

# Asbestos Cement Pipes

## scope

This guide sets out our minimum operational requirements when working with asbestos cement (AC) pipes and highlights key steps to keep you and your family safe. The risk control plan should also be referred to along with our permit process.

Work involving asbestos is either asbestos removal work (where the primary focus of the work is to remove asbestos) or asbestos related work (which includes maintenance and servicing work, transport and disposal, demolition & refurbishment work) – scan or click the QR code below for more detail in ACOP s21. This Water Ways guide applies to all workers involved in either work type.

## operator qualifications, skills and training

**Competent persons who have completed Wellington Water Asbestos Awareness training (or equivalent) can remove:**

- 10m<sup>2</sup> or less of non-friable asbestos or ACM (asbestos containing material) cumulatively over the whole project and the associated ACD (asbestos-contaminated dust or debris)
- minor amounts of ACD, not associated with the removal of friable or non-friable asbestos

**Class B licence holders with Unit Std 29765 can remove:**

- non-friable asbestos or ACM
- ACD associated with removing non-friable asbestos or ACM

**Class A licence holders with Unit Std 29766 can remove:**

- friable asbestos or ACM
- asbestos-contaminated dust or debris (ACD)
- non-friable asbestos or ACM



**A WW Unlicensed or Class B asbestos removal work permit will be required**

Refer to the table on page 3 of this Water Ways or the asbestos flow chart in the Living Safely Manual

## minimum PPE requirements



**1**

### Identifying asbestos cement (AC) pipes



- expect to find Asbestos Cement (AC) pipes in road corridors but they can be found anywhere above or below ground
- assume the pipe could contain asbestos and have a competent person check it before starting work
- review any asbestos management plans if available for the site

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### Everyone involved must wear the correct PPE



- scan the QR code below for full PPE details  
- refer to the Fulton Hogan "Working with Asbestos Cement Pipes Procedure"
- keep all PPE on until the job is fully completed

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### Breaking and joining AC pipes



- don't - dry cut
- don't - use grinders
- don't - smash up the pipe
- don't - use compressed air
- don't - use high pressure water



Chain pipe cracker

- complete the relevant permit, refer to table on page 3
- minimise site disturbance and stop works if the pipes become friable
- remove AC pipes in sections, splitting at collars or sleeves
- hand cut or crack AC pipes using the correct tools - powered tools are to be asbestos approved type
- keep AC pipes wet when handling
- contain and collect all debris and dust

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## Removal and disposal

- remove pipes and slurry from cutting area to prevent them from drying
- wrap pipes / slurry in 200µm heavy duty plastic
- place the wrapped material in another 200µm heavy duty plastic bag and goose-tie the neck
- label the bag “Asbestos Hazard – wear respirator and protective clothing while handling contents”
- visually inspect site to ensure NO asbestos remains
- take the bagged waste to an approved asbestos waste disposal area (or store in an approved place until it can be disposed of)
- asbestos waste is to be disposed of appropriately and legally (please refer to your local council for exact requirements)
- follow the decontamination process as detailed in the Fulton Hogan “Working with Asbestos Cement Pipes Procedure” scan the QR code for more information

## Transportation

- Transportation of less than 50kg requires only emergency response information to be accessible to the driver in the event of an emergency - no placarding or "D" Endorsement required
- Transportation of more than 50kgs of asbestos waste is classified as Dangerous Goods and the following requirements must be met:

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- driver must be supplied with a completed Dangerous Goods Declaration Form
- truck to have correct placarding - Class 9 front and rear (or orange and black striped dangerous goods sign for volumes 50-2500kg)
- driver must have a current "D" endorsement on their driver's license, or be under the direct supervision of a person in the vehicle who holds a current "D" endorsement
- emergency response information and dangerous goods declaration must be contained in document holder marked "Dangerous Goods Documents" or similar and placed on the driver's door in a position that is visible and accessible to a person standing on the ground with the driver's door open

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## Requirements, notifications, permits and calculations

also see the table on the following page for the mandatory requirements that apply to all work involving asbestos

- The less than <10m<sup>2</sup> calculation for AC pipes is based on the external surface area of the material across the entire job / project (not just at one location)



- formula  
 $\pi \times \text{diameter (m)} \times \text{length (m)} = \text{m}^2$
- eg a 12m length of 250mm (0.25m) diameter pipe  
 $3.14 \times 0.25 \times 12 = 9.42\text{m}^2$  - no notification required


- quick reference guide

		Pipe Length (m)														
		1	2	3	4	5	6	7	8	9	10	20	30	35		
Pipe Dia (m):	0.1	0.31	0.63	0.94	1.26	1.57	1.88	2.20	2.51	2.83	3.14	6.28	9.42	10.99		
	0.2	0.63	1.26	1.88	2.51	3.14	3.77	4.40	5.02	5.65	6.28	12.56	18.84	21.98		
	0.3	0.94	1.88	2.83	3.77	4.71	5.65	6.59	7.54	8.48	9.42	18.84	28.26	32.97		
	0.4	1.26	2.51	3.77	5.02	6.28	7.54	8.79	10.05	11.30	12.56	25.12	37.68	43.96		
	0.5	1.57	3.14	4.71	6.28	7.85	9.42	10.99	12.56	14.13	15.70	31.40	47.10	54.95		
	0.6	1.88	3.77	5.65	7.54	9.42	11.30	13.19	15.07	16.96	18.84	37.68	56.52	65.94		

scan or click for more info and video



## Mandatory requirements that apply to all work involving asbestos

work type	permit	licence	training	notification
<b>Asbestos Related Work</b> e.g. Maintenance of in service AC water mains	Asbestos Related Work Permit	N/A	FH Asbestos Awareness Training	N/A
<b>Unlicensed Asbestos Removal Work</b> e.g. Removal of old AC water mains less than <10m <sup>2</sup>	Unlicensed Asbestos Removal Work Permit	N/A	FH Asbestos Awareness Training	N/A
<b>Asbestos Removal Work</b> e.g. Removal of old AC water mains greater than >10m <sup>2</sup>	Asbestos Removal Work Permit	Class B Asbestos Removal Licence if non-friable or Class A Asbestos Removal Licence if friable	Specialist Asbestos Removal Training dependent on licence class and workers role	<b>Notified to WorkSafe NZ</b>  click to go to WorkSafe Notified at least 5 days prior to the work starting unless the removal work is in response to a breakdown of an essential service or an unexpected event that may expose people to airborne asbestos