



Acoustic Design for Focus



Quiet the noise. Protect the focus.

A short guide on why offices can be distracting, and how sound masking and acoustics help improve productivity.





#1

Noise is the #1 employee complaint across office spaces.

Speech is Special: A 2020 study showed that attempting to concentrate during normal-volume speech raised cortisol levels and caused more physiological stress compared to silence and ambient noise.

What sabotages focus



Distractions

When unexpected off-task information captures our attention.



Interference

When off-task information gets confused with task information.



Interruptions

When a distraction or interference pulls us off a task entirely to start a new task.



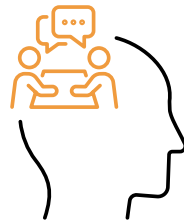
The Cost of Distraction

71%



of employees are not engaged at work.

40%



of employees seek employment elsewhere due to stress and disengagement.

\$450B



estimated cost of employee disengagement in the U.S.



Reduced productivity: Sound expert Julian Treasure reported that there is a 66% drop in productivity in open offices.



Designing for focus can:

Improve worker
concentration by

48%

Reduce employee
stress by

27%

Lower work
errors by

10%

Eliminate conversational
distractions by

51%

Did you know? It is possible for a space to be too quiet. Microsoft's Anechoic Chamber, recognized as the quietest place on earth at -20.3 dBA, is so quiet people can hear their own heartbeat - and have not been able to tolerate more than 45 minutes in the space.

Deep work requires focus



77%

of employees prefer a quiet environment when focus is needed.

But, employees can't access it



69%

are dissatisfied with the noise level at their primary workspace.



The problem is rarely volume

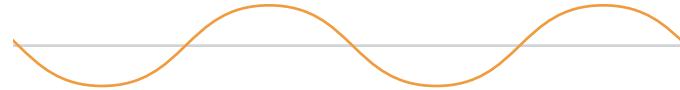
Most offices are not overly loud, but they carry sound. A colleague's phone call, a hallway chat, a video meeting two desks over: none of it is deafening, but all of it is understandable, and understandable speech is what pulls attention away from the task in front of you.

Research on office noise has long found that speech is more disruptive to concentration than other sounds of the same loudness, because the brain automatically tries to follow the words. Modern layouts make this worse. Open floor plans, glass, exposed ceilings, and hard floors give speech a long, clear path to every ear.

The VoiceArrest sound masking system by MPS, provides white noise solutions for virtually any space.

[Learn More](#)

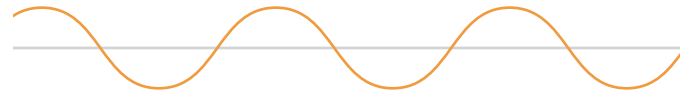




Low Tone, Low Frequency

Long wave (50 - 250 Hz)

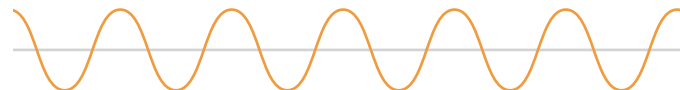
Heating systems, ventilation, elevators, copy machines, server rooms



Mid Tone, Speech Frequency

Mid-length wave (250 - 2500Hz)

Speech, vowels, consonants



High Tone, High Frequency

Short wave (2500 - 12000Hz)

Ringtones, typing/clicking sounds, children

Reduce noise where it makes the biggest difference



Open work areas

Masking shortens the distance over which conversations can be understood, so people at neighboring desks are no longer part of every call.



Offices and meeting rooms

Gaps, doors, and shared ceiling space let speech through. Adding ceiling and wall panels help absorb that sound so less of it travels across the workspace.



Collaboration and break areas

Active spaces are meant to be lively and foster a great company culture. Using a combination of acoustic panels and sound masking keeps that energy from spilling into the focus zones next door.



Reception and waiting areas

People waiting should not overhear what is said at the check-in desk. VoiceArrest's Adaptive Volume adjusts the volume based on the existing noise level and ensures that the masking sound remains at an appropriate level.

The ABC's of Speech Privacy

Absorb – using acoustic panels or dividers can absorb distracting sounds as well as cut down on visual distractions.

Block – installing partitions can reduce both acoustic and visual distractions.

Cover – adding a source of unstructured, low-level background sound with a modern, adaptive sound masking system can cover distracting noise and increase speech privacy.

Diffuse – utilizing wall panels and a mixture of surfaces help to spread sound energy evenly in a space.



Masking + Absorption

Masking works best in a room that is not also fighting echo. Where rooms are hard and reflective, speech arrives louder and lingers longer, which forces the masking level up. Adding absorption first, then masking, gives a calmer result at a lower masking level.

MPS offers both layers. Ceiling baffles and clouds such as Luna, wall panels such as Vero, and integrated LED baffles calm the room itself. The VoiceArrest system handles what absorption cannot. Together they form one designed soundscape rather than two separate fixes.



Two Tools

Absorption: Ceiling baffles and clouds, wall panels, and dividers soak up sound that would otherwise bounce around. Rooms have less echo and lower overall noise, and speech does not carry as far.

Explore ceiling baffles
and wall panels

Two Jobs

Sound Masking: An engineered background sound raises the noise floor just enough that distant speech drops beneath it. Words stop being intelligible, so they stop being distracting.

Explore sound masking
solutions



Sources

Common sources of occupant dissatisfaction with workspace environments in 600 office buildings

<https://journal-buildingscities.org/articles/10.5334/bc.274>

2013 State of the Global Workplace Report, Gallup

<https://www.steelcase.com/research/articles/topics/privacy/privacy-crisis/>

Workplace Acoustics Study: Published 2019

<https://www.interface.com/content/dam/interfaceinc/interface/publications/brochures-collateral/ams/a-e/acoustics/Interface%20Acoustics%20Report-v6.pdf>

Speech is special: The stress effects of speech, noise, and silence during tasks requiring concentration

<https://onlinelibrary.wiley.com/doi/10.1111/ina.12733>





1100 Professional Dr, Suite 100
Plano, TX 75074

866-557-8438

mpsacoustics.com