

A meal for the senses:  
the value of acoustic  
treatment in restaurants

● Custom Groove  
in Empire

Rydes World Square,  
New South Wales



## A meal for the senses: the value of acoustic treatment in restaurants

Dining out is a sensory experience. People go to restaurants to eat food they would not otherwise eat, in a setting that is vibrant (or relaxing, depending on the restaurant), and do things differently than they otherwise would. For restaurant designers and specifiers, a huge amount of time and effort goes into creating the right ambience for the venue. How bright should the lighting be? What colours will bring the space to life? What construction materials and fittings should be used?

Given the thought that goes into creating these spaces, it's somewhat surprising that comparatively little time is given to restaurant acoustics. The minimalist design trends of modern restaurants mean that the majority of contemporary establishments are designed with hard, reflective surfaces and raw construction materials—think steel, concrete, wood, and glass—that offer no acoustic absorption. As a result, these spaces become excessively noisy.

All restaurants should have a level of auditory ambience, of which noise is a factor. People would feel self-conscious going to a restaurant that was as quiet as a library. However, by virtue of poor acoustic design, and lack of acoustic treatment, many restaurants' noise levels (noise being unwanted sound, commonly caused by reverberation or echo within a space) are unpleasant and unchecked—resulting in the discomfort of staff and diners, to the detriment of the businesses themselves.

There are significant health impacts that can result from prolonged exposure to excessive noise. There are the obvious hearing-related issues, such as hearing loss or tinnitus, but researchers have also linked noise to greater stress levels and increased annoyance, as well as a lowering of immune system function overall, making people more susceptible to illness. In fact, researchers from the University of Manchester in England discovered that background sound, unrelated to food, can influence both perception of taste and enjoyment of food.

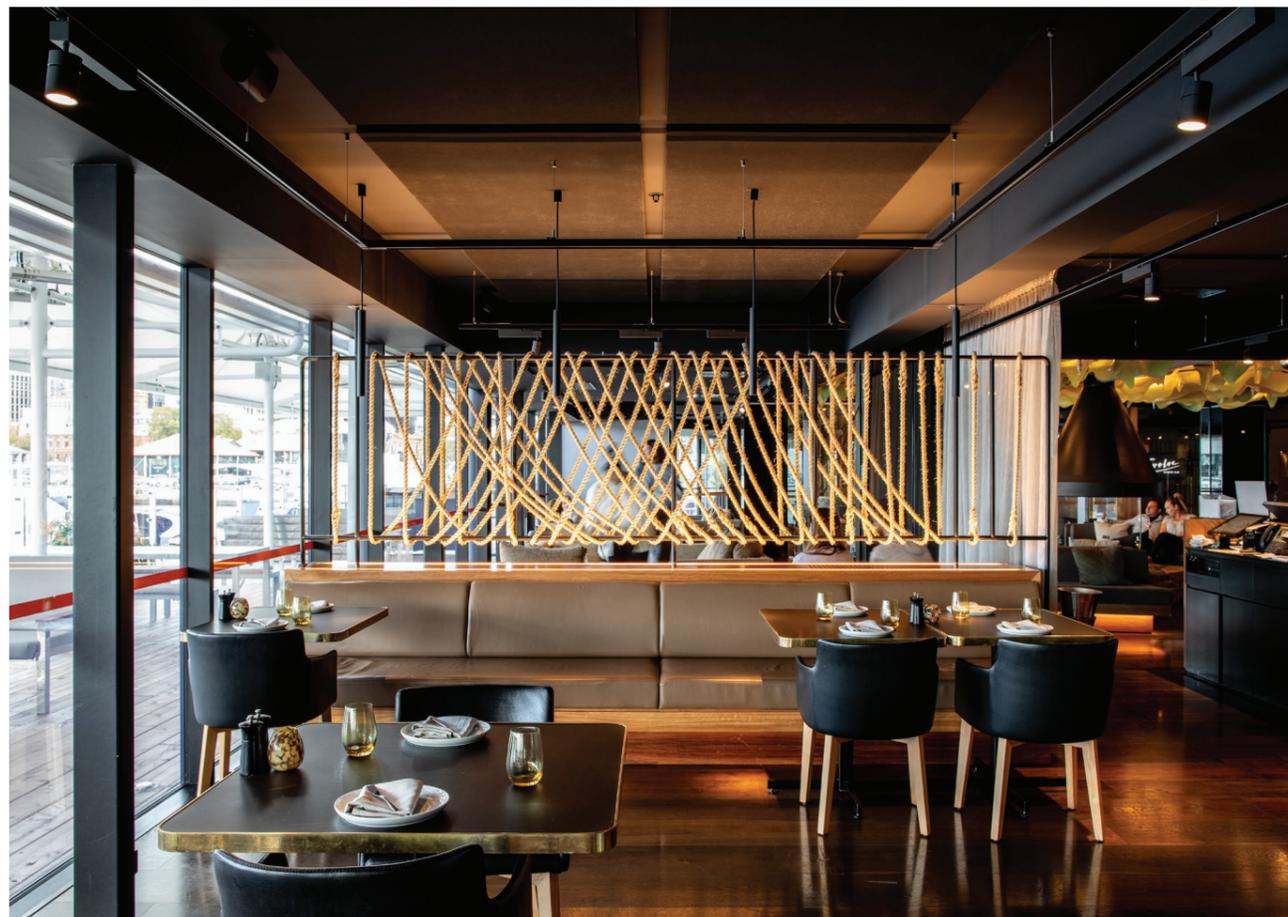
It's not uncommon to find restaurants where the sound levels are around 80 - 90 decibels, and even up to 95 decibels in some cases. To put that in perspective, normal conversation is around 60 dB, alarm clocks are about 80 dB, and power tools are around 90 dB. Considered in those terms, spending a couple of hours eating a delicious meal next to a circular saw seems fairly unappealing.

Another perspective is what is considered 'safe' by our regulatory and industry bodies. Prolonged exposure to a sound source above 85 dB is considered 'harmful' and can result in permanent hearing damage. Safe Work Australia has used this as a threshold and mandated that 85 dB is also the utmost limit for work without hearing protection. This means that noise is an occupational health and safety issue for restaurant owners and staff alike. Despite an attempt by Restaurant and Catering Australia in 2011 to have that limit raised to 100 dB (the level of your favourite song playing at full blast through your headphones) being unsuccessful, little seems to have changed in terms of restaurateurs' appetites for noise reduction.

Excessive noise is readily treatable. Obviously it should be considered within the design and fitout phase of any new space as much as possible, allowing acoustic treatment to be holistically integrated within the overall design and aesthetic of the space. However for restaurants with existing noise issues, or for restaurateurs who have taken over an established space, retrofitting acoustic treatment solutions is simple and cost effective.

Autex Acoustics® modern acoustic solutions exist in a range of forms—from common wall and ceiling panels to fins, baffles and dividers. They can blend into the background or become statement pieces in and of themselves, depending on the designer's desire—with the option to print photorealistic textures such as brick, marble, or wood. As they are made from polyester fibre, and contain at least 45% recycled PET plastics, they're lightweight, easy to install, and sustainable. They do not emit Volatile Organic Compounds—carbon-based gases that can aggravate respiratory conditions, and cause other health issues. But most importantly, when installed by experts, they reduce excessive noise in restaurants without compromising on the desired sound-based ambience of the space.

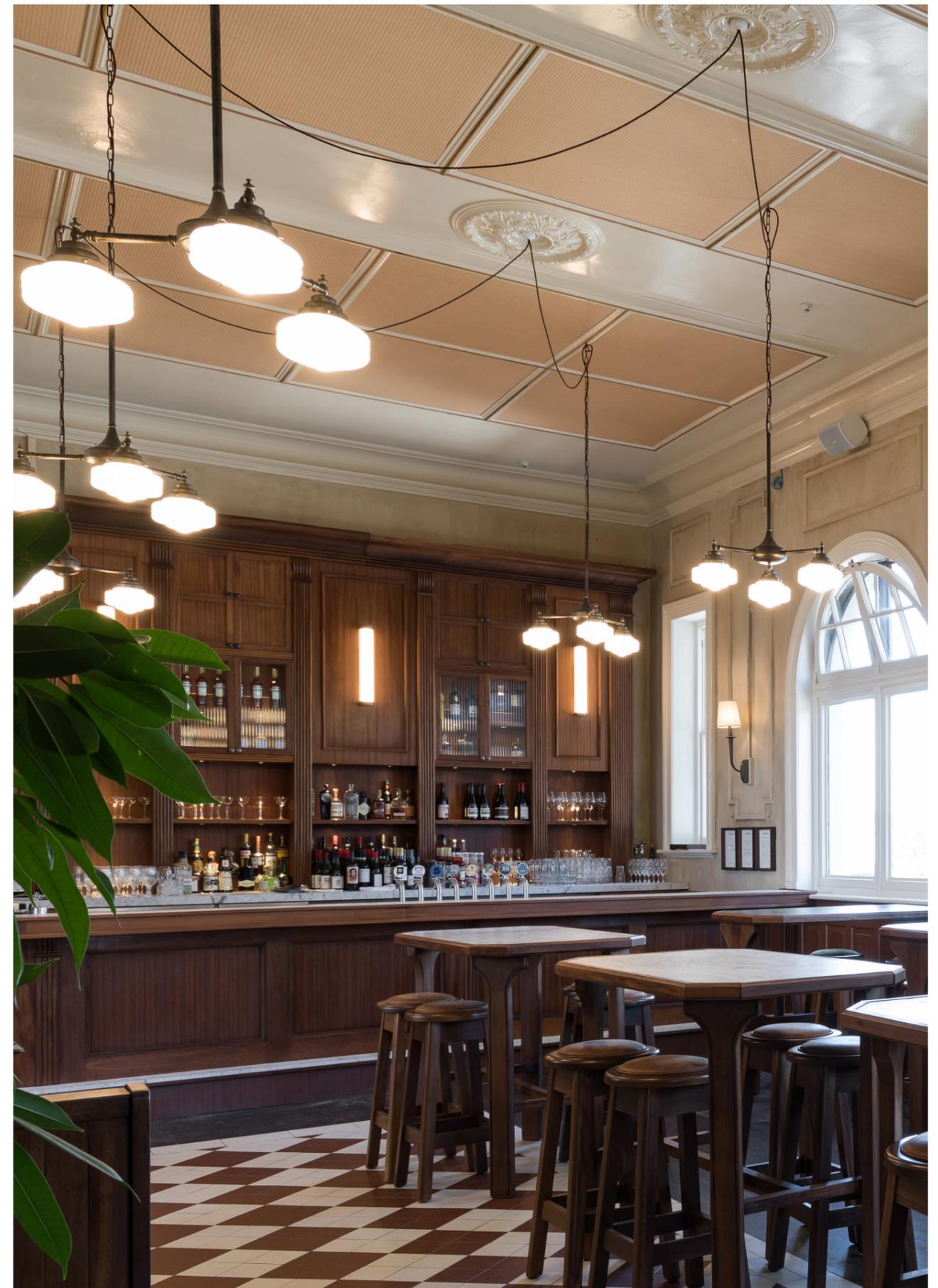
By opting for greater levels of acoustic control, designers, specifiers, and restaurateurs alike can protect the health and wellbeing of their patrons and staff, and create pleasurable auditory experiences that complement, rather than distract from, their delicious food.



● MacQ1, Tasmania

● Quiespace Panel in Nude Black

● Design: Circa Morris Nunn Architects



● Hotel Ponsonby, New Zealand

● Quiespace Panel with custom Print Texture

● Design: Ctrl Space

## Autex Acoustics®

For over 50 years, Autex Acoustics has been at the forefront of advances in acoustic solutions. As a leader in non-woven architectural textiles, Autex Acoustics supplies an increasingly sophisticated range of products to the building industry. Autex Acoustics solutions are made from 100% polyester fibre, with a minimum of 45% recycled PET plastics. They are non-allergenic, non-toxic and low VOC, making them healthy and safe for use across all hospitality applications.

Autex Acoustics Cube™ is an environmentally conscious, versatile and decorative acoustic panel. It is lightweight and semi-rigid, meaning it can be used as a wallcovering, creative medium and stand-alone feature. Cube is available in a range of sizes and thicknesses, so it can fit easily into any space. Available in a range of colours and customisable print options, Cube offers incredible visual and functional design flexibility, as well as excellent acoustic performance.

Autex Acoustics Quietspace® Panel provides high acoustic performance and is designed to absorb a minimum of 85% of the sound energy it meets, making it perfect for reducing reverberation and echo in spaces with high noise levels. Designed for minimal intrusiveness and able to blend into any interior environment, Quietspace Panel is available in black, white, or grey; for more colourful applications it can be laminated or overlaid with Vertiface®.

The modular Frontier™ system is available in two variations—Fins and Raft—and is designed to interact with spaces using an innovative adjustable channel and clip system—giving you complete control over the height, spacing, and placement of each individual component. Incredibly lightweight, Frontier Acoustic Fins and Raft are made from 100% polyester fibre and cut to form elegant 2D and 3D shapes.

## References

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Brown, S. L. (2017). *Minimalist design trends usually to blame for noisy restaurants, audio expert says*. Retrieved from <https://www.abc.net.au/news/2017-08-29/restaurants-too-loud-design-at-fault/8848134>



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