Listen up!

An overwhelming majority of the harsh noise experienced in a room is the result of sound bouncing off ceilings, floors and other hard surfaces. As a result, reverberant sound mixes with direct sound and causes an acoustic muddle that makes listening and communication difficult. In learning spaces, ensuring a high degree of speech intelligibility is critical, but it's not just educational facilities that are in need of sound quality and reverberation control.

Noise significantly impacts our experiences in any indoor environment. To control noise and give ourselves the pleasure of no echo, no reflection sound that colours or muddles amplified speech and music, the use of sound absorbing panels (acoustic panels) is indeed a life-saving option.

So, how do they work?
There are generally two types of treatment for reverberation – absorption and diffusion. Absorption is the trapping of noise by the fabric of the acoustic panel, and diffusion is the breaking up and scattering of the soundwaves. Most acoustic panels on the market address sound absorption. Sound diffusion, on the other hand, is more challenging to address because it requires acoustic panels to have (instead of a flat, linear surface) surfaces with varying depths, curves or other three-dimensional construction.

An acoustic product that addresses both absorption and diffusion is far more effective in controlling noises and for this reason, many acoustic panels are manufactured from fabric. The Soundtect 3D panels now on the market are a perfect example of this; their multi-planed faces breaking up the sound waves on contact and preventing the noise from bouncing back into the room and keeping it trapped inside.

And not only that, a strong commitment to environmentally ethical behavior is paramount. Certain brands like Soundtect keep to this by using 70% of recycled polyester (using fibres that started its journey as a plastic PET bottle) to create third-generation sound absorbing panels for an eco-friendly approach to acoustics, and in doing so, create an acoustic material of unbeatable quality and performance. It goes without saying that for companies seeking green options for their offices or other indoor spaces, as well as solutions for excellent acoustics, having sustainable sound absorbing panels will tick all their boxes.

Of course, sometimes there is a lack of wall space. Open-plan offices and glass partitioned rooms create a hive of reverberation and lack of privacy, but this doesn't mean they can't be treated. Ceiling applications in the form of suspended acoustic panels, hanging partitions, or even the addition of acoustic furniture, all assist with the control of noise created by the layout of modern designed offices and public places, and consequently improve sound clarity and limit distracting noise when added into a scheme.

In fact, ceilings being the largest expanse of flat reflective areas, are the prime location for the addition of acoustic panels and in many cases the only available space to do so.

The acoustic treatment of a room should be certainly considered at design stage as whilst it is easy to retrofit our acoustic panels into a building, it is the upheaval of the office and cost to the company in lost working hours to carry out the changes that makes the difference. The beauty of the acoustic solutions on offer in today's market allows the reverberation treatment to be very much a part of the design and in many cases the feature in an otherwise understated concept. After many years of noise being ignored. it seems we are finally listening to roar of the people to create the silence they crave.