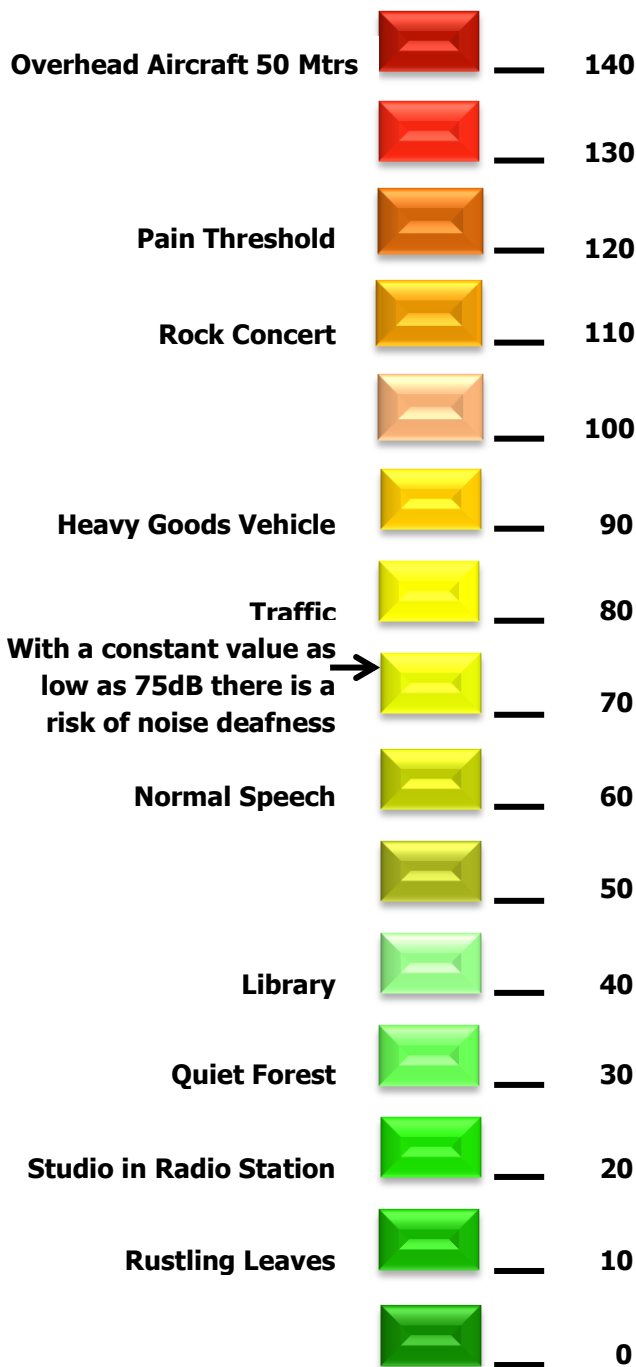


Sound Reduction

Sound doesn't have to be complicated...



How does sound travel?

Sound travels through the air like ripples on a pond surface when a stone is dropped into it. The sound radiates outwards in all directions from the source, gradually reducing in intensity or until an object stops its progress.

Sound (dB Decibels)

Sound is described in different ways but primarily in terms of intensity and frequency. The sound intensity is described in dB. A low dB indicates a soft sound, a high dB value indicates a loud sound.

Frequency describes how high or low pitched the sound is (Hz).

Sound Reduction

A sound's volume set at **60dB** decreased by...

- 3dB is just perceptible
- 5dB clearly noticeable
- 10dB Half the original volume

Recommended Indoor Ambient Noise Levels

Dwellings:

- Bedrooms 30-35dB
- Living rooms 30-40dB

Offices:

- Private 35-40dB
- Open plan 45-50dB

Typical noise levels

- 50 metres overhead aircraft 140dB
- Car alarm 120dB
- Passing train 90dB
- 20 metres from busy carriageway 78dB
- 20 metres from busy main road 68dB

Living with your windows is easy