8)

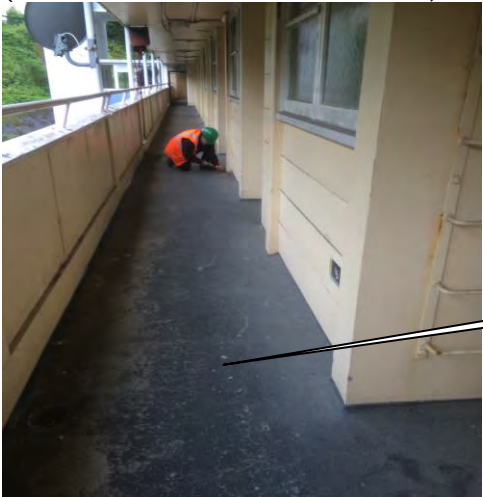
Sample 9 Hatch panel soffit entry outside room 215.
(CES REPORT No 132364 Attached) Amosite Asbestos detected.



Asbestos sheet (9)

Hazard algorithm score 4(very low) while not disturbed

Sample 10 Exterior landing membrane level 2.
(CES REPORT No 132365 Attached) No Asbestos detected.



Landing membrane not Asbestos (10)

Sample 11 Base board level 2 handrails. (Refer to the photo below)
(CES REPORT No 132366 Attached) No Asbestos detected.

Sample 13 joiner panels to handrails level 2.
(CES REPORT No 132368 Attached) No Asbestos detected.



Base board not Asbestos (11)

Joiner not Asbestos (13)

Sample 12 Lift lobby level 2 Cladding under windows.
(CES REPORT No 132367 Attached) Amosite Asbestos detected.



Asbestos panels (12)

Hazard algorithm score 4(very low) while not disturbed
Note not all the cladding under the windows is Asbestos there is some Gib board as well.

Sample 14 Sheet above entry door outside unit 214.
(CES REPORT No 132369 Attached) Amosite Asbestos detected.



Asbestos sheet (14)

Hazard algorithm score 4(very low) while not disturbed
Note this cladding is above every entry door

Sample 15 Exterior face of Handrail unit 315.
(CES REPORT No 132370 Attached) No Asbestos detected.



Exterior lining handrail not Asbestos (15)

Sample 16 Lining to shower unit 315.
(CES REPORT No 132371 Attached) No Asbestos detected.



Shower linings no Asbestos backed (16)

Sample 17 Pipe in hot water cupboard unit 315.
(CES REPORT No 132372 Attached) Amosite Asbestos detected.



Asbestos vent pipe (17)

Hazard algorithm score 5(low) while not disturbed
This is probably a vent and if so is likely to be in place in all rooms.

Sample 18 Cladding under windows unit 315.
(CES REPORT No 132373 Attached) Amosite Asbestos detected.



Asbestos cladding (18)

Hazard algorithm score 5(low) while not disturbed

Sample 19 Tar membrane to deck unit 315.
(CES REPORT No 132374 Attached) No Asbestos detected.



Tar Membrane not Asbestos (19)

Sample 20 Vinyl to Kitchen unit 315.
(CES REPORT No 132375 Attached) No Asbestos detected. (Refer to the photo below)

Sample 21 2nd layer of Vinyl to Kitchen unit 315.
(CES REPORT No 132376 Attached) No Asbestos detected.



Ist layer of Vinyl not Asbestos (20)

2nd layer of Vinyl not Asbestos (21) under top layer

Sample 22 Tar Membrane walkway level 3
(CES REPORT No 132377 Attached) No Asbestos detected.



Landing membrane not Asbestos (22)

Sample 23 Outside cladding panel Balcony unit 415
(CES REPORT No 132378 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos cladding (23)

Hazard algorithm score 5(low) while not disturbed

Sample 24 Backing paper under new Vinyl unit 415
(CES REPORT No 132379 Attached) No Asbestos detected.



Backing paper not Asbestos (24)

Sample 25 Soffits to exterior top of building
(CES REPORT No 132380 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos soffits (25)

Hazard algorithm score 5(low) while not disturbed

Sample 26 Wall linings exterior top of building
(CES REPORT No 132381 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos cladding (26)

Hazard algorithm score 5(low) while not disturbed

Sample 27 Wall linings interior top of building
(CES REPORT No 132382 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos cladding (27)

Hazard algorithm score 5(low) while not disturbed

Sample 28 Lower Roof Membrane
(CES REPORT No 132383 Attached) No Asbestos detected.



Lower roof membrane not Asbestos (28)

Sample 29 Wall panels lift lobby Top level
(CES REPORT No 132384 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos cladding (29)

Hazard algorithm score 5(low) while not disturbed

Sample 30 Upper Roof Membrane
(CES REPORT No 132385 Attached) Chrysotile Asbestos detected.



Asbestos content in roofing membrane (30)

Hazard algorithm score 4(very low) while not disturbed

Sample 31 Roof Hatch

(CES REPORT No 132386 Attached) Amosite and Chrysotile Asbestos detected.



Asbestos cladding (31)

Hazard algorithm score 5(low) while not disturbed

Sample 32 Textured ceiling coating to entrance lobby ground floor
(CES REPORT No 132387 Attached) No Asbestos detected.



Ceiling texture not Asbestos (32)

Sample 33 Textured ceiling coating to entrance lobby ground floor
(CES REPORT No 132388 Attached) Amosite Chrysotile & Crocidolite Asbestos detected.



Asbestos soffits (33)

Hazard algorithm score 5(low) while not disturbed

Some cladding is in poor condition and is showing signs of friability.

**Either damaged breaking away from framework or paint peeling back
Consideration should be given to painting the surface with damage with a sealer coat which
would be sufficient to arrest the degradation to the face.**

We have not been able to inspect behind wall linings for Asbestos but in all probability given the construction and lack of Asbestos insulation materials on any pipe work there is unlikely to be any issues around Asbestos in these cavities.

Asbestos cladding to walls will inevitably have some friable dust element to internal framing.

We have inspected under carpet floor coverings where possible and found no sign of other vinyl floor coverings.

All practical effort has been made to identify the existence of Asbestos where possible without being invasive in the areas listed. However all care should be taken during any demolition or remodelling work.

I trust this report meets your requirements and look forward to being of further assistance.

Yours faithfully

Mike Chesterfield
Managing Director



Report Number **132356**
02-Dec-14

Mike Chesterfield
All Asbestos & Insulation Ltd
P O Box 30836
LOWER HUTT

IDENTIFICATION OF ASBESTOS IN A BULK SAMPLE

Samples received on 2/12/2014 from 314 The Terrace. Sampled by All Asbestos, on 1/12/2014.

Results

Sample #	Sample details	Analytical results
132356	01. Internal riser panel - Unit 115	No Asbestos Found
132357	02. Exterior panel under window - Unit 115	Amosite
132358	03. Vinyl to kitchen - Unit 115	No Asbestos Found
132359	04. Hatch panel soffit entry - 115	Amosite
132360	05. Stipple to kitchen ceiling - 115	No Asbestos Found
132361	06. Lining to electrical rise stairs - Level 1	No Asbestos Found
132362	07. Electrical board - Level 1 stairs	Chrysotile
132363	08. Vinyl toilet - Room 215	No Asbestos Found
132364	09. Hatch panel soffit entry - 215	Amosite
132365	10. Exterior landing membrane - Level 2	No Asbestos Found
132366	11. Base board - Level 2	No Asbestos Found
132367	12. Lift lobby board under windows - Level 2	Amosite
132368	13. Joiner panel hand rails - Level 2	No Asbestos Found
132369	14. Sheet above entry doors to units - Room 214	Amosite
132370	15. Outside face of handrail - Room 315	No Asbestos Found
132371	16. Lining to shower - Room 315	No Asbestos Found
132372	17. Pipe in hotwater cupboard - 315	Amosite
132373	18. Board under windows - 315	Amosite
132374	19. Tar membrane to deck - 315	No Asbestos Found
132375	20. Vinyl to kitchen	No Asbestos Found
132376	21. 2nd vinyl layer under hardboard kitchen - 315	No Asbestos Found
132377	22. Tar membrane deck - Level 3	No Asbestos Found
132378	23. Outside panels balconys - Room 415 Level 3	Amosite and Chrysotile

IANZ ACCREDITED LABORATORY
All tests reported herein have been performed in accordance with the laboratory's scope of accreditation
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132356
Page 1 of 2

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132379	24. Backing paper under new vinyl - Room 415	No Asbestos Found
132380	25. Soffits exterior top of building	Amosite and Chrysotile
132381	26. Wall linings exterior - Top level	Amosite and Chrysotile
132382	27. Interior wall linings wash room - Top level	Amosite and Chrysotile
132383	28. Roof membrane - Top level	No Asbestos Found
132384	29. Wall panels north lift lobby - Top level	Amosite and Chrysotile
132385	30. Roofing membrane upper roof level	Chrysotile
132386	31. Hatch top of plant room	Amosite and Chrysotile
132387	32. Textured coating to entry lobby - Ground	No Asbestos Found
132388	33. Soffit board entry level ground	Chrysotile, Amosite and Crocidolite

This report may not be reproduced, except in full. Results pertain to sample "as received".

Method: Based on Australian Standard: AS 4964-2004, Method for the identification of asbestos in bulk samples.

Asbestos types: Amosite or Brown asbestos; Crocidolite or Blue asbestos, and Chrysotile or White asbestos.

* Interpretations and opinions expressed in this report are outside the terms of this Laboratory's Accreditation.

* Asbestos is a hazard. Provided it is incorporated into a stable matrix and no airborne dust is produced it presents minimal health risk. The Asbestos identified follows the definition of "asbestos" (even as a contaminant) in The Health and Safety in Employment (Asbestos) Regulations 1998.


Reported By

Maryanne Roberts
Analyst



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

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Page 2 of 2

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