Noise: pipe lagging



Environment Protection Authority Victoria



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Hazard control guidance sheet

Using pipe lagging to eliminate or reduce the risk of harm from noise

Description

Pipe lagging, also known as pipe insulation, is a cover placed around pipes to reduce noise emissions that escape through the pipe wall (break-out noise). It can also keep pipes hot or cold or reduce condensation.

Pipe lagging can be made of many different compounds, including flexible or rigid foams, fibreglass and glass wool.

Lagging is commonly used as an acoustic control in even the smallest businesses and residential properties. It helps reduce noise from plumbing, and heating, ventilation and air conditioning-related pipes and ducts. However, it is just as important on larger scale sites.



Figure 1. Co-generation plant with all pipes fully covered in pipe lagging.

Type of control

Physical.

When to use this control

Pipe lagging is an important noise control in all businesses and residential properties.

Suitable for: businesses and sites of all sizes with pipes and ducts.

Industries that would use this: all.

More information

See our website: epa.vic.gov.au/forbusiness/find-a-topic/noise

Contact us: 1300 372 842 (1300 EPA VIC) or contact@epa.vic.gov.au

The actions you take and the controls you decide to implement will support you to comply with your <u>general environmental duty</u> and other duties under the *Environment Protection Act* 2017.



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What to consider when deciding to use pipe lagging

Things to consider:

- Pipe lagging can be applied to pipes, ducts, fan housings and valves in commercial, industrial and domestic buildings. Some materials can act as acoustic absorbers, others as acoustic barriers, and some as neither or both. It is for this reason that it is important to consult a suitable qualified professional when deciding on the material to use.
- Consider the contents of the pipes you want to insulate and how this can impact the material you use. For example, the best solution acoustically may not withstand the high heat in the pipes you are insulating.
- Install pipe lagging with care, closely following the manufacturer's instruction. Although it generally does
 not need much maintenance, it is still necessary to carry out routine inspections of your installed
 insulation to ensure there are no rips, tears, gaps or wearing areas that could render your pipe lagging
 ineffective and cause noise pollution. Where there is damage to the pipe lagging, it should be repaired
 as soon as possible.

Engaging an acoustic consultant

An acoustic consultant will typically be a person who is eligible for membership of the <u>Australian Acoustical Society</u>. The business a consultant works for will typically be a member of the <u>Association of Australasian Acoustical Consultants</u>.

See <u>Work with an environmental consultant</u> (EPA website) for general information about how to engage a consultant.



This control is an *example or option only* of what you could put in place to eliminate or reduce the risk of harm to human health and the environment. You can implement other controls, so long as you can demonstrate you have eliminated or reduced the risk of harm as far as <u>reasonably practicable</u> (EPA website).

Disclaimer

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