

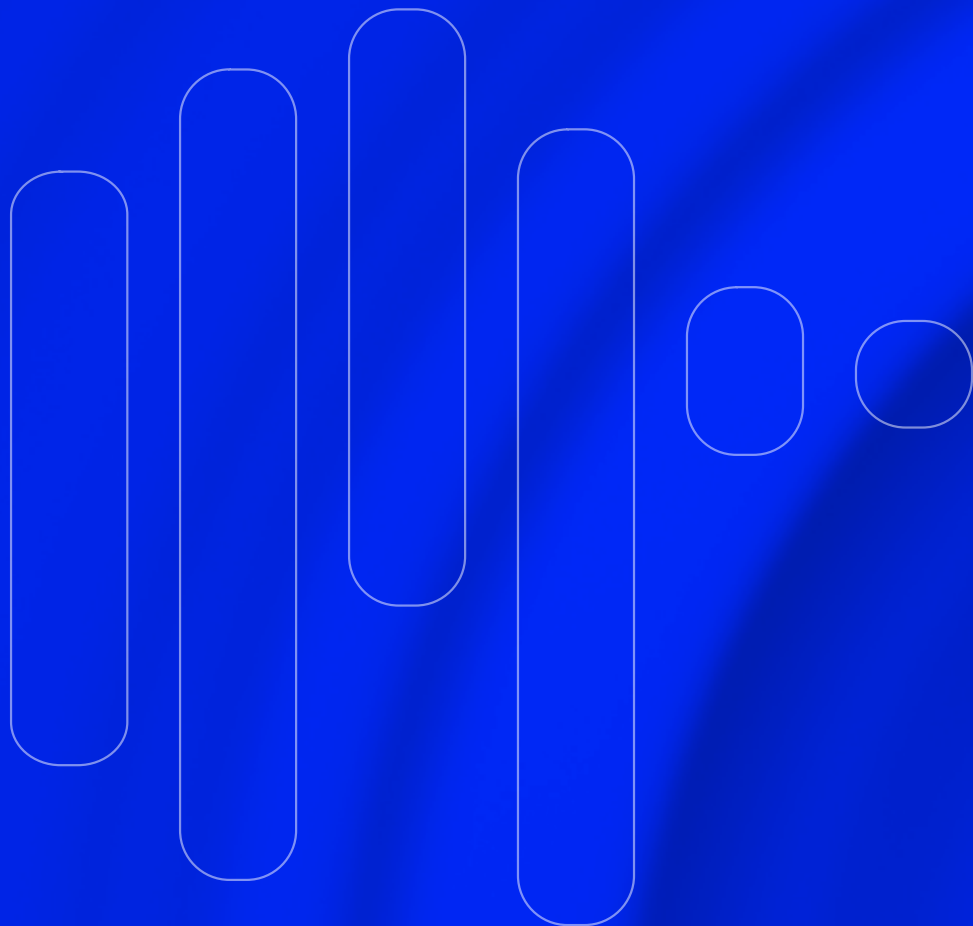


ACOUSTIC SYSTEMS

FOR MECHANICAL PLANT, PLANT ROOMS
AND BUILDING SERVICES.

ACOUSTECH

The science of silence



Experts in the science of HVAC noise control.

For more than 25 years, AcousTech has worked alongside mechanical engineers, acoustic consultants and building services contractors to solve noise problems that matter in plant rooms, on rooftops, inside data centres, and across critical infrastructure.

We don't just supply products. We design systems, including enclosures, louvres, doors and attenuators, that are engineered to work together so that performance on paper matches performance on site.

NATA-accredited testing | **Australian manufactured** | **Engineered to specification**

FRONT COVER IMAGE CAPTION

Sonic System V50 panels on an HVAC plant enclosure. Rw 31dB, NRC 1.00.



**AUSTRALIAN
MADE.**

ACOUSTECH

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Sonic acoustic attenuator, cylindrical configuration, controlling HVAC noise without restricting airflow.

Noise doesn't stay where you put it.

Fans, chillers and air handling units generate tonal noise, broadband mechanical energy and low-frequency sound that travels further than expected. A system can meet its internal targets and still generate complaints externally.

Most HVAC acoustic failures happen at interfaces, not primary elements. The panel performs. The louvre performs. But where they meet, where the door frame sits, and where services penetrate the structure, that is where sound finds its way through.

Where performance is typically lost:

1. Service penetrations through walls and slabs
2. Door frames and perimeter seals
3. Louvre direct line of sight
4. Roof and structure-borne transmission
5. Flanking paths at panel junctions

“ The most expensive acoustic problem is the one discovered after the mechanical design is locked.

Early engagement costs a fraction of late-stage remediation.

One system. Four elements. No weak links.

DESIGNED FOR HVAC ENVIRONMENTS. ENGINEERED TO WORK TOGETHER.

1. Sonic System acoustic modular panels

CONTAINMENT AND ABSORPTION

Modular steel panels with non-combustible Rockwool core. Rw 31–45dB. Fire rated -/120/-.
Australian manufactured. Used for plant room walls, chiller enclosures, rooftop screens and external barriers.

2. Sonic Access acoustic doors

ACCESS WITHOUT COMPROMISE

Purpose-built acoustic doors with SonicFix pre-hung frames, a system that eliminates leakage at the frame junction. Rw up to 52dB. Available in single and double leaf configurations.
Full perimeter seals as standard. Optional vision panels and acoustic louvres available.

3. Sonic Series acoustic louvres

AIRFLOW AND ATTENUATION

Eight blade configurations from 100mm to 600mm depth. Rw 18–33dB. Free area 21–67%.
Chevron and double-stage blades for high-performance applications. Galvanised, stainless, aluminium or powder-coat.

4. Sonic acoustic attenuators

DUCT NOISE AT THE SOURCE

Cylindrical, podded and rectangular configurations for HVAC ductwork, AHU connections and fan discharge. Reduces duct-borne and breakout noise without restricting airflow.
Sized to your system, built to spec.

Full technical data, drawings and NATA test reports are available on the AcousTech website at acoustech.com.au.



Sonic System acoustic modular panels, Sonic Series acoustic louvres and Sonic Access acoustic doors on a Queensland school HVAC package.



*Open-top Sonic Series acoustic louvre enclosure.
Door built from the same Sonic Series louvre for continuous airflow.*

If it has mechanical plant, we've worked on it.

Data centres

Continuous operation. High airflow demand. Low-frequency dominated noise from large cooling plant. Zero tolerance for post-completion remediation. AcousTech designs data centre acoustic systems from the schematic stage before the mechanical layout is locked.

Commercial developments

Mixed-use buildings put rooftop HVAC plant in close proximity to residential and commercial receivers. AcousTech coordinates early with mechanical and building services engineers to ensure compliance is embedded from the outset, not retrofitted later.

Government & public buildings

Government and public buildings such as hospitals, schools, courts and public facilities operate under tight acoustic criteria. AcousTech coordinates early with mechanical and building services engineers to ensure compliance is designed in, not added after.

Manufacturing & industrial

High-output plant generates constant broadband noise. AcousTech designs enclosures, screens and ventilation treatments that reduce noise at the source without disrupting production or airflow.

25+ years of Australian projects. NATA-accredited performance. Manufactured locally.



SL4-15C acoustic louvres installed at Helensvale Branch Library, Gold Coast QLD, rooftop plant enclosure, north elevation.

Helensvale Branch Library

GOLD COAST, QUEENSLAND



THE CHALLENGE

The City of Gold Coast was extending the plant room at Helensvale Branch Library to accommodate a new air conditioning system upgrade. The rooftop plant deck sits directly adjacent to a public road and residential receivers, with night noise limits of 43dB(A) to the north and 39dB(A) to the south as specified by acoustic consultants WSP Australia.

The architect required a continuous, frameless louvre appearance with concealed mullions, ruling out standard box-frame louvre systems and requiring a custom horizontal blade orientation across three elevations spanning over 38 linear metres.



THE SOLUTION

AcousTech supplied SL4-15C aluminium acoustic louvres across three louvre banks enclosing the north, east and west elevations of the plant deck. Blades were oriented inward-facing and sloped back toward the plant deck to minimise noise transfer to surrounding roof areas and adjacent receivers.

Total installation: Louvre 1 (north) 17,000mm wide x 4,169mm high. Louvre 2 (east) 5,000mm wide x 4,619mm high. Louvre 3 (west) 16,857mm wide x 2,271mm high. Bolted connection to structural framing with 40mm perimeter flashing throughout.



THE RESULT

Post-installation acoustic testing confirmed compliance with WSP noise criteria across all elevations. Night noise limits met. The installation passed first measurement.

PRODUCTS USED:

SL4-15C acoustic louvres aluminium, powder-coat finish, concealed mullion horizontal blade configuration

Not quieter by chance. Quieter by design.

Every AcousTech system is engineered to a performance target, not selected from a catalogue and hoped for the best. Airflow velocity, equipment type, duct geometry, building structure and receiver sensitivity all influence the outcome. We model it, specify it, and stand behind the result.

What sets AcousTech apart:

- NATA-accredited acoustic test data on all products, not manufacturer claims
- Australian manufactured, consistent quality, reliable lead times, no import risk
- CAD and BIM files available for all standard products, easy to coordinate
- SonicFix pre-hung frame system, eliminating the most common point of acoustic failure in plant room doors
- Early engagement support, we work with mechanical engineers at schematic stage, not as an afterthought
- Post-installation acoustic testing available, NATA-accredited and fully documented

Download the full technical brochure, including NATA test data, product drawings, attenuator insertion loss data and louvre airflow curves, from the AcousTech website.

Talk to us before the mechanical design is locked in.

The earlier AcousTech is involved, the simpler and more cost-effective the acoustic solution.



