

Problem:

Cisco Systems – the worldwide leader and \$ 39.5B network company – is concerned about privacy. Their sales offices utilize a mixture of open plan design and “quiet” rooms for confidential conversations. Specifying high-end, quality materials, Cisco’s highly engineered spaces became uncomfortable for employees because they were too quiet—almost museum like in effect. This “too quiet” environment did not enable Cisco to provide the level of privacy, confidentiality or comfort that they desired for their sales office spaces. The challenge was to maintain confidentiality, improve comfort and by doing so, improve the productivity of their employees.



Having specified and installed Lencore Sound Masking products successfully since 1997, Cisco turned to Lencore again to meet this challenge.

Solution:

Lencore’s approach started with the simple question: “What do you want the space and the sound masking to achieve?” With up to 90 sales offices across the US and Canada, the Standards Manager for Cisco Systems wanted an acoustical design which “sounded” the same no matter which location. The design needed to provide “Normal Speech Privacy” in the open office space and “Confidential Speech Privacy” in and outside of the quiet rooms.

Through facility testing, (which included the study of speaker distance variability) the Standards Manager selected the Lencore Spectra® System. The introduction of sound masking to the space improved employee comfort while also contributing to speech confidentiality. The Spectra® System was chosen because of its ease of use, uniformity of sound and consistent quality performance in multiple locations.

Outcome:

A new sales office standard is now utilized by all of Cisco’s architectural firms across the US and Canada. Cisco Systems achieved their primary and secondary goals of privacy and comfort, respectfully. The sound masking solution provides a superior customer experience while allowing employees to better focus on their functions while reducing their

distractions. In this scenario, Cisco Systems was not concerned about measuring a return on their investment as much as meeting privacy and comfort goals set for their customers and employees. They achieved this and more with the Lencore solutions.

**Commentary:
Sound and Productivity**

According to an ASID study produced with Bullock Associates, “A series of studies conducted over the past 12 years has convincingly documented that conversational distraction and uncontrolled noise is the primary cause of productivity loss within offices. More than 80% of the workers believed they would be more productive if their workspace provided more acoustical privacy.”

This issue continues to be exacerbated through the promotion of community engagement in open office design as well as partition height reduction (typically a cost saving approach) to 53 inches – the minimum height for effectively blocking or absorbing noise. But office space that is too quiet is unproductive as well.

The goal of office design is to enhance productivity while creating employee comfort. Background sound masking can provide proper noise levels to achieve these goals.

ASTM—Speech Privacy

Based on standards set by the American Society for Testing and Materials (ASTM) – specifically ASTM E-1130, there are metrics to determine adequate levels of speech privacy within a space. Three categorical levels of speech privacy exist according to ASTM and are used by industry professionals:

No speech privacy	Over 20 percent of the spoken word is understood and the conversation is intelligible.
Speech Privacy	20 percent or less of the spoken word is understood.
Confidential Speech Privacy	Less than 5 percent of the spoken word is understood.

An Articulation Index (AI) is used to calculate and correlate the level of speech privacy to the ASTM standard. An AI of 0.20 or less is the benchmark for achieving speech privacy and is the standard you should adopt as an acceptable level for most office environments.