

# **Noise Emission Factsheet**

# **Air-Conditioning Equipment**

Noise from air-conditioners can disturb neighbours, disrupt their sleep and interfere with their normal daily activities (listening to the TV, conversing with family members). If loud enough, it can have a negative impact on people's health.

#### Be a good neighbour

Take the time to talk to neighbours and ask them for suggestions about solving any problems. Discuss noise concerns with neighbours before installing equipment that emits noise. In many cases an agreement can be reached that satisfy everyone's needs. When buying air conditioning equipment, note the dB(A) output of the equipment and implement mitigating measures to reduce noise levels if necessary.

#### The Law

The *Environmental Protection Act 1994* introduced by the State Government, describe noise standards for air-conditioners in section 440U. Council is legally required to enforce these standards when the noise is emitted from residential premises. If issues between neighbours cannot be resolved and further complaints are made, Council will have to investigate. If an air-conditioner exceeds the noise standards, Council may have to issue the owner or operator with an on-the-spot fine.

#### **Allowable Noise Limits**

If noise from an air-conditioner exceeds the following decibel levels when measured at a neighbour's house, the owner or operator may be issued with an infringement notice

- before 7a.m. if the use causes audible noise; or
- from 7a.m. to 10p.m, if the use causes noise of more the 70dB(A); or
- from 10p.m. to midnight, if the use causes noise of more than the lesser of the following-50dB(A); 10dB(A) above the background level."

#### Below is a practical guide to different decibel levels:

- Quiet room in the house 20-30 dB(A)
- Daytime in a quiet residential street 35-45 dB(A)
- Large busy office 50-60 dB(A)
- Lawn mower from 15 meters away 70 dB(A)



#### Ways to reduce noise

A range of measures can be used to reduce the noise impact of an air-conditioner. These include:

#### a) Limiting hours of operation

Talk to neighbours to find out if there are particular times when the air-conditioner disturbs them.

#### b) Selecting a quieter air-conditioner

Older air-conditioners can be particularly noisy. Replacing an air-conditioner with a quieter model may help solve the problem.

#### c) Location

Locate the air-conditioner as far as possible from neighbours and away from sensitive areas (e.g. bedroom windows). Avoid placing the air-conditioner near a noise reflective surface (e.g. multiple walls, corners) and use existing features to hide the air-conditioner from view, as this will often reduce its noise impact.

#### d) Maintenance

Lack of maintenance can cause higher noise levels and reduce the effectiveness of air conditioners. Contact the manufacturer or installer for advice

#### e) Fences or Barriers

A solid fence that hides the air-conditioner from view may also help to reduce noise levels. If neighbours can see the air-conditioner or if the fence has any gaps, this won't be as effective.

### f) Acoustic Enclosures

Enclosing the unit (e.g. in a wooden box with an absorbent lining) can be very effective, although it is important that the unit has adequate ventilation. This can usually be achieved by getting advice from the manufacturer or installer.

## g) (g). Modifications to the fan or compressor unit

Sometimes modifications can be made to the unit to reduce noise. For example, a noise absorbent sock can be fitted to some compressors. Discuss this option with the manufacturer or installer.

#### For further information please contact:

**Environmental Health Services at Mount Isa City Council on 4747 3200**