

# Noise: acoustic louvres



Environment  
Protection  
Authority Victoria



Publication 1885 March 2021

Hazard control guidance sheet

## Using acoustic louvres to eliminate or reduce the risk of harm from noise

### Description

When building an enclosure or barrier to prevent noise pollution, the potential for heat build-up within the enclosure can be a serious concern.

In many situations, a traditional opening or louvre system will provide adequate airflow. It can, however, compromise the effectiveness of the barrier or enclosure in reducing noise. Acoustic louvres can be very effective in these situations.

Acoustic louvres are used to provide ventilation to noisy rooms, such as plantrooms in residential buildings, while also maintaining noise reduction.



**Figure 1.** Enclosure with acoustic louvres for ventilation.

### Type of control

Physical.

### When to use this control

Acoustic louvres are generally used in the design of a barrier or enclosure.

**Suitable for:** any application where a barrier or enclosure is being implemented and air flow or heat dissipation is necessary, such as inlets of air conditioning and refrigeration, ventilation systems, enclosures on generators or compressors.

**Industries that would use this:** any industry that uses a barrier or enclosure to contain noise, or any premises with noisy plantrooms.

### More information

See our website: [epa.vic.gov.au/for-business/find-a-topic/noise](https://epa.vic.gov.au/for-business/find-a-topic/noise)

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

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



# Acoustic louvres: hazard control guidance sheet

## What to consider when deciding to use acoustic louvres

### Things to consider:

- An acoustic louvre provides adequate ventilation while maintaining noise pollution control. Consult a suitably qualified professional to ensure your louvres are appropriately designed. See [Work with an environmental consultant](#) (EPA website).
- Acoustic louvres are often made from sheet metal, such as galvanised steel. The blades of the louvres are filled with a sound absorbing material, which is often fibreglass or similar. They are placed at angles to inhibit noise travelling from the source to noise-sensitive receptors, reducing the received noise level.
- Acoustic louvres can be fitted with rain and weather shields. These prevent birds and rodents entering the enclosures. They are usually non-combustible and anti-corrosive for optimum safety. The features you require will depend on the position and function of the louvre system.
- With the correct design and planning, acoustic louvres can provide minimum air flow obstruction and optimised noise emission reduction.
- Acoustic louvres are generally considered low-maintenance noise emission solutions. However, it is still important to practise routine maintenance of all your equipment, machinery and control solutions. This ensures everything is running optimally and you are producing the least noise possible from your business or site.



### Engaging an acoustic consultant

An acoustic consultant will typically be a person who is eligible for membership of the [Australian Acoustical Society](#). The business a consultant works for will typically be a member of the [Association of Australasian Acoustical Consultants](#).

See [Work with an environmental consultant](#) (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 [reasonably practicable](#) (EPA website).

### Disclaimer

The information in this publication is for general guidance only. It does not constitute legal or other professional advice and should not be relied on as a statement of the law. Because it is intended only as a general guide, it may contain generalisations. You should obtain professional advice if you have any specific concern. EPA Victoria has made every reasonable effort to provide current and accurate information, but does not make any guarantees regarding the accuracy, currency or completeness of the information.

© State of Victoria (Environment Protection Authority Victoria) 2020.



This work is licensed under a [Creative Commons Attribution 4.0 licence](#). You are free to re-use the work under that licence, on the condition you credit Environment Protection Authority Victoria (EPA Victoria) as author, indicate if changes were made and comply with other licence terms. The licence does not apply to any photographs and images; any branding, including the EPA Victoria logo and Victorian government logo; and any content supplied by third parties.