

Sound Masking in the Healthcare Environment

A Single Solution for Many Problems



Acoustics in the Healthcare Environment Fall Largely Into Two Classes:

Clinical

- Patient rooms - Resting patients, healthcare consultations
- Corridors - Public filled with unvetted individuals from all walks
- Nursing stations - Discussion of patients' personal info, shift changes, phone calls
- Exam rooms - Privacy is required so trustful conversation can happen between doctor and patient
- Waiting areas - Public space with idle ears naturally listening to surrounding chatter

Administrative

- C-level offices, meeting rooms, and lobbies
- Corridors with inherent eavesdropping possible
- Admissions - Personal info, name address, date of birth, and cell phone verbally shared
- Waiting areas - Public space with idle ears naturally listening to surrounding chatter
- Finance / call centers - Agents with headsets repeating credit card numbers, DOB, etc.
- Records - Open office space with the sharing of sensitive personal data
- Human resources - Confidential employee data, pay grades, terminations, & reprimands
- Security - Responsible for privacy and confidentiality



The Z Series is an all-in-one solution that not only supplies sound masking, but also delivers high quality background music and paging.

Standards and Regulations that Drive the Need for Sound Masking

1. HCAHPS - Hospital Consumer Assessment of Healthcare Providers and Systems

Affordable Care Act proclamation

Goal: To give a voice to healthcare consumers after the care is given

- Introduction
 - HCAHPS and its role in healthcare reform
 - Financial implications of low sleep scores
- Sleep scores and Medicare reimbursement
 - Link between sleep scores and financial penalties from Medicare
 - Need to target hospitals with below-average scores for improvement
- Utilizing the HCAHPS-Patient discharge survey rating
 - Accessing patient exit scores on www.medicare.gov
 - Comparing scores of three hospitals in the local area
 - Importance of the "Was your room quiet at night?" question
 - This serves to give the patient a "Vote" after receiving care
- The challenge of achieving complete silence in hospitals
 - Silence is not good, minimized distractions are good
 - Complete quiet is impractical and makes any sound capable of awakening sleeping patient
 - Transient sounds are reduced with sound masking improving patient sleep score
- The effectiveness of sound masking
 - Introducing steady background sound to lessen the impact of transient sounds
 - Masking reduces the difference between silence and noise whether noise is constant or dynamic
 - Improve sleep scores through the presence of background sound
- Benefits of sound masking for patients and hospitals
 - Reduction in distractions and disruptions during sleep
 - Enhanced restful and uninterrupted sleep for patients
 - Well-rested patients heal faster and are released sooner
 - Positive influence on sleep scores and overall patient satisfaction
- HCAHPS Conclusions
 - Sound masking is an effective solution for improving the sleep experience
 - Avoidance of financial penalties
 - Provision of better-quality care through sound masking
 - Patient post-care reviews affect providers' revenue stream



SHS Series Strategically Hidden Speakers are designed to minimize aesthetic impact with only a small visible footprint.

2. HIPAA - Health Insurance Portability and Accountability Act

Goal: To protect the collection, storage, and sharing of patient personal data

- HIPAA origin was initially based on the protection of patient privacy information with storage and records. It soon evolved to include privacy protection while verbally collecting and sharing information
- HIPAA attempts to make healthcare designers and practitioners aware of how design practices affect patient privacy. This includes many forms of privacy including acoustics.
- Requirements include the use of "reasonable" attempts to protect privacy
- Attempts to protect privacy include absorption, blocking, and covering speech commonly referred to as the ABCs of speech privacy
- Covering speech, drowning it out, is what sound masking does
- Sound masking is the least effective and most productive method for the protection of speech privacy

3. **ESG** - Environmental, Social, and Governance are the three main factors used to evaluate a company's or investment sustainability and ethical impact.

Goal: Establishment of criteria that are used to evaluate a company's performance in areas related to sustainability and social responsibility.

- Environmental factors refer to a company's impact on the environment, including its carbon footprint, use of natural resources, and efforts to mitigate climate change.
- Social factors consider a company's impact on society, including its relationships with employees, customers, suppliers, and communities and its human rights practices.
- Governance factors refer to the company's management structure, board composition, and overall transparency and accountability to shareholders and other stakeholders
- Sound masking allows the social element of ESG to improve by adding privacy, minimizing distractions, and improving both comfort and productivity
- Facility managers and administrators can "Check the box" for the social guideline in ESG

4. **LEED** - Leadership in Energy and Environmental Design

Goal: Provide a framework for healthy, highly efficient, and cost-saving green buildings

- LEED certification focuses on the building
- LEED v4.1 is a green building rating system that focuses on sustainability and energy efficiency in buildings
- Sets criteria for acoustic performance
- LEED v4.1 includes various categories, one of them is "Indoor Environmental Quality," which includes requirements related to acoustics.
- To earn LEED certification, a building must meet specific acoustics requirements, including Sound Transmission Class (STC) and Noise Criterion (NC) ratings.
 - STC is a measure of a material's ability to block sound
 - NC is a measure of the background noise level in a space
- Sound masking can improve the STC rating of building materials by 5 points.
- If considered as a design platform, sound masking can improve privacy without compromise
- Savings on building materials improve when sound masking yields a 5-point increase in STC
- Employers in LEED-certified spaces report higher recruitment and retention rates and increased employee productivity
- LEED-certified buildings are a solid asset for investors, occupiers, and communities
- Proven to be top-performing commercial real estate investments

5. **WELL** - International WELL Building Institute (IWBI)

Goal: Standard focused exclusively on the ways that buildings, and everything in them, can improve our comfort, drive better choices, and generally enhance, not compromise, our health and wellness

- Focuses on the human aspects of building design
- Global movement to help people thrive
- Promotes the use of materials and systems that support health and wellness
- Aimed at allowing occupants to be happier, healthier, and more productive
- Roadmap for creating and certifying spaces that advance human health and well being



The M1000A35 is a self-contained sound masking system that increases speech privacy and enhances workplace acoustics.