Opus Acoustic® Blades

Acoustek

Contents

Why Acoustic Treatment?

Noise: An irritant, a pollutant, a health hazard, yet accepted by many as ‘normal’.

The latter is evident in many restaurants and workplaces where the assault on ears can vary from chairs scraping floors, foot steps on hard surfaces, but more often general conversation where individual volume tends to increase relevant to the interfering sound reverberation, thereby contributing to the further mayhem.

Such mayhem propagates into an unhealthy auditory sphere formation bombarding the ears and all manner of other sensory perceptions.

Restaurant noise frequently exceeds 90dB, yet at 85dB the hair cells within your ears start to die - never to be regenerated, premature deafness is the outcome - not a probability a fact.

A good acoustic environment can:

- Improve taste of food
- Improve the ambient experience
- Encourage clientele to visit a conversation friendly environment
- Increase motivation by 60%
- Increase complex task efficiency by 50%
- Increase problem solving by 20%
- Lower adrenaline levels by 30%

Reverberate noise - an infinite number of sound reflections that will keep the ‘source sound’ audible for a short period of time.

Hard surfaces will reflect the sound more and bounce the noise wave back to meet its source, whereby it then joins the second wave of noise transmission and subsequently a third etc.

Performance

The performance of sound absorptive insulation is typically described by the Noise Reduction Co-efficient of the product. This NRC is a simplified single number that is the arithmetic average of noise attenuation over 6 frequencies: 125Hz, 250Hz, 500Hz, 1000Hz, 2000Hz, 4000Hz.

In sound absorption applications, the NRC is often used as a performance measure, the higher the NRC, the greater the sound absorption at those frequencies.

Absorption at low frequencies is often the most critical in building acoustics since it is typically the base sound that causes annoyance.

The typical treatment of acoustic problems is to stick 7mm or 12mm thickness 'Acoustic material' to the wall in the hope it might fix acoustic issues. However, such materials have a very low NRC rating of 0.30 to 0.40 = absorbing up to 40% of reverberate noise but reflecting 60% of noise. Such products are glued to a wall and once the tenancy expires or expands the 'make good' cost is significant as the material will of course damage the substrate wall when removed.

Acoustek products are designed for easy installation via paper template plus plastic clips, relocation being the easiest possible with minimal damage for subsequent 'make good'.

We also have the unbeatable NRC 0.97 whereby our tile products absorb up to 97% of reverberate noise. Our cost is more than competitive and with 11 patterns with 15 different colours we have a style & colour to suit most requirements.

Opus Acoustic® Blades

Utilising 25mm profile, proven acoustic sheet of NRC 0.65 we dissect the board into blades and position those blades either suspended from the ceiling or wall mounted. This collective blade positioning increases the absorptive surface area providing better interference with reverberate noise waves. Depending upon blade spacing we can achieve up to 0.90 NRC - absorbing up to 90% of reverberate noise.

The Acoustek result will look better and perform beyond any alternative product's ability.

Acoustic Lighting & Room Heat Dissipation

Opus Acoustic® Blades perform extremely well both acoustically and with room heat dissipation. The heat flows upwards past the blades whilst reverberate noise is intercepted within the increased surface area & absorbed.

The inclusion of LED lighting within the Opus system is easily installed prior or subsequent to the blade installation. Your local electrician can recommend the appropriate Lumens strength and supply a dimmer operation to enable the appropriate ambient lighting required.

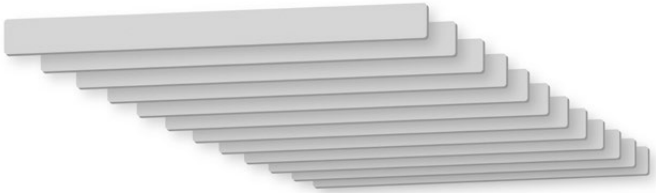
Tempo Major & Tempo Minor Acoustic Blades

Ceiling hung & wall hung. Whilst a basic blade design this product will enhance any room whilst curing it's reverberate noise issues, choose a colour or lighting to also enhance any decor.

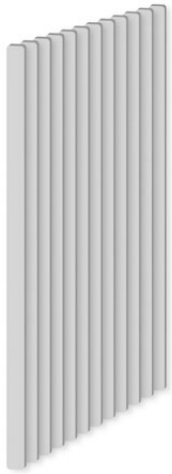
Tempo blades are parallel cut from proven acoustic material with minimum NRC 0.65, this being calculated on single side of the sheet being exposed. We cut the sheet into blades, thereby increasing the surface area - every surface of the board is now exposed.

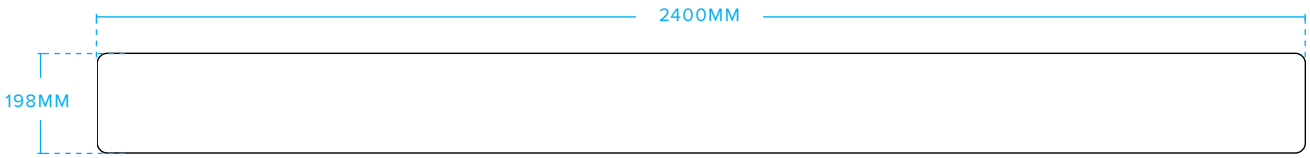
Depending upon blade spacings we can achieve up to NRC 0.90 - absorb up to 90% of reverberate noise.

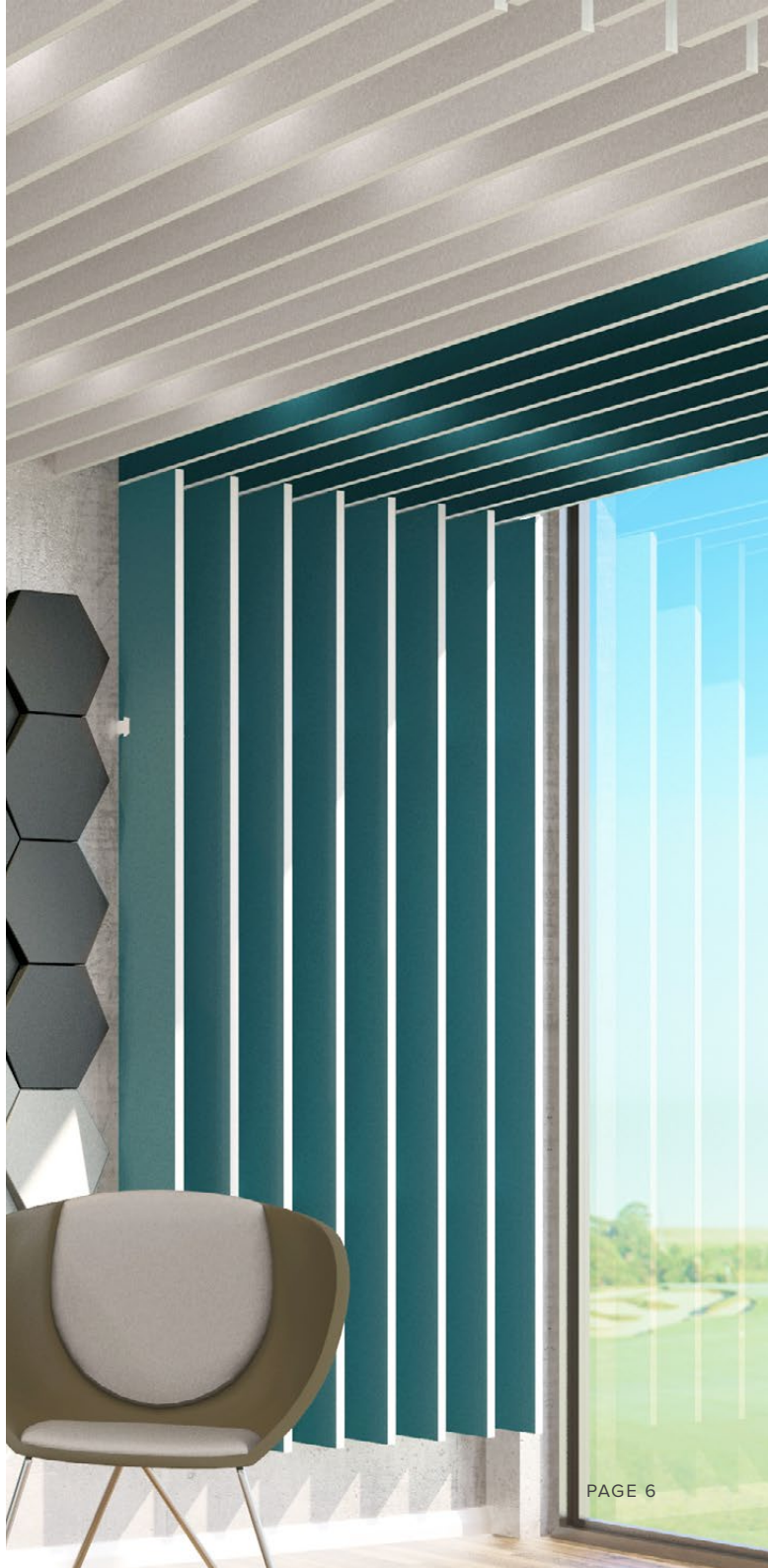
TEMPO MAJOR



TEMPO MINOR





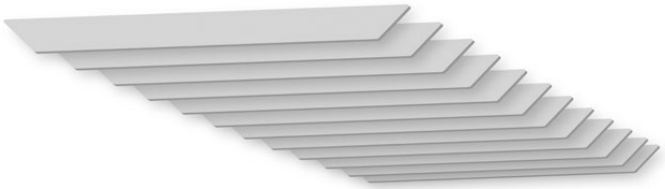


Sonata Major & Sonata Minor Acoustic Blades

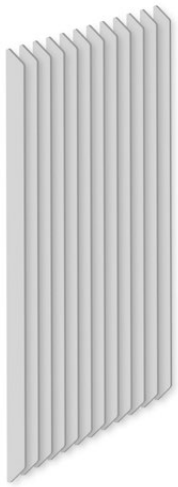
Ceiling hung & Wall hung.
The design change of a 45 degree angle terminating the end of each blade gives more individuality, the acoustic performance remains constant. The junction of ceiling and wall blades attempts a mitre giving detailed difference for the discerning.

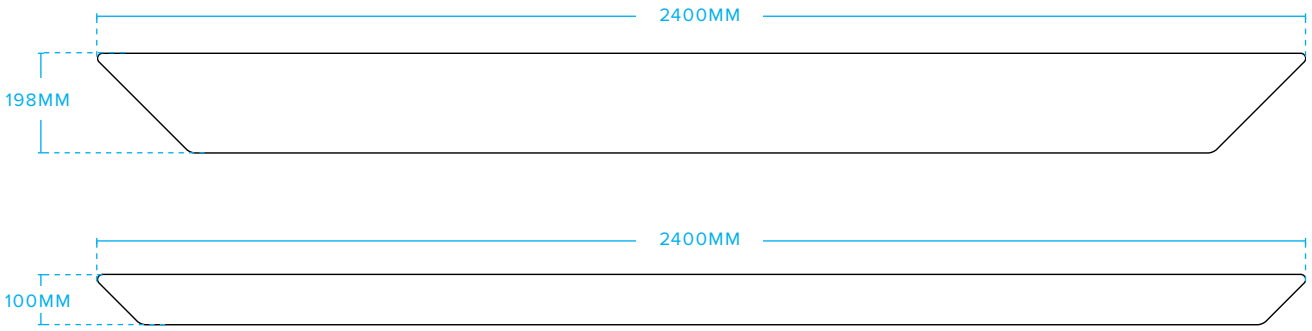
Sonata blades are parallel cut with the addition of a 45deg angle to finish the blade ends, we use proven acoustic material with minimum NRC 0.65, this being calculated on single side of the sheet being exposed.
We cut the sheet into blades, thereby increasing the surface area - every surface of the board is now exposed. Depending upon blade spacings we can achieve up to NRC 0.90 - absorb up to 90% of reverberate noise.

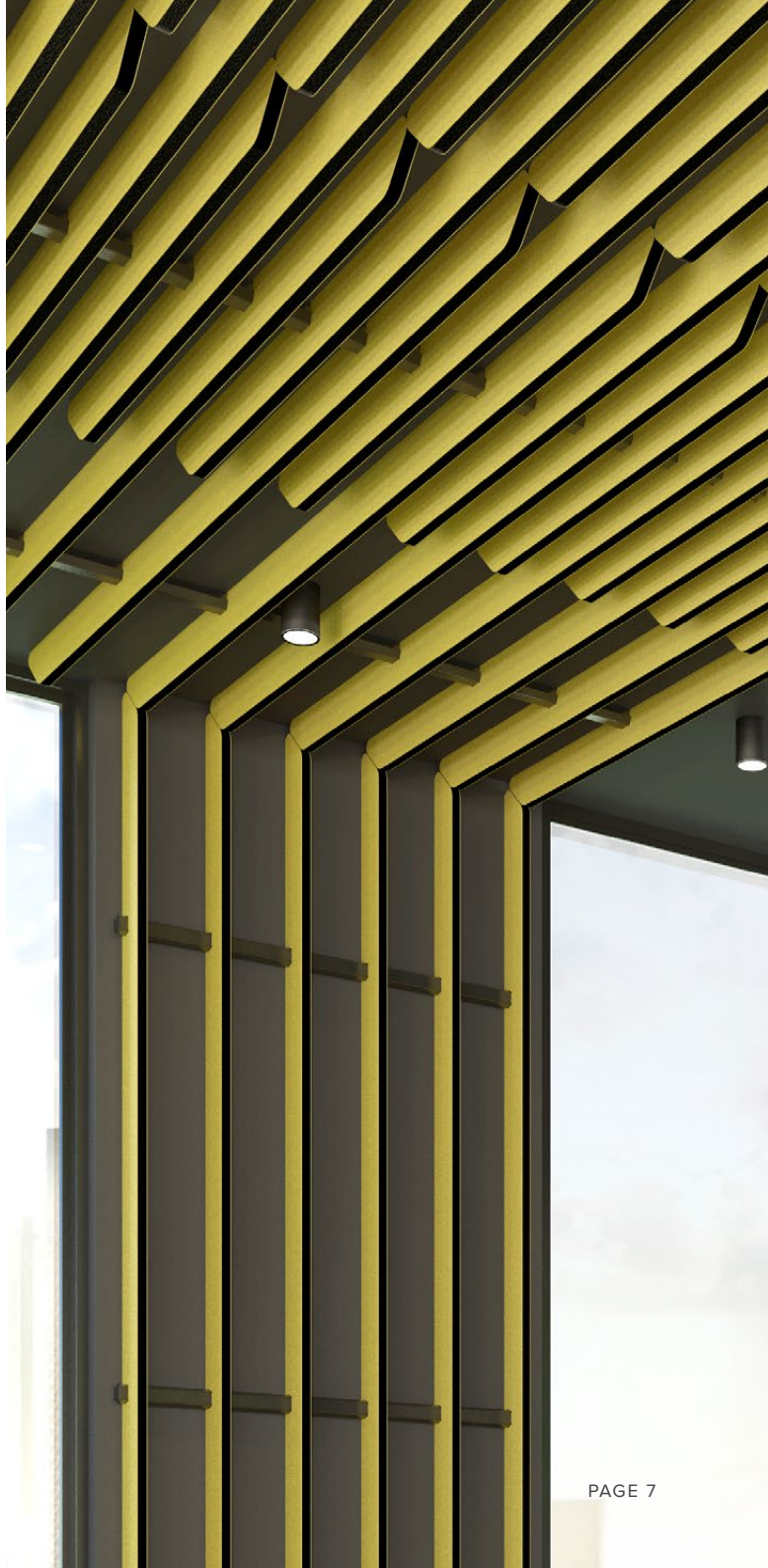
SONATA MAJOR



SONATA MINOR







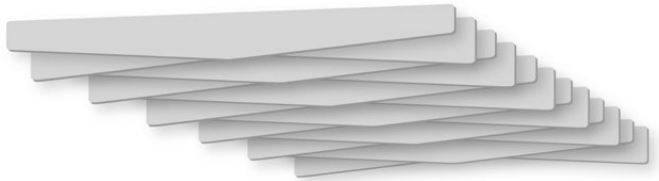
Vibrato Ceiling Hung Acoustic Blades

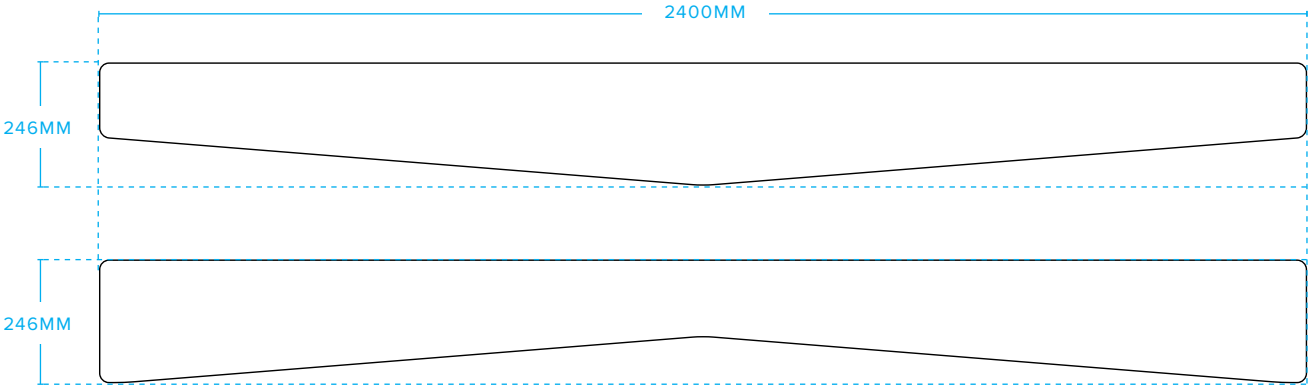
The alternating Vibrato blade shapes suspended from the ceiling provide extra design flair, this design has more complexity and interest, a great feature for any boardroom.

Vibrato has 2 opposing angled blades cut from proven acoustic material with minimum NRC 0.65, this being calculated on single side of the sheet being exposed. We cut the sheet and position as blades, thereby increasing the surface area - every surface of the board is now exposed.

Depending upon blade spacings we can achieve up to NRC 0.90 - absorb up to 90% of reverberate noise.

VIBRATO





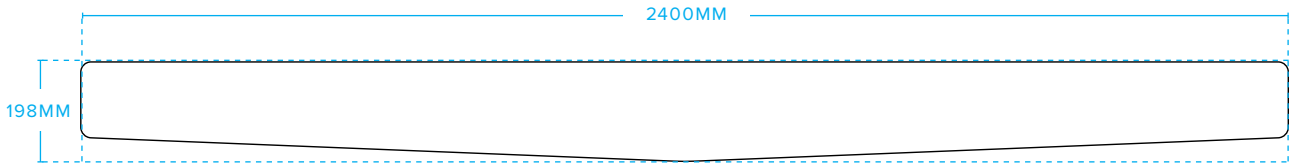
Adagio Ceiling Hung Acoustic Blades

Adagio has a more gentle flowing contour, aesthetic appeal is very subjective but this simple contour has individuality that will combine with any of the wall blades also as per our illustrated example the Diffuse acoustic tile suits perfectly without any loss in NRC ratings.

Adagio blades are shaped from 150mm to 198mm - forming an easy contour, the blades are cut from proven acoustic material with minimum NRC 0.65, this being calculated on single side of the sheet being exposed. We cut the sheet and position as blades, thereby increasing the surface area - every surface of the board is now exposed.

Depending upon blade spacings we can achieve up to NRC 0.90 - absorb up to 90% of reverberate noise.

ADAGIO



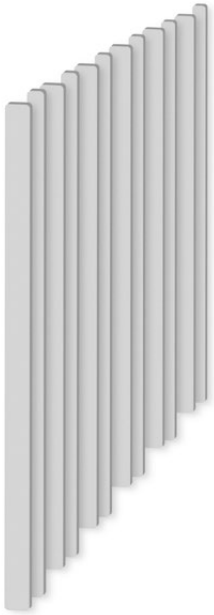
Melody Wall Mounted Blades

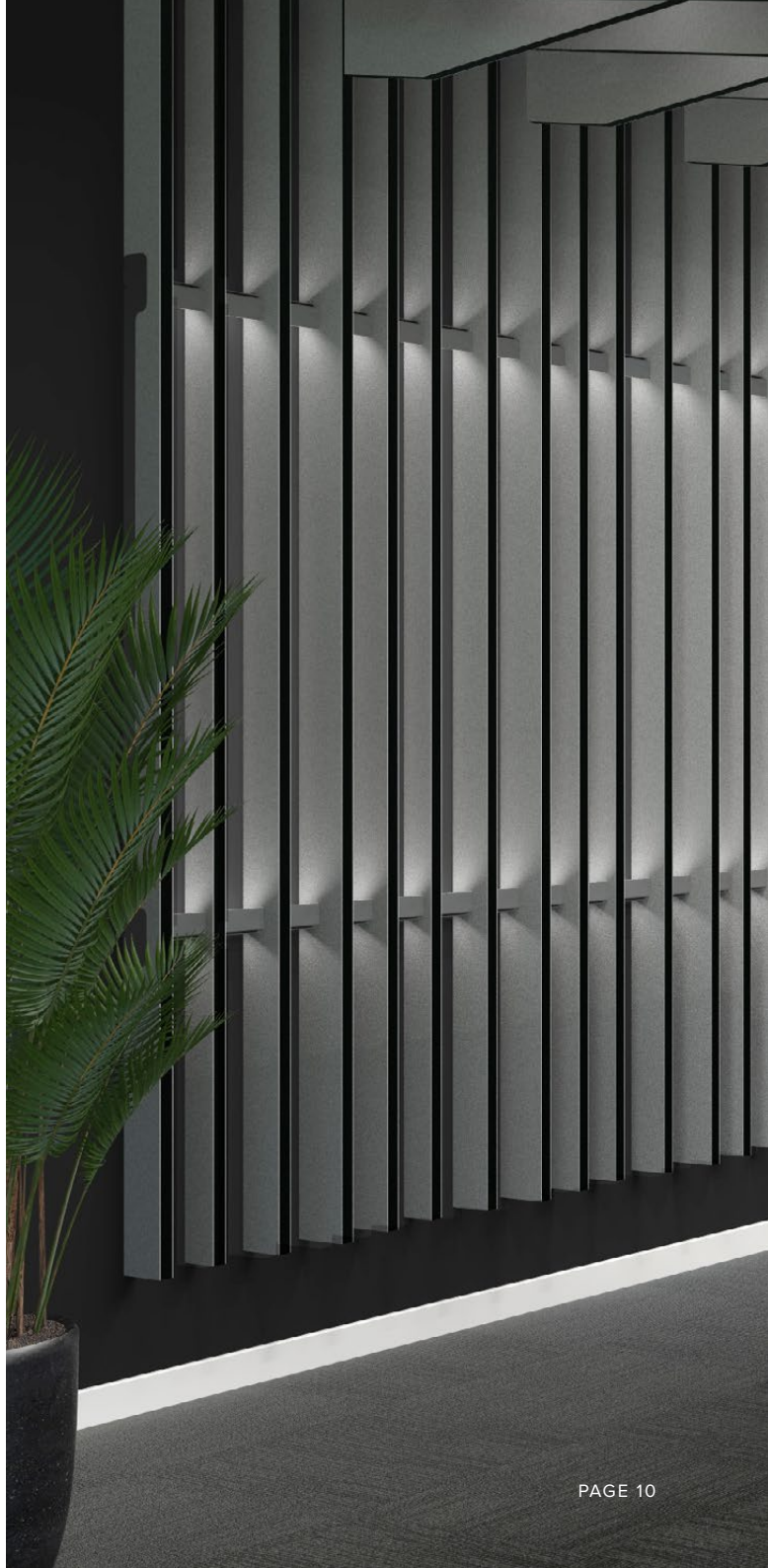
Melody Wall mounted blades incorporate 2 profile sizes of 80mm to 118mm profile providing a gentle undulating pattern, these can also be utilised for ceiling suspension with lower ceiling heights. The wall mounted option gives a gentle melody of shape that become very effective with noise attenuation.

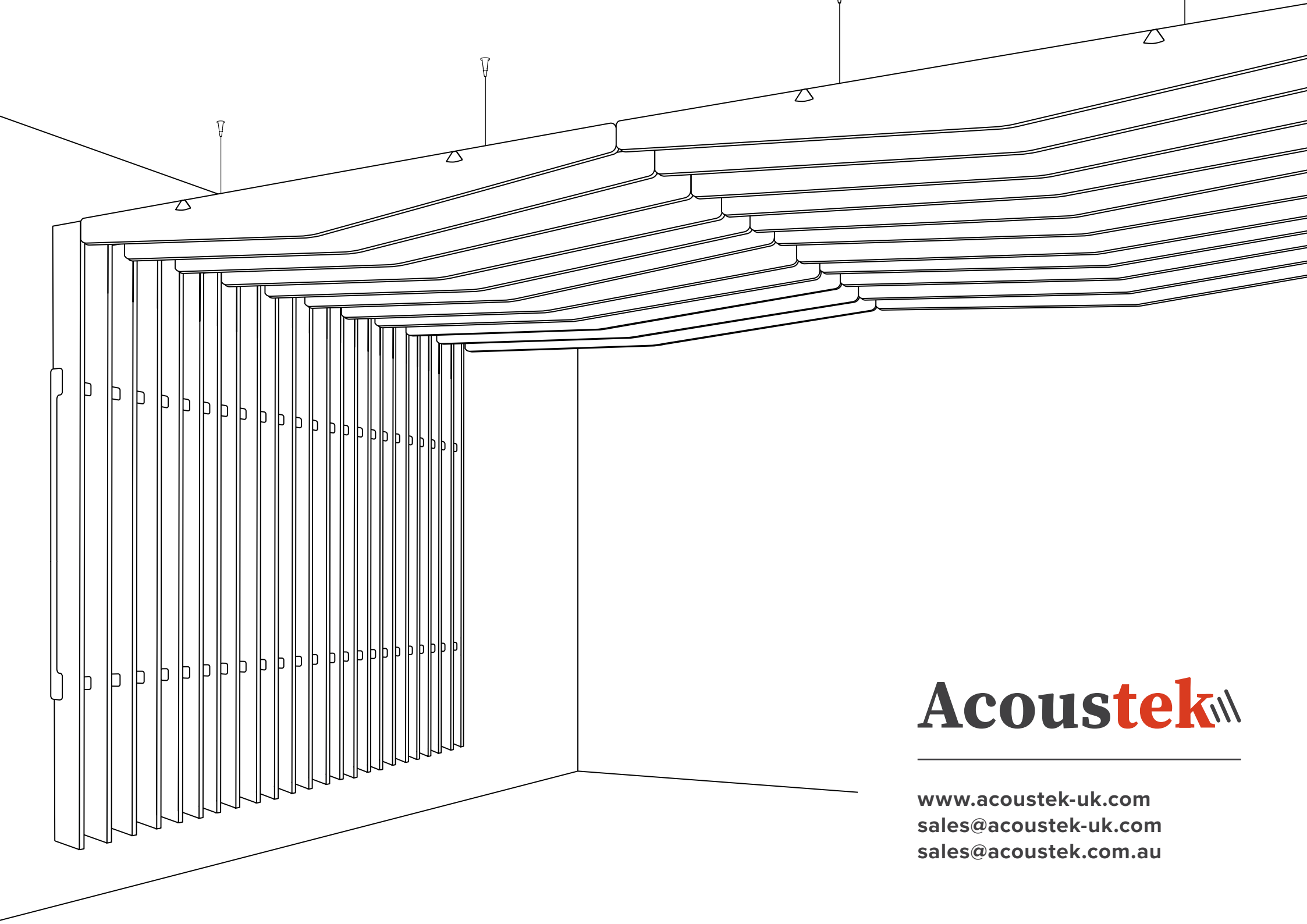
Melody blades are dimensioned from 80mm to 118mm profile, this provides the gentle undulating shape once installed, the blades are cut from proven acoustic material with minimum NRC 0.65, this being calculated on single side of the sheet being exposed. We cut the sheet and position as blades, thereby increasing the surface area - every surface of the board is now exposed.

Depending upon blade spacings we can achieve up to NRC 0.90 - absorb up to 90% of reverberate noise.

MELODY







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