

REDUCING IMPACT OF AIRCRAFT NOISE AT HOME

This fact sheet outlines ways to reduce the intrusion of aircraft noise and other external noise in homes. It also provides guidance on where to find information on sound insulation.

The Australian Standard 2021-2000, shows that aircraft noise intrusion within a building depends on:

- the location, elevation and orientation of the building relative to the aircraft flight paths
- the types, times and frequency of aircraft operating
- meteorological conditions (including wind, cloud cover and temperature)
- the type of layout used in the building
- the construction and ventilation of the building
- the internal acoustic environment.
- ensuring windows and door seals are properly fitted and fixed
- repairing any gaps or installing new window seals to help noise reduction
- installing air conditioning rather than relying on open windows to help reduce external noise, particularly for rooms used for sleeping
- using external solid core doors with acoustic seals.

For those affected mainly by noise at night, consider using these methods for rooms used for sleeping. This will achieve effective noise reduction without the expense of treating the whole home.

The major entry points for external noise intrusion in homes are windows, doors, ventilation openings and other cracks and openings.

Effective methods for reducing external noise intrusion in homes include:

- facing windows away from noise sources
- minimising the use of hard exterior surfaces such as paving as this reflects sound rather than absorbs it
- using insulation in the ceiling to close gaps in roof tiles
- using materials such as acoustic insulation for internal and external walls, floors and ceilings
- using double glazing and laminated glass windows
- using screen walls to shield external noise
- using sound absorbing materials such as acoustic tiles, carpet, curtains and noise reduction underlays to help absorb sound and control sound reverberation

BUILDING CODE OF AUSTRALIA

The Building Code of Australia (BCA) forms volume one and two of the National Construction Code and contains technical provisions for the design and construction of buildings and other structures. More information on the BCA can be found at the following link: www.abcb.gov.au/about-the-national-construction-code/the-building-code-of-australia

ACOUSTIC CONSULTANT

If you are considering sound insulation for your home, it may be useful to contact an acoustic consultant to ensure your proposed changes will provide effective noise reduction. The following link to the Association of Australian Acoustical Consultants (AAAC) website provides more information: www.aaac.org.au

OTHER INFORMATION

To purchase a copy of the Australian Standard, please click on the link to the SAI Global InfoStore: infostore.saiglobal.com/store

The Department of Infrastructure and Regional Development provides a consolidated list of suppliers in Sydney and Adelaide for regular maintenance of noise insulation equipment and fittings, supplied under the Government's Noise Insulation Programs: www.infrastructure.gov.au/aviation/environmental/insulation

The 'Your Home' website details information on noise control: www.yourhome.gov.au/housing/noise-control

Adelaide City Council has produced a Noise Technical Fact Sheet: www.adelaidecitycouncil.com/assets/acc/Environment/noise/docs/noise_fact_sheet_4_-_sound_insulation_for_glazed_doors_and_standard_doors.pdf

Perth Airport has an information booklet on its website on reducing the impact of aircraft noise: www.perthairport.com.au/Files/Reducing_Aircraft_Noise_in_Existing_Homes.pdf