

Acoustic Products

Can't Hear Yourself Think?

For a more harmonious workplace, check out these five pieces of sound advice



↑ Acoustic treatment on just one wall of this town hall in Wollerau, Switzerland is enough to reduce echoes

Increasingly, workplaces are designed to be casual, fun places – like a loft or cafe. But a cool-looking interior with lots of exposed surfaces can have a negative impact on the acoustics of the office, or how it sounds.

“Until recently, sound has been slightly shrouded in mystery,” says Richard Grove, head of acoustics at architecture firm, BDP, “but over the past 12 or so years, there has come to be much more of an understanding of it and how it affects the workplace environment.”

Recent research shows that 60% of workplace time is spent on quiet concentration and it takes on average 25 minutes for a worker to return to the original task when interrupted. A good acoustic environment can reduce stress (adrenaline levels) by 30%, improve task motivation by 66% and increase concentration-based task performance by 50%.

To help office designers take advantage of the new research, Acoustic Products, specialists in high-quality cost-effective acoustically controlled environments, has put together a five-point primer for sounder sound design.

1. Understand who is using the space and what kind of noise they make.

Walk into many a badly planned agency and you'll find lots of employees wearing headphones. They may be trying to block out the noise of colleagues next to whom they were placed because office managers thought “knowledge workers” prefer a louder environment.

In fact, the sound space workers prefer often depends on the exact work they are doing. So office-planners should issue questionnaires about what people are up to,

the noise it makes as well as their tolerance for din – and organise the office accordingly.

2. Get to know how sound works and how it can be reduced.

Sound in the workplace is a complex matter, taking in pitch, variability, information vs. noise and the human ear and brain. However, the most important things to understand are, firstly, that sound reaches the ear in three main ways: directly, through early reflections, and through longer reverberation.

The second big thing to know is that this is bounced off the hard surfaces in a room, such as exposed soffits, desks, windows and walls. Soft surfaces, like fabrics, acoustic screens, baffles and partitions absorb the sound.

It's hard to guess exactly what the result will be – so acoustic software is useful to help you visualise how sound will reach room-occupants.

3. It's not all in the mind – but a lot is.

Psychoacoustics looks at the way sound is perceived – which is not the same as the sound itself, although they are related!

The science tells us that overheard conversations are the most distracting – even quiet ones – and that things are worse when you can see people's lips moving.

We also know many people experience unwanted sound as a lack of privacy, which can knock productivity.

Finally, we know that cubicles can make noise seem louder due to sensory deprivation.

4. Give employees lots of sound options.

Most people aren't tied to their desks. So a workplace should have lots of different zones where people



↑ BDP's design for PwC Sheffield shows the benefit of having several sound zones for a variety of work styles

can carry out a variety of activities, from quiet, focused heads-down work through to boisterous meetings – maybe over lunch – via one-on-one phone calls.

Be sure to place intermediary sound zones between places of low and high noise to prevent complaints.

5. Strike a balance between a wet and dry sound space – and save money.

It is wrong to assume a workplace in which you can hear a pin drop is ideal. In fact, too much sound absorption can knock out all reverberation and create a “dead” space. That is good news for specifiers because they don't have to splurge on lots of screens, baffles or acoustic panelling. And creating a perfectly-sound-balanced workplace might be more affordable than you thought.

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