

## **Insider view**

### **Quiet! Cutting down on office noise is as easy as ABC**

Presley Werlein III

A survey of 400 business managers conducted by the Building Owners and Managers Association and the University of Maryland identifies noise control as the greatest opportunity for productivity improvements with an estimated average increase of 26 percent.

Findings of another survey, commissioned by the American Society of Interior Designers, are similar. More than 70 percent of respondents said that they would be more productive if their office were quieter.

The formula many professionals use to achieve these results is the ABC Rule:

- **Absorb noise.** Adding absorptive ceiling tiles, wall materials and flooring reduces the energy and, therefore, the volume of sounds reflected off their surfaces back into the office space. To limit the lighting system's impact on the absorptive performance of the ceiling, select a system that incorporates a minimum number of ceiling fixtures while still meeting the specified lighting requirements. Minimize the size and number of reflective materials, such as glass and metal, used in the space because these will reflect noise and conversation.
- **Block noise.** Another method of controlling noise is to block sound transmission. Closed-plan designs use walls and plenum barriers to block sound, but blocking also is a relevant technique for open concept offices.

Locate noisy office machines and high-activity areas, such as call centers, in remote or isolated areas. Maximize the distance between employees and minimize direct paths of sound transmission from one person to another by seating employees facing away from each other on either side of partitions.

- **Cover noise.** Since offices exist for active purposes, silent environments are not an option. Yet the typical response to acoustic problems is to try to achieve silence by using these first three methods of noise control.

A sound-masking system typically consists of speakers installed in a grid-like pattern above the suspended ceiling. The system introduces a specific background sound at controlled levels across the facility, rendering speech unintelligible to people outside of the immediate area of an office.

Just as with ergonomic factors, there is a comfort zone for the volume of sound. The background sound level should be high enough to provide noise control and speech privacy, yet low enough to be comfortable.

*Presley Werlein III is principal of Houston-based Executive Wall Concepts Inc.*