

UNIQUE CEILING SYSTEM CONTRIBUTES TO HIPAA ORAL PRIVACY COMPLIANCE AT ST. LOUIS DENTAL PRACTICE

Speakers That Look Like Acoustical Ceiling Panels Provide Sound Masking as well as Background Music

Pediatric Dentistry of Sunset Hills is a dental practice in suburban St. Louis that cares about its patients and its patients' confidentiality. That's why speech privacy was an important concern when the practice recently expanded and remodeled its offices.

As office manager, Marcia Albrecht, notes, "We were very conscious of HIPAA regulations, not only as they pertained to oral privacy, but also electronic and written privacy. We were thinking about them all through the design process because this was our opportunity to do it right."

Albrecht explains that the five-dentist practice used to operate a satellite office. Then, about a year ago, the decision was made to close the satellite and expand the home office to accommodate all the dentists in one location. As a result, the office nearly tripled in size, from 3,000 square feet to nearly 8,000 square feet.

When it came to the oral privacy aspects of the new space, the office manager knew she wanted to take measures to ensure that conversations about or with a patient were not overheard. "However, we also knew we didn't want to totally enclose our offices, nor did we want to install cubicles for use with patients checking in or out."

As one measure to help ensure speech privacy, a number of counters were placed away from the main reception desk so that patients could speak more privately, especially when it came to financial matters. To help further ensure speech privacy, the practice also decided to install a unique ceiling system that provides sound masking as well as background music from speakers that look just like standard ceiling panels.

Speaker Panels Blend In with Ceiling Panels

Chosen for use in the office was an i-ceilings® Sound System from Armstrong. The system is comprised of special ceiling panel speakers, electronic processors and amplifiers to generate the sound, and custom tuning for the space.

The flat, 2'x 2' speaker panels are offered in the same patterns as many popular Armstrong ceilings. As a result, they blend in with the acoustical ceiling, making the space more visually pleasing. This aesthetic benefit did not go unnoticed by Albrecht. "In our old space, the speakers were cut into the tiles, giving the ceiling a cluttered look," she says. "The new ceiling is much cleaner and neater in appearance."

CI Select, a St. Louis-based full service systems integrator, installed the unique sound system in the new offices. Dave Dwerlkotte, one of the principals, explains that in most applications, music speakers are cut into and placed in the ceiling, while sound masking speakers are hung in the plenum, bouncing the electronic masking sound around the plenum and then back down through the ceiling plane.

However, i-ceilings speaker panels work differently. They are flat speakers that simply lay in the grid like standard ceiling panels, radiating sound downward in an omni-directional pattern. Because of this design, they provide wider sound dispersion and more uniform coverage than conventional cone speakers.



An Armstrong i-ceilings Sound System is helping the Pediatric Dentistry of Sunset Hills comply with HIPAA oral privacy regulations by providing sound masking throughout its office, including this reception area.

Speaker Panels Provide Masking and Music

To meet the requirements of the new dental offices, CI Select installed 46 i-ceilings Privacy™ speaker panels throughout the space. Privacy speaker panels are specifically designed to provide sound masking as well as background music and paging. While the system has all three capabilities, the dental practice is only using it for masking and music right now, although two of the speakers are also being used for sound reinforcement for a large plasma screen in the main waiting area.

Dwerlkotte notes that one of the reasons the i-ceilings system was chosen was that it can combine masking, music and paging in the same system, thereby eliminating the need for separate systems for each. According to Dwerlkotte, this is an important feature. “The ability to provide multiple capabilities from a single system is much more efficient,” he says. “It also makes for a very compact, space-saving system.”

The system is also designed to accommodate multiple zones. At the pediatric dental offices, for example, the space is divided into four separate audio areas, each of which can be individually controlled. A pair of Armstrong 2-zone TRI-PAK™ TR-230 processors with built-in amplifiers deliver the sound to the zones.

Dwerlkotte also notes that i-ceilings speaker panels are easier to install and relocate than conventional speakers because they simply lay in the grid like standard acoustical ceiling panels. In the case of the dental offices, his technicians averaged about four speaker panels per hour compared to 1-1/2 cone speakers per hour.

HIPAA-Related Installations Are Increasing

Dwerlkotte points out that the use of sound masking as part of a balanced overall acoustical design to help meet HIPAA oral privacy compliance continues to increase. As examples, he cites two other applications his firm recently completed in addition to the Pediatric Dentistry of Sunset Hills offices.

The first involved the installation of 150 i-ceilings Privacy speakers at a large call center operated by SSM Health Care, a full service healthcare network that operates seven hospitals in the St. Louis area. In this case, the six-zone system is driven by a larger processor with two separate amplifiers and used solely for sound masking in order to improve speech privacy in this sensitive area as well as in the records management and materials management departments.

The second application, much smaller in scope but just as important to HIPAA compliance, called for the installation of an i-ceilings Sound System in the registration area of St. Joseph's Hospital in St. Charles, Missouri, one of the hospitals in the SSM system. “This space contains a registration desk as well as a number of nearby cubicles where incoming patients discuss personal information with hospital administration personnel,” Dwerlkotte explains.

“To help keep conversations in this area private, we installed five Privacy speakers along with a small 1-zone TRI-PAK TS-110 speaker-mounted processor/amplifier. This type of set-up is ideal for ‘spot-masking’ applications like this in which sound masking is only required in a small area located within a much larger area.”

Regardless of whether the installation is large or small, the recent experience of CI Select attests to the fact that sound masking in healthcare applications continues to grow, due in large part to its ability to help meet HIPAA oral privacy requirements.



CI Select installed 150 i-ceilings Privacy speakers at this call center to help SSM Health Care comply with HIPAA regulations in this sensitive area.