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© Fraunhofer Institute for Building Physics IBP, Stuttgart 2023 Indispensable element of good room acoustics

Sound masking in office environments



www.ibp.fraunhofer.de/ office-initiative

Improving concentration levels with sound masking

Sound masking is the targeted superimposition of background noise (e.g. annoying background speech) with neutral natural or artificial sounds. It reduces the disturbances perceived by employees, enhances their performance and increases their sense of privacy. At the same time, it does not conflict with occupational health and safety regulations.

Basic principle of sound masking

To improve acoustic conditions, noise is added to the environment, which is not something most people would intuitively understand. Background noise is increased in a specific way without raising the rating level applicable to occupational health and safety regulations. This makes it possible to mask distracting sounds, such as colleagues' conversations.



Would you like to implement a needs-based acoustics concept in your offices? Are you looking for a competent partner who can develop and implement such a concept for you?"

Get in touch with us!

Advantages of sound masking

- Sound masking reduces the so-called distraction radius.
 Fewer people are affected by the ambient noise.
- Enhanced employee performance and increased satisfaction
- Fewer work interruptions and less stress
- Office activities with a high disturbance potential, such as phone calls or meetings, can be better reconciled with activities such as concentrated work that requires a quiet environment.

In open-plan office environments, implementing the best acoustic measures is not enough to sufficiently reduce the impact of disruptive speech (known as "irrelevant speech effect"). Sound masking is therefore a further element that can be used to optimize acoustics in offices. Sound masking is a further means of acoustically conditioning office environments in addition to organizational measures, shielding and sound absorption.

Getting started with sound masking

For sound masking to develop its full effect, not only is a needs-based concept extremely important but also the way it is implemented. Therefore, it is crucial to encourage acceptance of the system among employees by:

- ... Teaching how to use sound masking correctly
- ... Developing pleasant sound masking signals
- Informing about the system and how it works
- Training courses & demonstrations
- ... Evaluation
- Taking its context of use into account

Sound masking indispensable element of good room acoustics

Fraunhofer IBP's range of services encompasses the development and implementation of needs-based acoustics concepts. These comprise four different aspects:



Sound masking, or the targeted treatment of background noise, does not replace the other aspects of integrated acoustics design, but nevertheless constitutes an important building block for good room acoustics.

For inquiries, advice or a non-binding offer, please do not hesitate to get in touch with us at any time. For more information, please visit:

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