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## Doing more with less: Budget early for acoustics solution

Corporate real estate executives are faced with constant challenges of growth and contraction. It doesn't matter which direction the organization is going, budgets exert pressure on CREs.

By addressing office acoustics on the front end of a construction project, costs can be lowered, worker densities can be increased and the cost for the next reconfiguration can be lowered as well.

For the sake of privacy, barriers are constructed within commercial office space. Many times, office walls are built from the floor to the underside of the structure in order to provide privacy. The costs associated with this decision cascade through the budget with increased costs for HVAC components, steel, sheet rock and fiberglass insulation.

Not only do structure-high walls increase the "first cost" of construction, but also they increase the cost of the next project by limiting flexibility. When the walls are torn down, the ceiling grid is in shambles, and the area needs another construction project.

The use of walls built to the underside of the ceiling grid allows for greater flexibility, faster construction and lower costs. If demountable walls are used, the reconfiguration costs

and facility disruption are further reduced when the space is modified again.

The usual argument against this lower cost method is speech privacy. The tool that allows the less expensive method of construction is sound masking.

Sound masking is an electronic system that produces a soft background sound. Most people describe the sound as being similar to air conditioning. Using sophisticated electronics, the sound is precisely tuned to cover the sound of speech. The result is significantly improved privacy.

The sound of speech travels from office to office through multiple paths. These weak acoustical links allow conversations to be overheard. Even facilities that have spent extra dollars on structure-high walls and insulation are plagued by sound that travels through window mullions and HVAC components. Sound masking is the equivalent of throwing an acoustical blanket over these weak links.

Numerous industry studies have confirmed that the most frequent complaint in offices is the distracting conversations of coworkers. Distractions are an impediment to productive work and they reduce worker satisfaction.

A study recently was published that surveyed more than



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23,000 individuals in 142 different buildings. The findings include that more than 80 percent of respondents have a problem with neighboring conversations. The study concluded that employees get "caught up" in "irrelevant speech that disrupts memory when task loads are high."

Privacy also can be dramatically improved in open plan workstations. By increasing privacy and reducing distractions, workstations can be successfully used by higher-level employees and managers.

When quality systems furniture panels are used, at a minimum height of 54 inches, the privacy in workstations can be improved to a point that allows low distractions from neighboring conversations. In fact, some well-designed workstations with sound masking exceed the privacy levels of offices without sound masking.

In a recent planning meeting with a client, the management team decided to reorganize how it utilizes its space. By limiting

the number of private offices and moving managers, directors and even some vice presidents into workstations, this fast-growing technology company was able to significantly lower its construction budget and increase the efficiency of its space. The budget and space savings allow the incorporation of specialty areas within the space that cater to the employees and improve the worker's perception of the workplace.

Of course, some employees need a high level of privacy for their regular duties. These relatively few offices along with the conference rooms will be built with demountable partitions fastened to the underside of the ceiling grid.

Using fewer building materials and increasing densities allows for lower construction costs. Additionally, with today's heightened environmental consciousness, fewer materials and more efficient use of facilities improves the sustainability of the new or reconfigured space.

By proactively addressing office acoustics, worker productivity is improved through increased privacy and reduced distraction. The construction cost savings and the ability to address environmental sustainability are the cherry on top.▲