

Where & How Sound Masking Technology Can Help

From ensuring proper confidentiality of information and helping patient sleep in healthcare facilities to reducing noisy distractions in open-plan offices while providing employees with better acoustic privacy and a focus-friendly environment, the benefits of sound masking technology have been the subject of numerous scientific studies.

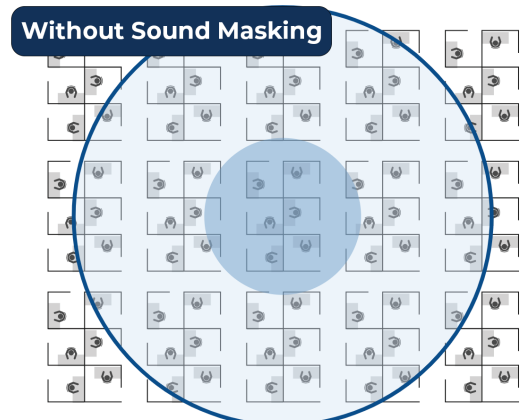
Making Open Offices Less Distracting and More Private

It's yesterday's news: open-plan offices may be paved with good intentions but they're also filled with unsatisfied workers. They're not exactly getting the best of press lately either. What makes them so increasingly unpopular? **Too little privacy and too many distractions.** Two major complaints that are inextricably linked to space acoustics—a key aspect of occupant comfort which is still too often downplayed in office construction projects.

Of course, sound travels very easily throughout open-plan offices, given that there are no doors or walls to stop it. Because of this, private conversations between colleagues or over the phone can be clearly heard by pretty much everyone across the floor. This not only makes it difficult for workers both nearby and further away to get into flow and concentrate on their tasks, but it also makes everyone uncomfortable about being themselves, discussing private matters or simply collaborating, in fear of disturbing others or being overheard by the wrong persons.

Reducing the Radius of Distraction for Open-Plan Office Workers

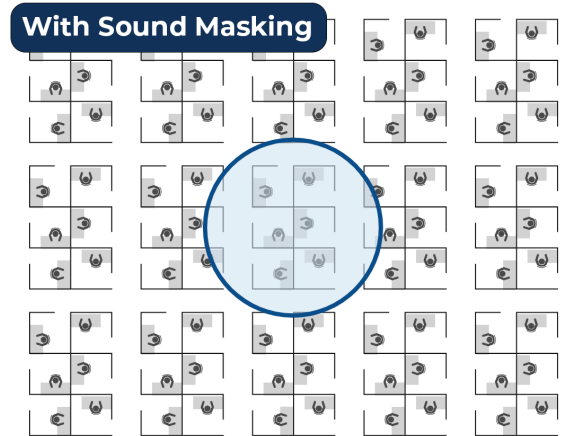
Sound masking improves the employee experience and performance in open-plan offices by significantly reducing their radius of distraction. A scientific study carried out in a banking call center by Valtteri Hongisto of the Finnish Institute of Occupational Health has shown that open office workers get a lot less distracted by conversations, and any other incidental sound for that matter, happening within a radius of 15 to 40 feet from where a sound masking loudspeaker is located.



Acoustic Privacy Without Walls

Despite the absence of walls and visual privacy, open offices can and should at least feel more private acoustically. It's one thing being able to clearly see everyone working around you, but it's quite another being able to clearly hear each word spoken by everyone around you. Sound masking helps with the latter by making conversations around you less intelligible.

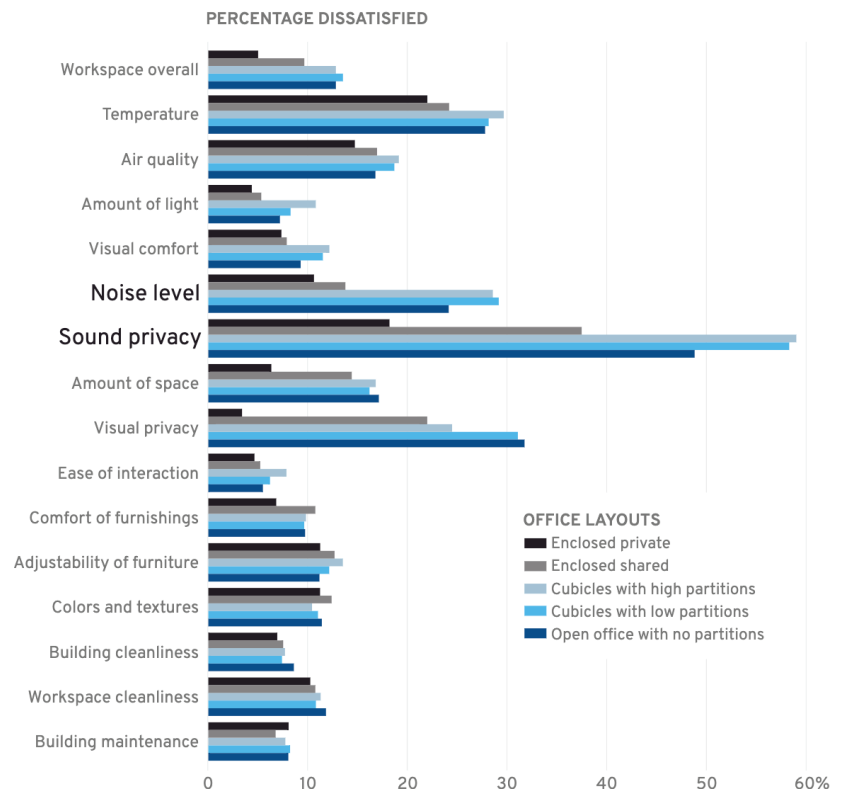
With sound masking, open-plan offices can be the collaborative and stimulating working environment they were always meant to be, while providing employees with a greater sense of acoustic privacy and helping them stay focused on what matters. Of course, they'll still see each other working, but they won't be able to clearly hear each other talk over the phone, chat with colleagues, or think out loud.



Sound Masking Can Solve Two of the Biggest Complaints About Open-Plan Offices

By adding a continuous, low-level ambient sound to an environment, sound masking can help make conversations for listeners that aren't intended to hear them unintelligible, and therefore much easier to ignore.

Stop Noise from Ruining your Open Office
- Harvard Business Review



What Researchers Say About Open Offices and Sound Masking

Sound masking systems can be used to add neutral background noise that will cover speech sounds and other distracting noises. Sound masking is an effective way to lower the speech intelligibility index (SII) and create good acoustical conditions. Laboratory simulations have also found that sound masking improves the execution of complex cognitive tasks and reduces perceived stress.

Workstation Design for Organizational Productivity - CNRC

Appropriate sound masking is necessary to achieve acceptable speech privacy between two neighbouring workstations [...] A significant improvement in objective speech privacy occurred after installing a sound masking system [...] The need for further acoustic improvements became negligible because major acoustic problems no longer existed after installing a sound masking system.

Effects of sound masking on workers - a case study in a landscaped office - Valteri Hongisto

An ideal ambient noise level is approximately 45 dBA. If the noise level is much less, speech privacy will be substantially reduced. If it is much higher, the noise will be a source of annoyance and may reduce speech privacy because people will talk louder. The maximum noise level should therefore not exceed 48 dBA. Because it is important to achieve an ambient noise level within a very small range of levels, and because noise levels should be evenly distributed throughout the office, this is usually best achieved using electronic masking noise. Of course, this also allows the spectrum, as well as the level, of the masking sound to be optimally set to maximize the speech privacy without undue disturbance.

Criteria for Acoustic Comfort in Open-Plan Offices - Bradley, J. S.; Gover, B. N.

The main argument in favour of open plan offices is the expected reduced cost relative to closed offices with full height partitions. The cost savings may be a little reduced with the extra expense of meeting acceptable speech privacy requirements. However, these additional costs are usually assumed to be small relative to the costs of decreased performance by distracted office workers [...] A successful open office should include an optimum masking sound spectrum.

The Acoustical Design of Conventional Open Plan Offices - Bradley, J.S