

Productive Silence

Noise Distraction Affects Employee Satisfaction and Productivity

By Fred Folsom

Consider the plight of James Goodson, (alias) director of Facilities for a Fortune 500 company. After two years in the planning and construction process, his company was eagerly awaiting the completion of its new world headquarters complex. Most of the project is open plan, and many employees were moving from traditional private offices. They were naturally apprehensive about the change, but accepted the forecasts that the new, more open, and collaborative environment would be conducive to working effectively.

Unfortunately, within three months after the initial move in, many of the company's valuable high-tech employees were up in arms, with regular complaints about constant speech distraction. They simply could not think and concentrate in their new \$50 million building. The problem was the project was not designed to manage today's high levels of noise distraction. Sadly, this true story is repeated all too often in corporate office buildings, due to a lack of understanding and attention to acoustical design.

Noise Distraction in Today's Office

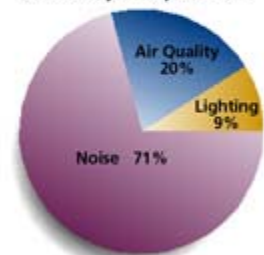
Two recent studies clearly show that speech distraction is rated by employees as the No. 1 facilities problem that affects their satisfaction and productivity. The two most prominent office acoustical problems are excess speech noise distraction in open plan, and a lack of protection for confidential conversations in private offices.

Manage office noise problems with the following cost-effective solutions:

- Quantify acoustical performance with Computer Acoustical Modeling. This software predicts the level of workstation-to-workstation speech privacy that will result from the current design, while still in the planning stage. Modeling will eliminate the risk of expensive remedial changes after occupancy.
- In open plan office environments, provide higher absorption ceilings with a NRC rating of 0.70 or better; use sophisticated sound masking systems that are site tuned before occupancy in one-third octave band performances; select the appropriate furniture panel height and acoustical performance.

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Contributions To Workspace Distractions: *Dynasound Collaborative Studies of Five Major Corporations*



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Experts in office equipment trends predict that voice-activated computers and desktop video-conferencing will both become common in open plan offices within the next three years. The consequence of this added speech will increase today's already high levels of distracting speech noise. Now is the time to remedy speech noise distraction in open plan offices.

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- In closed plan office environments, use wall systems that achieve “as built” performance of 35 STC or better; use ceilings with a 35 CAC; treat open air grilles with sound baffles; add sound masking to inhibit people from hearing sensitive conversations.

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Sound Masking Systems

Masking works by slightly raising a building’s background sound level, so that employees are not able to easily understand and be distracted by speech conversations – increasing speech privacy by 50 percent. Sound masking is inexpensive and easy to install even in occupied spaces, ranging from \$1.25 to \$1.50 per square foot. Financial models show a 300- to 500-percent return on investment for increased privacy.

Recent developments in sound masking make these systems ideal in flexible spaces. New patent pending smaller masking speakers are now available to provide masking within raised floor cavities. Either static or air-handling raised floors can accommodate these new speakers. The benefits of including sound masking in raised flooring systems include lower installed costs than overhead masking, exceptionally even sound distribution, and more predictable performance with the masking located closer to occupants’ conversations in open or closed plan.

Additionally, new masking speakers with a “finished” architectural appearance are available for exposed structure facilities, which often lack suspended ceilings.

Fred Folsom is executive vice president of Norcross, GA-based Dynasound Inc., the industry’s largest provider of design-build sound masking solutions.