

VERTICAL HORIZONZ




Safety.Certainty | New Zealand
STRUCTURED TRAINING SPECIALISTS

Asbestos Awareness



Regulation and ACOP

Reprint as at 15 May 2017



Health and Safety at Work (Asbestos) Regulations 2016
(LI 2016/15)


Jerry Mateparae, Governor-General

Order in Council

At Wellington this 15th day of February 2016

Present:
His Excellency the Governor-General in Council


Note
Changes authorised by [subpart 2](#) of Part 2 of the Legislation Act 2012 have been made in this official reprint.
Note 4 at the end of this reprint provides a list of the amendments incorporated.
These regulations are administered by the Ministry of Business, Innovation, and Employment.



APPROVED
CODE OF PRACTICE

**Management and Removal
of Asbestos**

NOVEMBER 2016 AMENDED DECEMBER 2016



New Zealand Government



You and Asbestos?

Asbestos is a chronic hazard, with serious risk

- (a) Take reasonable care of **own** Health and safety
- (b) Take reasonable care that his or her **acts or omissions** do not adversely affect **others**
- (c) **Comply** with any reasonable instruction
- (d) **Cooperate** with any reasonable policy or procedure that has been notified to workers.



Asbestos

Actually a group of mineral silicates:

- **White** ([Chrysotile](#)) $\{\text{Mg}_3(\text{Si}_2\text{O}_5)(\text{OH})_4\}_n$
- **Blue** ([Crocidolite](#)) $\text{Na}_2\text{Fe}^{3+}\text{Si}_8\text{O}_{22}(\text{OH})_2$
- **Brown** ([Amosite](#)) $\{(\text{Mg},\text{Fe})_7\text{Si}_8\text{O}_{22}(\text{OH})_2\}_n$



Description

- Fine fibres found in rocks
- Non-flammable 'wool' or 'cotton'
- Made into **strong** ropes, **fire resistant** cloth or sheets
- Often **mixed with another material** and **painted**, *making visual identification unreliable*
- Used in construction, **cladding** and **thermal** or **acoustic insulation** of offices, factories and houses
- Its presence can only be confirmed through accredited laboratory testing.

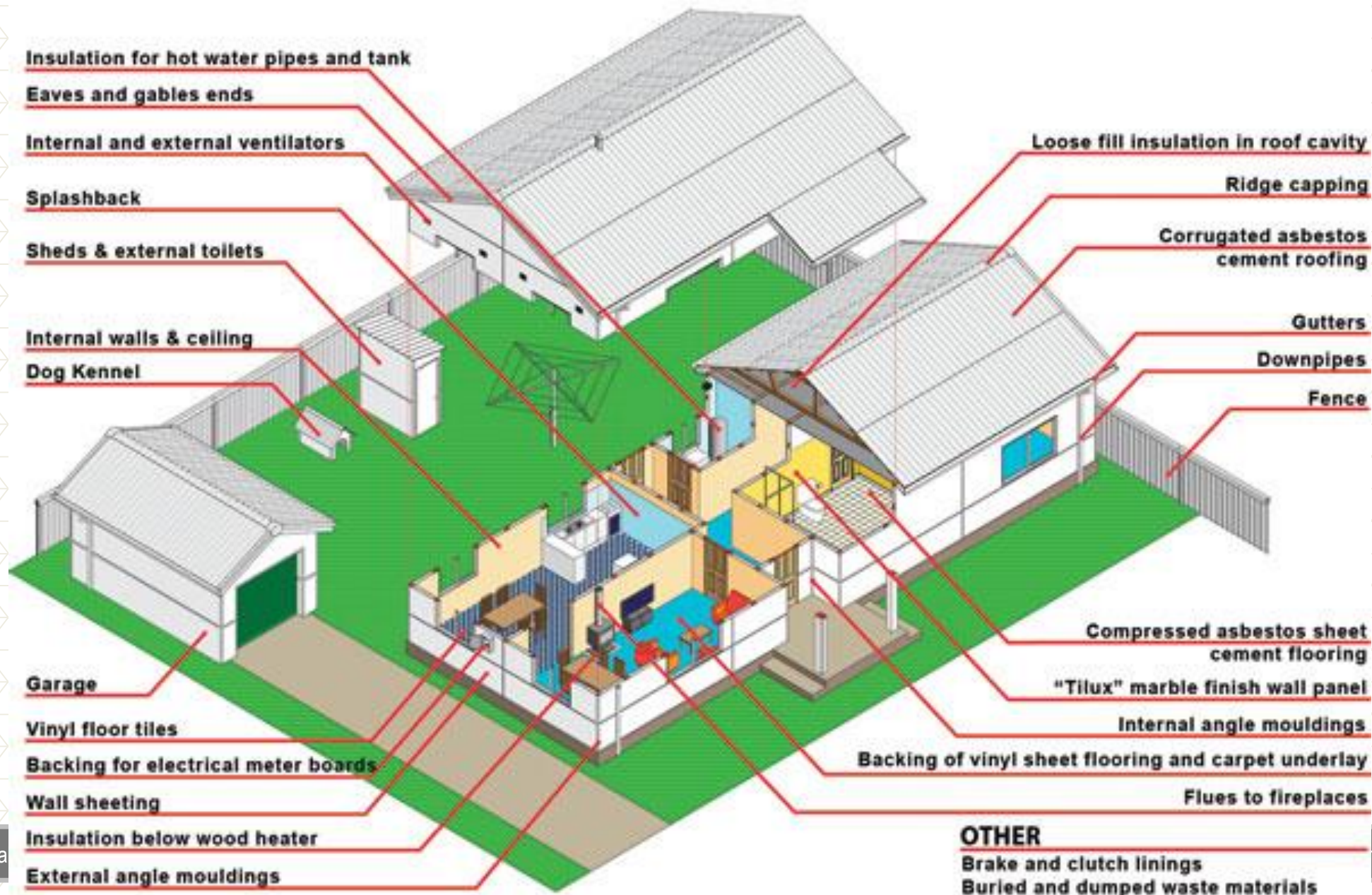


Where Can We Find Asbestos?

- Buildings constructed and/or repaired before 2002 (WorkSafe state 2000)
- Soffits, external wall cladding, or corrugated roofing sheets, lino flooring, or textured ceilings.
- Pipes, insulation, water proofing, lagging, ropes
- Small appliances, wiring, backing boards
- Brake pads, gaskets and seals



WHERE ASBESTOS MAY BE FOUND IN A TYPICAL HOME



Friable vs Non-Friable

Friable (non-bonded)

Powder form or able to be crumbled, pulverised, or reduced to a powder by hand pressure when dry.



Non-friable (bonded)

Not in a powder or cannot be crumbled, pulverised, or reduced to a powder by hand pressure when dry.



Friable

Friable (non-bonded)

- Insulation in roof spaces
- Textured Ceilings (Popcorn)
- Sound proofing
- Spray on fire proofing
- Gaskets
- Ropes
- Lagging.



Friable

Friable (non-bonded)



Non-Friable

Non-friable (bonded)

- Corrugated roofing and flashings
- Cladding
- Pipes (water mains)
- Gas Flues
- Floor Coverings
- Asbestos Cement Boards
- Ceiling Tiles

Can become Friable

- Age
- Abrasion
- Algae
- Weather
- Water Blasting
- *Fire damage
- Chemical Treatment



Non-Friable

Non-friable (bonded)





Non friable asbestos now made friable by fire



Damaged and exposed asbestos cement pipes – typically non friable.

When asbestos cement piping is damaged it becomes and should be treated as friable



How Can You Tell The Difference Between Asbestos And Other Products?

- Mostly by age
- Treat anything not confirmed as post 2000 as possible asbestos
- Painted surfaces can be misleading
- Can only be confirmed through accredited laboratory testing.



Recognising Asbestos (more detail)

- **Age:** There is no asbestos in cement board post 2002. Cement board older than 1985 is **likely** to be asbestos. Anything not confirmed post 1986.
- **Looks:** Grey brittle cement board with dimples and/or lines on the underside may be asbestos.
- **Joiners:** Fibro nails, cut corner pieces and edge pieces, and the use of battens as joiners indicate asbestos.
- **Fibres:** Asbestos fibres clump to give an uneven glassy look to broken edges.

Asbestos can only be confirmed by accredited laboratory



Hardiflex

**Asbestos
"Fibrolite"**

**Asbestos Fibro and Hardiflex Compared
Back To Back**

Dimpling effect on the sheet.



Battens between the joins



Fibro nails (without a point) indicate the brittleness.



Corner and edge pieces on the sheet.



I battens





Close up - Asbestos Fibro

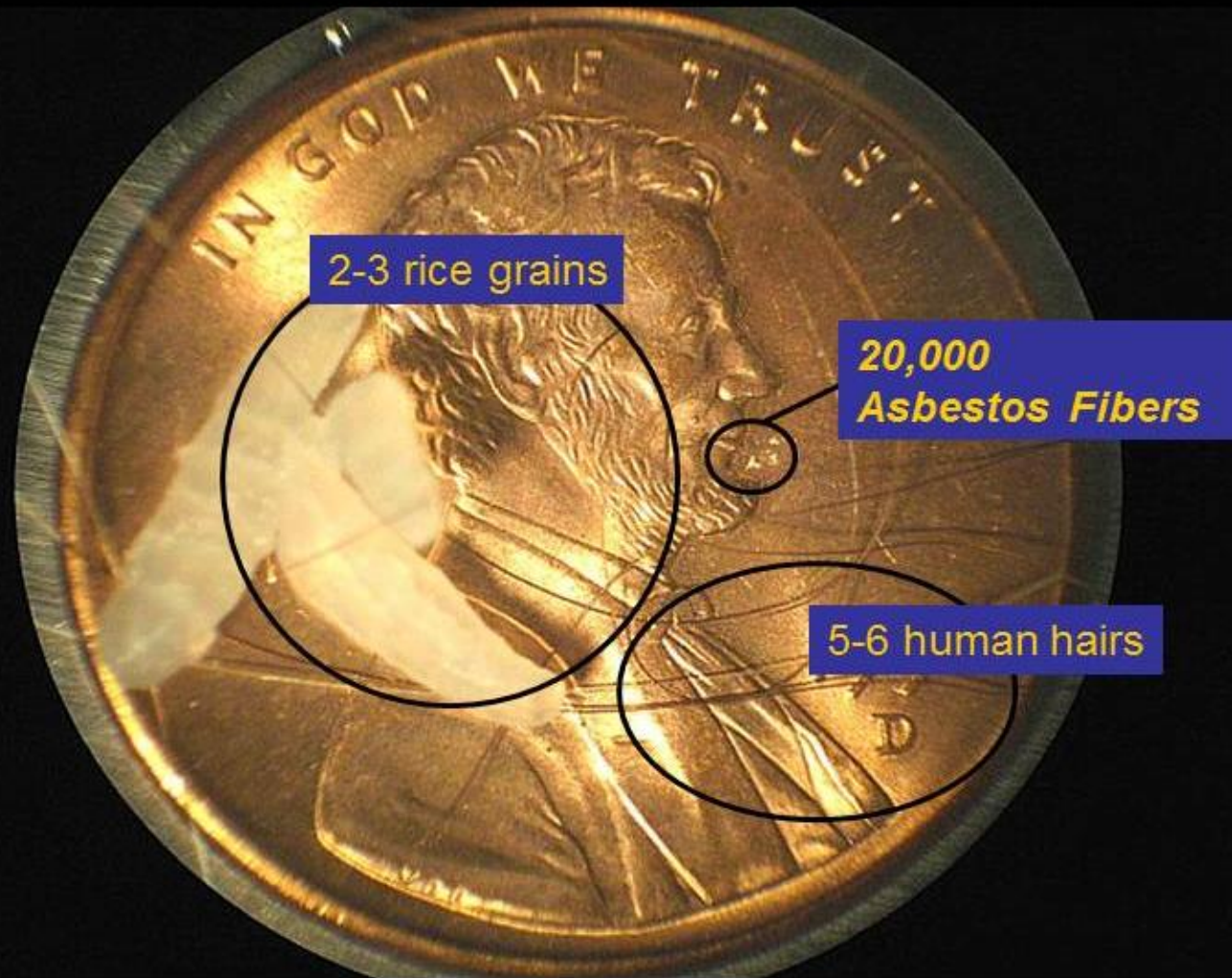


Close up - Modern Hardiflex

Use a digital camera in *macro* mode to take a close up shot of the sheet edge. If you are lucky you may be able to spot the clumps of raggedy glassy asbestos fibres.



How small are asbestos fibres?



www.AsbestosDiseaseAwarenessOrganization.org





Asbestos fibro shed



"Tilux" - Bathroom fibro



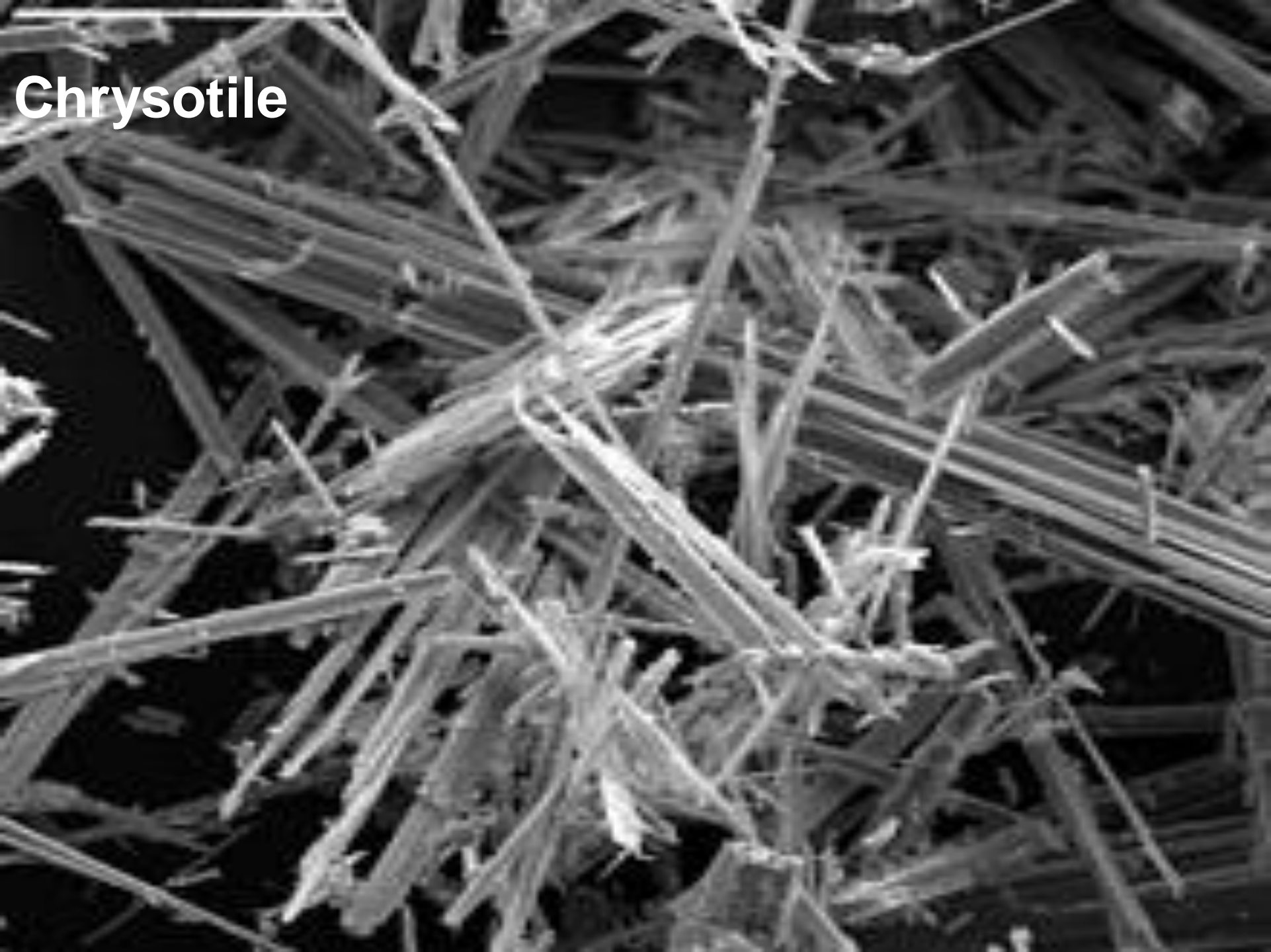
Why Asbestos is a Problem?

- Inhalation of asbestos fibres is a potentially fatal health risk
- Smaller fibres (below 0.3 micrometres in diameter and 0.5 micrometres in length) can cause the following diseases:
 - Asbestosis (progressive fibrosis)
 - Lung cancer
 - Mesothelioma (a cancer of the lung lining)
 - Other cancers.





Chrysotile



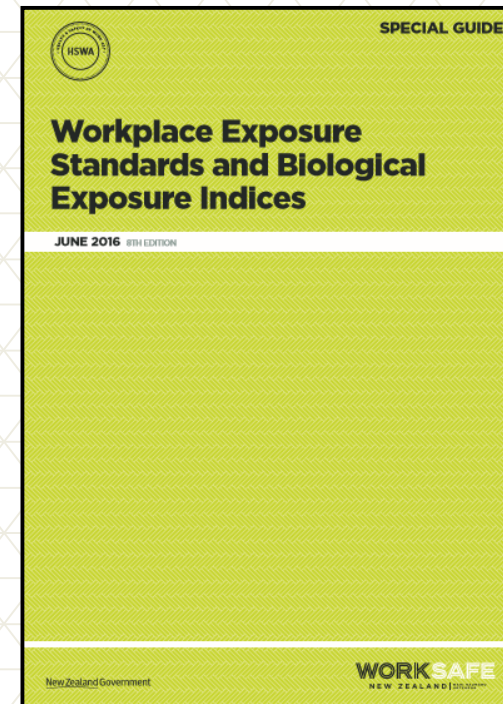
Exposure

- Inhalation of asbestos fibres is a potentially fatal health risk
- Can take as long as 40 years to have noticeable effect – though rate depends on exposure
- There is no safe level and no safe exposure time. Any exposure or 'dose' is dangerous.



Workplace Exposure Standards (WES)

- There are no safe exposure limits to asbestos fibres
- PCBU Must ensure so far as reasonably practicable exposure to asbestos is kept and maintained as low as possible and under no circumstances exceed the WES-TWA of 0.1 fibres per millilitre of air (WES June 2016 Edition 8).



Identify/Suspect Asbestos at Work?

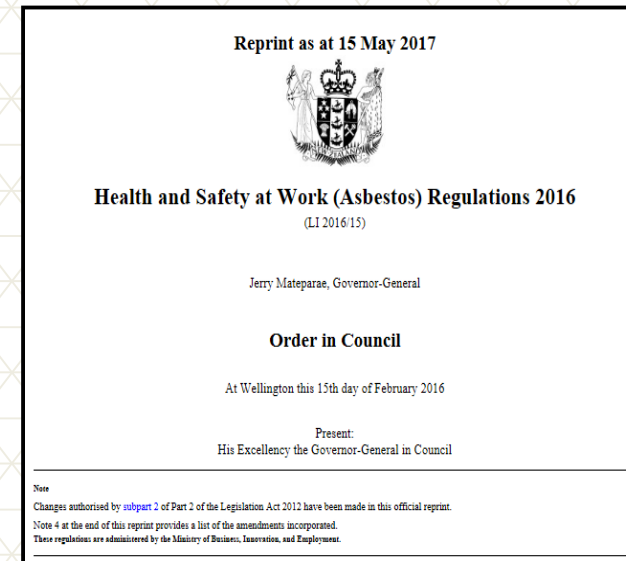
1. DO NOT TOUCH IT –
Do not disturb it in anyway!
2. Report it to your supervisor
or employer immediately!
3. Follow all reasonable policies
and procedures
4. Comply with reasonable
instruction.
5. Ensure your follow the Asbestos Management
Plan



Asbestos Regulations 2016

PCBU's are **required** to hold a licence for removal of:

- Over 10 m² of non-friable asbestos containing material (ACM) or asbestos (Class A or B)
- OR any amount of friable asbestos (Class A).



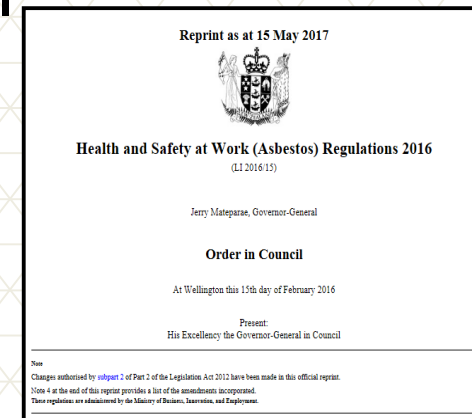
Asbestos Regulations 2016

A license **IS NOT** required for the removal of

- 10 m² of non-friable asbestos

All removal work needs to be performed safely

- Trained : US 2138/29765/29766 for Workers – 29767 for Supervisors of Removal
- Resourced (PPE)
- Procedures (SOP)



WORK INVOLVING ASBESTOS

ASBESTOS-RELATED WORK*

- Research and analysis
- Sampling and identification
- Transport and disposal
- Demonstrations, education or practical training
- Response to an emergency
- Demolition
- Firefighting
- Maintenance and servicing work
- Rectifying work
- Display of an artefact or thing
- Mining
- Laundering asbestos-contaminated clothing
- Naturally occurring asbestos
- Work carried out in accordance with an approved method

ASBESTOS REMOVAL WORK

Unlicensed asbestos removal†

- Removing 10 m² or less of non-friable asbestos and associated asbestos-contaminated dust (ACD)
- Removing ACD not associated with the removal of friable or non-friable asbestos and is only a minor contaminant

Licensed asbestos removal†

Class A

- Any amount of friable asbestos or ACM
- Any amount of ACD
- Any amount of non-friable asbestos or ACM

Class B

- Any amount of non-friable asbestos or ACM
- ACD associated with removing non-friable asbestos or ACM

PPE Requirements

Minimising exposure can be done through PPE and RPE.

- Coveralls: **disposable coveralls** rated type 5, category 3 (EN ISO 13982–1), **fitted with a hood and cuffs** (reusable not advised)
- **Gloves: Single use, low protein (powder free) gloves**
- **Lace-less safety footwear**
- **Respiratory Protective Equipment (RPE) – P2+.**



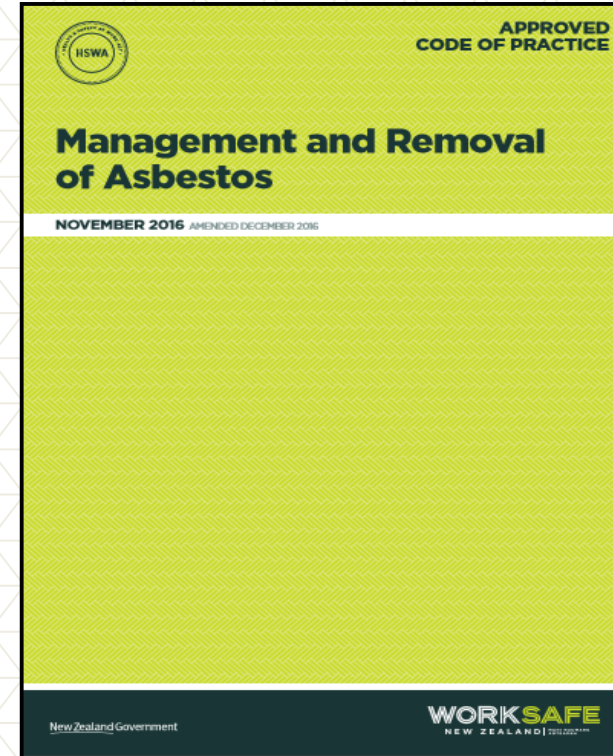
Process for Removal of Friable Asbestos

- Notify Worksafe NZ 5 days prior
- PCBU must hold Class A license
- PCBU must ensure an independent licensed Asbestos Assessor is engaged and to perform air quality tests
- The work area for removal is to be enclosed
- If glove bags are not used negative pressure is applied to the enclosure
- All glove bags and enclosures are to be dismantles and disposed of safely
- PCBU must gain a clearance cert from the asbestos assessor



Controls for Removal of Non-Friable ACM

- Asbestos records (surveys, register, asbestos management plan)
- Safe work instruments
- Training and supervision
- Tools and equipment
- PPE (incl. laundering)
- Health monitoring
- Decontamination
- Waste containment and disposal.
- Notify Worksafe NZ 5 days prior for greater than 10² M



Further Information

WorkSafe New Zealand

- WorkSafe New Zealand website
www.worksafe.govt.nz
- WorkSafe Health and Safety Inspectors
- WorkSafe publications (Codes of practice)
- By email info@worksafe.govt.nz
- By phone 0800 030 040



SAMPLING



6

- Take the sample



Sampling



7

- Place sample into labelled bag and seal

8

- Place sample bag into a larger bag, label and seal

9

- Seal edge of sampling area



10

- Wipe or clean tools

11

- Place all waste into the asbestos waste bag

12

- Take off PPE and decontaminate/ dispose





Steps for Sampling

13

- Re-establish worksite

14

- Send sample to be analysed



Sample

Chain of Custody

SNA
Unit 1 Some Day
White Stuff Drive, Hamilton
www.SNA.co.nz

Contact Information
Office E: admin@SNA.co.nz P: 0800 007007
Lab E: lab@SNA.co.nz P: 0800 006006 ext MP

Company Name: Safe to Move
Contact Person: James Marley
Office Address: 10 Baker St, Holmes ville, Auckland

Email: James.marley@safetomove.co.nz
Phone / Mobile: 0800 Safetomove

Site Address:
Client Reference:
Date Results Required: (Choose) 24 hr / Urgent (<24hr) / Urgent (Verbal Result <2hr) or specific date:

Purchase Order Number:

PCL Job Number:

Client Sample ID	Tests Required		Sample Details								
	Asbestos		Bulk	Soil	Tape	Other	Sample Location and Sample Description and Notes (if applicable)				

Relinquished By:			Received By:		
Name	Date		Name	Date	
Signature	Time		Signature	Time	Date paid (if COD):

Attention Non-Account Holding Customers: Payment must be made before release of analy

Please select payment method: On-Account



Q&A

