



LEED Construction and Soft dB

LEED Construction and Soft dB Play Well Together

By *John Lehan*

As the demand for more sustainable building options increases, green construction is becoming more popular within the international construction market. It comes as no surprise that Soft dB experts are increasingly involved in LEED certified projects. Such projects often aim at delivering modern, bright, airy workspaces that put employee wellness, health and productivity at the core. However, green building design brings new acoustical engineering, vibration and noise mitigation challenges that didn't previously arise in conventional construction methods. Tackling this new set of challenges is what Soft dB does best.

Why Green Building Often Means Poor Architectural Acoustics

LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world. Introduced by the non-profit U.S. Green Building Council (USGBC) in 1998, LEED provides a standardized framework to create healthy, highly efficient and cost-saving green buildings. Today LEED certification is a recognized symbol of sustainability achievement in over 160 countries.

Now, many of the design strategies employed in LEED to deliver healthier buildings with more daylight, improved airflow, higher energy savings and improved temperature control tend to negatively impact the acoustic performance of green buildings. For instance, taking advantage of solar energy for indoor heating inevitably means having more windows, skylights, and interior glass partitions to ensure optimal daylight penetration. This, however, also means having to deal with more sound-reflecting surfaces and less effective acoustic insulation overall.

Moreover, the selection of construction materials can also significantly hamper the acoustic performance of any given space. Green buildings typically make extensive use of glass, wood, metal, stone, polished concrete and other acoustically reflective materials. On the other hand, acoustic ceiling tiles, sound-absorbing panels, rugs and carpets—all of which having traditionally helped reduce noise levels in a room—are much less commonplace in sustainable construction. As a result, green building acoustics are generally worse than their conventional counterparts. But it doesn't have to be that way.

Sound masking in the context of LEED certification

Until recently, acoustics in green buildings had not been a formal part of the LEED rating system. New LEED v4 criteria, however, now take into account the value of good acoustics in improving occupant well-being and productivity. More specifically, LEED v4 makes it possible to qualify for two points toward the Acoustic Performance credit in the Indoor Environmental Quality (IEQ) section of the new Interior Design and Construction (Commercial Interiors) rating system, and one point in the new Building Design and Construction (New Construction) system. Moreover, to ensure maximum acoustic performance of spaces, LEED v4 recommends not only the use of sound-absorbing materials, but also the installation of a [sound masking system](#).

Based on their extensive field experience, [Soft dB experts](#) commonly agree that installing a sound masking system remains the most cost-effective solution for overcoming the various acoustic challenges met in LEED projects. Indeed, when used in combination with sound-absorbing materials, our [SmartSMS-Net](#) sound masking system is proven to deliver unrivaled acoustic performance and comfort, regardless of how complex the environment.

What's more, SmartSMS-Net was built from the ground up with sustainable best practices and eco-efficiency in mind. It exclusively uses high-efficiency amplifiers and low-energy electronic components. And thanks to its built-in shutdown function, SmartSMS-Net is designed to consume virtually no power outside of regular operating hours.

Green building design can provide ideal acoustic comfort

As a proud member of the U.S. Green Building Council (USGBC) and Canada Green Building Council (CaGBC), Soft dB strives to stay current on all aspects of LEED while continuously providing innovative acoustic solutions well-tailored to the new generation of efficient, environmentally responsible, and healthy buildings around the world.

Soft dB's unique expertise has already helped some of America's most notable green buildings enhance their acoustic performance and secure extra LEED credits within the Indoor Environmental Quality category. The New Balance Headquarters, located at Boston Landing in Brighton, particularly shined as the [nation's first LEED V2009 Core and Shell Platinum Certification](#) to earn all points in indoor environmental quality. Also worthy of mention are the Blue Cross & Blue Shield of Rhode Island's headquarters in Providence, Partners Healthcare's facility in Somerville, and Metlife Building in Warwick—what do these great constructions have in common? They all achieved higher levels of LEED certification while leveraging Soft dB's sound masking system to provide optimal acoustic comfort to their occupants. Above all, each of these leading sustainable projects busted the myth that green initiatives and acoustical design don't play well together.

We at Soft dB strongly believe that working closely with architects and project stakeholders is key to ensuring that our sound masking system makes a real difference in the acoustic performance of LEED buildings, without ever compromising their esthetic value. Looking back at [many successful LEED certified projects](#) in which Soft dB was directly involved, this couldn't be more true.

Want to learn more about sound masking and how it can help you achieve superior acoustic performance in your future LEED certified projects? Visit Soft dB's [Sound Masking section](#).

John Lehan joined our ranks in 2012 as a senior team leader with over 20 years experience in delivering innovative market-leading solutions to global enterprises in all industries. Based in Massachusetts, he oversees the development of sound masking and the sales of acoustic solutions designed by Soft dB all across New England.