SOUND ZERO YOUR GUIDE TO OFFICE ACOUSTICS

Discover the science of sound and how we can enhance your office space for visual impact and acoustic comfort.

ACOUSTICS INHARMONY WITH DESIGN

Sound Zero was born out of the need for acoustically smart design, driven by a shared vision and desire to craft spaces that look, and sound, great.

This Guide To Office Acoustics was created to provide insight into the challenges that many open-plan offices face. Offices are not simply a place to work. They should act as a hub for creativity, collaboration, and innovation.

This is why Sound Zero has developed a series of bright, interesting and idea-inspiring acoustic systems to suit the individual design requirements of any office space without compromise.



SOUNDZERO





OUR CLIENTS

Sound Zero has helped tackle noise issues for a number of high-profile clients, creating tailor-made acoustic solutions that are on brand and on trend.







INTRODUCTION

With open-plan office environments growing in popularity, a need has arisen for companies to assess their office acoustics.

This need has been propelled by recent statistics, stating that workplace noise negatively affects job satisfaction, causing a reduction in productivity.

Despite this, office acoustics can often get overlooked when measuring factors contributing to job satisfaction. Many companies highlight air quality, lighting, and thermal conditions as a priority for staff well-being. Whilst all of these are greatly important, we advise companies to assess their office acoustics with the same level of importance.

WHAT IS ACOUSTIC TREATMENT?

Acoustic treatment refers to the measures you take to control sound within a space. It mostly tends to consist of identifying the different surfaces in a room that are contributing to the room's noise problem and targeting those for treatment.





THE SCIENCE OF SOUND

Some noise issues are different to others and the solution depends very much on the situation. Noise is rooted in different sources and can be identified primarily as high frequency, low frequency and impact. It is important to identify the noise types you are dealing with in order to select both the correct acoustic solution and the correct method of installation.

When a sound is created, it propagates from the source in all directions, radiating outwards until it encounters a boundary element.

Three different points intersect when sound reacts with its environment that all contribute to what we hear:

DIRECT SOUND

This implies that the sound has not reacted with its environment before it reaches your ears (which is what we want).

REFLECTED SOUND

We hear reflected sound when the noise interacts with a surface that sends the sound bouncing back. This reflected sound can be incredibly obstructive when combined with the direct sound we mentioned as it causes the brain to work harder in decoding the two similar sounds to localise its source (which is how humans can tell which direction a sound is coming from). This mental conflict contributes to fatigue and a loss of concentration.

REVERBERATION

This is how long it takes for sound energy to dissipate in a space until it is inaudible. Your brain can cope with singular sources of reverberation as it helps us know how big a space is, but when your brain tries to unravel multiple reverberated signals all at once, it can struggle to create a clear sonic image of the environment, again causing tiredness and in some cases claustrophobic responses. When a sound wave encounters a surface, it is either absorbed or reflected. An example of an absorbent material is carpet.

Sounds will reflect off hard, shiny surfaces such as windows, desks and hard floors. The reflected sound wave will continue to travel until it reflects off another surface.

The sound you hear in a room is an accumulation of direct sound and all the sound waves being reflected off many different surfaces.

The key point to consider here is: how many hard, shiny surfaces are there in your office? The chances are quite a lot.

OFFICE ACOUSTICS ON PRODUCTIVITY AND CREATIVITY

If you asked the majority of businesses what it is that drives success and sets them apart from their competition, creativity and productivity would be fairly high up on the list.

To quote Albert Einstein, "Creativity is intelligence having fun."

And in today's world, the need for creativity and innovation is essential for a thriving, progressive business.

As a result, companies are cultivating cutting-edge office spaces that are designed to represent the companies' image and bring people together, with design and layout concepts such as:

- OPEN SPACES
- HOT DESKING
- PODCAST STUDIOS
- COMMUNAL WORK AREAS
- MODERN FURNITURE
- VIVID COLOURS

Along with this, however, offices contain a wide variety of hard, reflective surfaces that can greatly inhibit productivity and creativity. Paired with noisy equipment and colleague chatter, you're at risk of creating the opposite effect that openplan offices aim to deliver.

Strategic placement of sound-absorbing surfaces such as acoustic wall panels, acoustic ceiling tiles and soundproofing carpet underlay can contribute towards an environment that provides maximum acoustic comfort to staff.

Dedicated areas within an open-plan office for meetings or for times when extra concentration is needed, such as private booths, are also a welcome addition.

By strengthening an employee's feeling of privacy in an openplan office environment, it lowers their stress levels, whilst increasing their overall satisfaction and productivity.



10 COST-EFFECTIVE WAYS TO CONTROL OFFICE ACOUSTICS

Bad acoustics can be improved with a few simple tweaks. We always suggest exploring cost-effective options first, before making more expensive investments. Here we highlight some of our 10 cost-effective ways to control office acoustics.



- Careful arrangement of teams
 Dedicated meeting rooms/quiet areas
 Separate spaces for lunch breaks
 Plants
 Acoustically treat ceilings
- 6. Separate rooms for noisy machinery
- 7. Sound-absorbing materials
- 8. Lining underneath the desks
- 9. Playing ambient noise
- 10. Make partitions an office feature

If you would like to a read more in-depth evaluation of our cost-effective solutions, read our detailed article here

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THE OFFICE FIT-OUT PROCESS

With so many options out there, we understand that acoustic solutions can be a bit of a minefield. And it's not just about sticking some foam on the walls!

Offices are an exciting place to be these days. We're seeing a rise in podcast studios, break-out spaces and quiet pods, which is opening up a whole new world of acoustic possibilities...







STEP 1: INITIAL ACOUSTIC CONSULTATION

The Sprocess begins with the consultation. This is the most vital part of the process as it allows us to understand the nature of your requirements.

The client would normally specify us with some form of drawing or floor plan, or we can come and take measurements.

Following this, we ask the client about the type of traffic that's usually in different areas. Is it normally busy or quiet? Where are the social hubs? Where are the different departments within the office?

These types of questions allow us to gauge the level of acoustic treatment that might be required.

DISCRETE SOLUTIONS

During our consultation, we explore whether you want physical partitions or more <u>discrete solutions</u>.

Many offices choose to create separate areas within the openplan office. This has the benefit of housing noisy machinery and equipment in one place and separating different departments based on the nature of their work.

If you're part of a dynamic sales team, you may want to

collaborate with other members of your team, whilst not disturbing members of the wider company.

Our work may require us to start looking at noise transfer and discreet acoustics, and things that can be hidden out of sight; out of mind.

The main point here is that there are lots of options available to you, based on your individual needs. We're always here to listen and offer expert advice when needed.





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STEP 2: MODELLING ROOMS

The visual impact of our acoustic materials has to be seen to be believed. This phase gives you the opportunity to gain an insight into what your office will eventually look like.

Using the latest software, we will build a 3D computer model based on your floor plans and the information gained during the consultation.

This allows you to physically see how your office will look once our acoustic products have been installed.

Our plans will be broken down into a proposal document. This will contain various elements, including:

THE PAPERWORK

- Materials we'll be using
- Information on the materials (fire rating, safety standards)
- Fit and finish options
- Installation time scale

Of course, every office space is unique, and our proposal document will be aligned with each individual office's needs.

We aim to complete the proposal document within 48 hours of the initial site visit, but this will largely depend on the size of the project.



PROVIDING ACOUSTICAL SOLUTIONS DIFFERENTLY

The work we do for each client is bespoke. We pride ourselves on the level of interaction that we have with each client and we're prepared to adapt our model and offering if necessary.

With Sound Zero, we won't put any restrictions in your way. We're a solution-based company that's driven by creativity and acoustic comfort.



STEP 3: MANUFACTURING ACOUSTIC PRODUCTS

Our products are made to order at our own UK manufacturing facility, so you can be sure of exceptional quality and that everything made meets all the British safety standards.

We're constantly expanding our in-house manufacturing process and use cutting edge technology and machinery to deliver sustainable and eco-friendly products. We even have our own in-house recycling plant.



STEP 4: ACOUSTICAL INSTALLATIONS

During the installation process, there'll be a site manager that gets assigned to the install. That person will oversee the operation, ensuring that the work is carried out efficiently and to a high standard.

We have a team of highly skilled installers that work fast and provide professional results. We can even work out of hours to minimise disruption to your workforce.

THE COMPLETE PACKAGE

We approach each new project with the same level of perfectionism, whilst creating a tailored solution based on your individual requirements.

We're with you every step of the way, from design to install and all that's in between. It's what sets us apart. With Sound Zero, you get the complete package.

If you would like to create your very own office oasis, <u>contact</u> <u>Sound Zero today</u> to discuss your individual needs.





OFFICE ACOUSTICS SOLUTIONS

Our options are endless and each office is unique, but take a look at some of the solutions available to you and see how Sound Zero can improve your office acoustics.

PRINTED WALL PANEL PROS







PRIVACY PODS







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PYRAMID FOAM









17/





HEX PROFILE











BRAND COLOURED FOAM PROFILES







NATURAL CORK PATTERNS







RECYCLED PET FELT







ACOUSTIC PODS by **BLOCK LONDON**

Find your inner-office-peace and escape the office racket!

Sound Zero teamed up with the furniture designers over at Block London to offer a range of Acoustic Pods that bring an oasis of calm to any noisy office environment.

"With noise in the workplace becoming a huge topic of discussion we wanted to create office Pods that are both acoustically effective and in keeping with our core design principles.

"We turned to vocal booths that are used in the recording industry for inspiration because they are designed to isolate a singer whilst also keeping them comfortable and inspired. Form and function.

"Our acoustic Pods are a cosy space for workers to sit down and fully immerse themselves in a project, with the upholstered interior made in Camira acoustic fabric, you can sit back and enjoy your work free from distraction."

Block London's iconic Pod range has been designed specifically to keep external noise to a minimum, with its heavy duty open cell foam construction and convex diffuser front edge able to reject incoming noise, it's the perfect addition to any productive office. 22

Exclusive 10% discount



E: info@sound-zero.com



HIVE H 1600 x W 980 x D 740 mm

FOAM BOX H 1600 x W 980 x D 740 mm

CLOUD NINE H 1600 x W 980 x D 740 mm





CONCLUSION

This guide is aimed to demonstrate the importance of acoustics in office environments. We view acoustics as something that should enhance a space through its visual impact, and we apply this ethos to every project we undertake.

If you'd like more information on how we can improve the acoustical comfort of your office space, <u>get in touch today</u>.









ABOUT US

Sound Zero offers a comprehensive range of soundproofing acoustic solutions for music studios, residential and commercial buildings, industrial premises, public spaces, and many other specialist areas, providing complete noise control for any environment.

When people think of 'acoustics', it's common to picture unattractive foam panels with little attention paid to the aesthetics, and this is what often puts people off. At Sound Zero, we like to do things a little differently. We believe that acoustic comfort should align itself with design, and our product catalogue reflects this.

Creativity is at the heart of everything we do, and we aim to enhance any environment through the power of acoustics. Our work with <u>Stella McCartney</u>, <u>Natural History Museum</u> and <u>Ministry of Sound</u> demonstrates our ethos, placing us as thought-leaders in our space.

There is no one size fits all approach when it comes to acoustic control, but Sound Zero can help you identify the problem areas and offer a unique and effective range of acoustic solutions for noise reduction, soundproofing, and sound treatment.



THANKS FOR READING

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