

Frequency and Acoustic Comfort

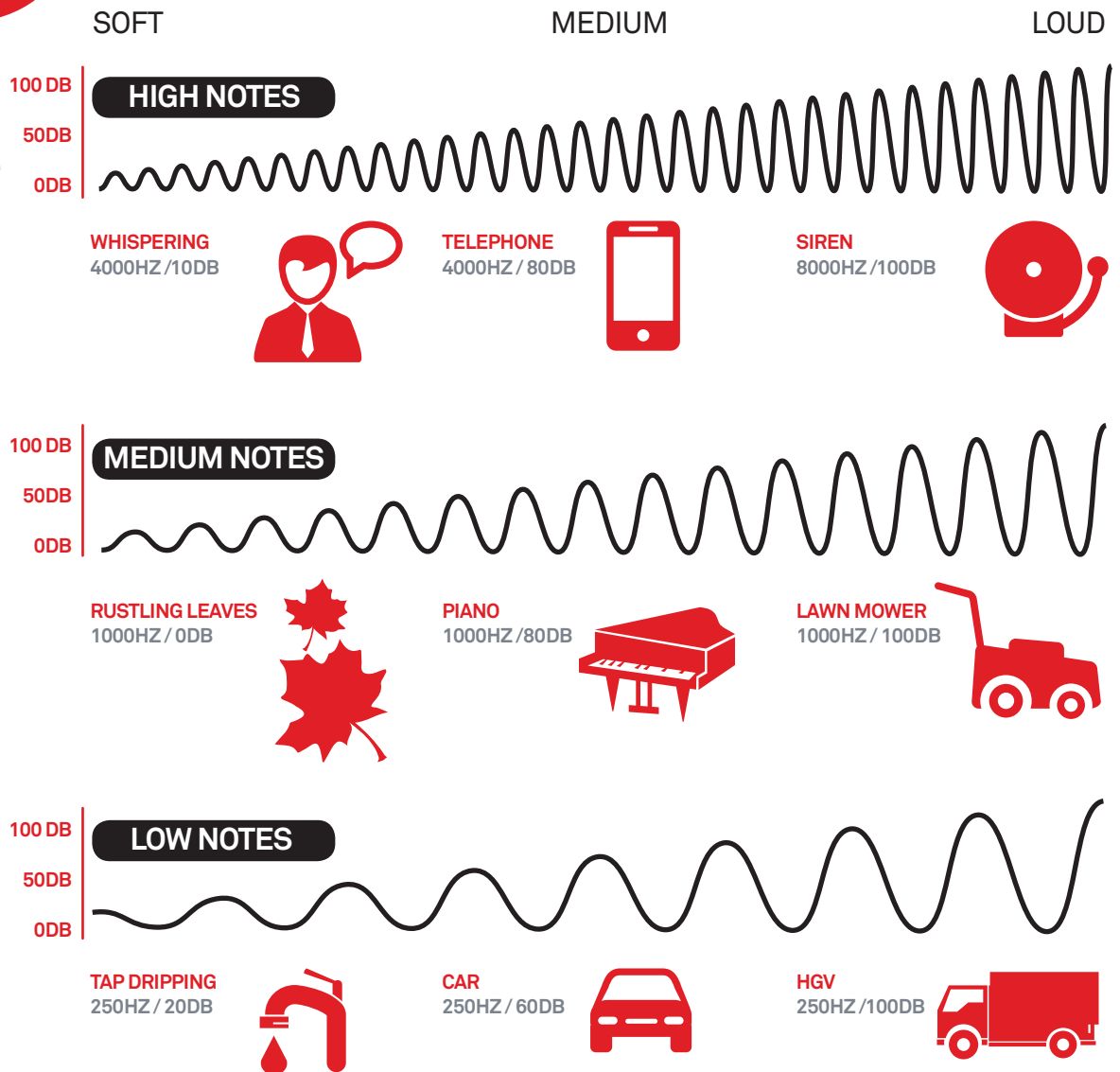
Soundwaves – just like the waves of the sea – vary in height, distance and speed. The frequency is the number of waves per second, and when you hear a different tone or pitch, it is due to the difference in the spacing of the sound waves. Waves that are close together are referred to as high frequency and

perceived as a ‘high note.’ Conversely, waves that are far apart are referred to as low frequency and are perceived as a ‘low note.’

The unit of measurement for frequency is the Hertz (Hz). The human ear can identify frequencies from 20Hz to 20,000Hz. When designing

for a workspace or educational facility we concentrate on the ‘speech frequency spectrum’ which goes from 250Hz to 4000Hz to build an overall picture of the ‘acoustic landscape’ taking into account the frequency and the internal ambient sound pressure as shown below.

HUMAN SPEECH
1000 TO 2000HZ
40DB TO 60DB



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