

# SOUND MASKING – INDISPENSABLE ELEMENT OF GOOD ROOM ACOUSTICS

The range of services of the Fraunhofer IBP comprises the development and implementation of user-friendly acoustic concepts. These concepts comprise the ABC of room acoustics combined with proper zoning:

- A (absorb)
- B (block)
- C (cover/mask)
- Z (zone)

Sound Masking and a targeted approach regarding the basic noise respectively, do not substitute the further elements of the integrated room acoustical conditioning, but represent an important component of efficient room acoustics.

## SOUND MASKING IN OFFICE ENVIRON- MENTS

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For inquiries, consulting, or a non-binding offer, please feel free to contact us. For further information, please refer to

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### Photo acknowledgments

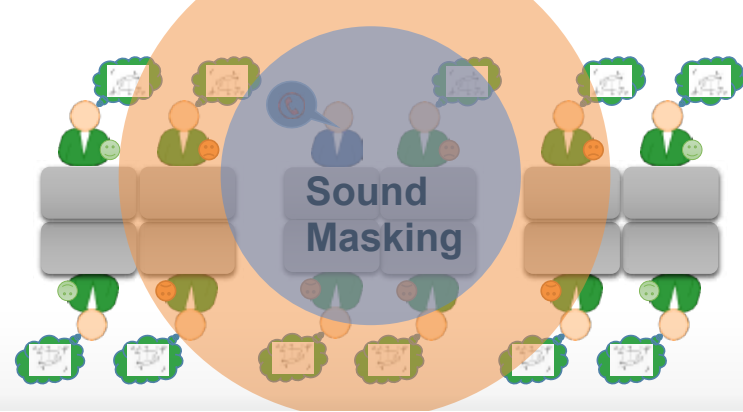
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## IMPROVING CONCENTRATION BY THE USE OF SOUND MASKING



Sound Masking is a suitable method to purposefully overlay background noise (e. g. disturbing background speech) by neutral, artificial or natural noise. It reduces perceived disturbances, and increases the performance and the sense of privacy of the employees. Besides, Sound Masking is not in opposition to the health and safety regulations.

### The Basic Principle of Sound Masking

In order to improve the acoustic conditions, noise is added to the environment – which is difficult to understand intuitively for most people. The background noise is raised purposefully, without increasing the noise rating level relevant for occupational safety. Thus, disturbing noise, such as conversations of colleagues in the background, can be covered.

### Advantages of Sound Masking

- Sound Masking reduces the so-called distraction distance (rD). A smaller number of persons is affected by environmental noise.
- Increase of performance and satisfaction of the employees.
- Less interruptions of work and reduced stress.
- Promoting better compatibility between office work with a high interference level (by phone calls or meetings) and work requiring efficient acoustic shielding (such as quiet focused work).

The impact of disturbing speech in open-plan offices (in science known as "Irrelevant Speech Effect") cannot be reduced sufficiently by the usually applied acoustical measures alone. Hence, Sound Masking represents a further component to optimize the acoustical office design.

### Introduction of Sound Masking

Besides an appropriate design of Sound Masking that meets the user demands, the way it is implemented is essential to be fully effective. In this context, it is particularly important to promote the acceptance of the system among the employees by:

- teaching the proper use of Sound Masking
- developing pleasant Sound Masking signals
- providing information about the system and its operation
- training and demonstration
- evaluation
- considering the user context.

**You would like to implement a room acoustics concept into your office spaces that is designed to meet the needs, and you are looking for an expert partner for the application-orientated development and implementation of this concept? Please contact us!**