



aquapipe[®]

WATER MAIN REHABILITATION

MAKE RENEWALS SPEND GO FURTHER

Eliminate pipe bursts, breaks and leaks

Reduce your safety risks

**SAVE WATER
& DISRUPTION
INSTALL
AQUAPIPE**

- » Fully structural liner
- » Up to 70% more cost effective and quicker than traditional methods
- » Easy rehabilitation of difficult to access watermains
- » Post-lining reinstatement of service connections from within the pipe
- » Certified drinking water safe to AS/NZS 4020, BS 6920 & ANSI 61



Low emissions of carbon dioxide when compared to traditional construction methods

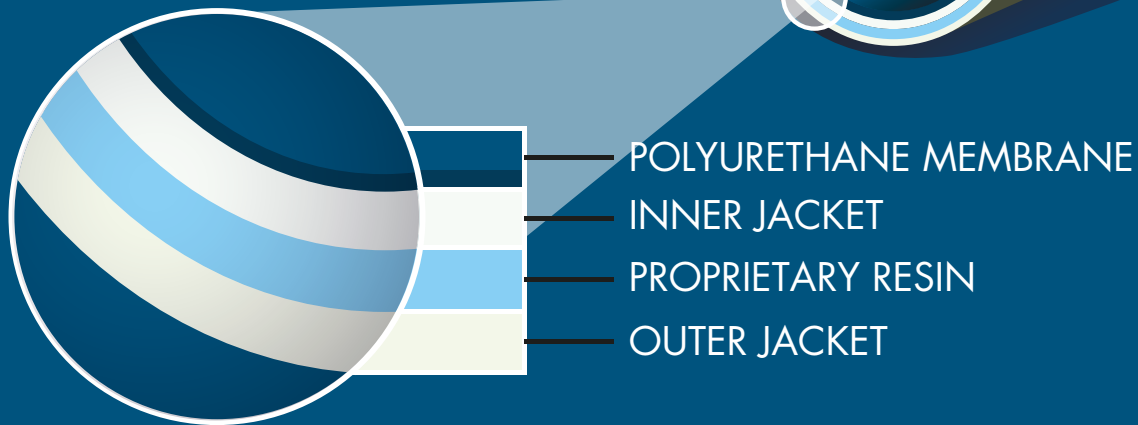


Over 1000km of Aquapipe® with 60,000 service connections have been installed over the past two decades throughout 500 towns and cities in North America and Australasia

» BASIC PROJECT STEPS

- Locate and inspect pipeline
- Accurately determine access pit locations and liner lengths
- Install temporary by-pass to maintain water supply
- Excavate access pits at each end of the section
- Clean pipeline
- Closed-Circuit Television (CCTV) inspection to identify service connections
- Insert plugs with specialised robotic equipment in service connections from within the pipe
- Inject the epoxy between the two liners whilst pulling the line in place, in a purpose built refrigerated mobile truck
- Form the liner by sending swabs from one end to the other
- Circulate hot water for curing
- Perform hydrostatic pressure test
- Reinstall service connections by drilling with specialised robotic equipment from inside the pipe
- Disinfect the pipe
- Reconnect the water distribution system
- Remove temporary by-pass
- Restore site

» LINER



» TECHNICAL SPECIFICATIONS

Diameters

Any pipe internal diameter from 100-630mm

Installation Length

Up to 300m

Installation Method

Pulled-in-Place Piping (PIPP)

BEFORE AFTER



» AQUAPIPE®

- Composite of woven textile jacket with epoxy and an inside polymeric membrane for water tightness
- Trenchless technology
- Cured-in-Place Piping (CIPP)
- Maximum burst pressure greater than 50 bar
- Mechanical interlock with host pipe of up to 8.8T/m²
- Mechanical Properties exceed ASTM F1216 and ASTM F1743
- Certified drinking water safe to AS/NZS 4020, BS 6920 & ANSI 61
- Hazen-Williams Coefficient greater than 120



» BENEFITS

Aquapipe is a structural trenchless technology exclusively designed for drinking water distribution systems

Engineers now have more options

- Safer construction with less risk to the public and complaints from community during work
- Ability to line pipes that are difficult to access (underneath bridges, highways, etc.)
- Rapid installation with less disruption with minimal impact on traffic
- Ability to line through bends, Sluice Valves and Hydrants
- Little excavation when compared to traditional open cut
- Adjacent infrastructure not disturbed by work

Aquapipe adds life to rehabilitated water distribution system

- Increased pressure, flow capacity and life span of infrastructure
- Corrosion resistance
- Regained structural capacity
- Capable of withstanding lateral deflections up to 50% of pipe diameter
- Suitable for lining firefighting water lines in areas prone to seismic activity

Economic considerations are the key to success with Aquapipe

- Rehabilitation up to 70% quicker and less expensive than traditional methods
- Prevents watermain breaks
- Reduced treatment and pumping costs
- No future maintenance required
- Reduced social costs

www.aquapipe.co.nz

» CONTACT US

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Developed in collaboration with the National
Research Council of Canada and the Urban
Infrastructure Research & Expertise Centre



aquapipe[®]

A technology
developed by:

SANEXEN
ENVIRONMENTAL SERVICES INC.