

Eckel Recording Room Captures Sounds of The Big Easy

A U.S. Mint-turned-museum boasts high-tech recording capabilities devoted to the music and culture of New Orleans and Louisiana

Early on in America's existence, U.S. coins were produced at the National Mint in Philadelphia. In 1835, with the U.S. expanding, Congress established three branch mints, including one in New Orleans. Coins started rolling off the presses in 1838 and would continue to be produced there until 1909.

For the next several decades the building served a number of federal entities. In 1966, the U.S. government donated the structure to the Louisiana State Museum. Today, the **Old U.S. Mint**—as it is now named—houses rotating exhibitions, the Louisiana Music Collection, the Louisiana Historical Center and the New Orleans Mint Performing Arts Center.

Located on the third floor, the Performing Arts Center is equipped for the production, recording and Web broadcasting of live musical and theatrical performances, lectures, symposia, oral histories and video interviews. The Center also hosts the ongoing "Music at the Mint" series featuring New Orleans and Louisiana music and entertainment.

With a goal of digitizing historical recordings—including those in the Louisiana State Museum's world-renowned Jazz Collection—and conducting onsite interviews that add modern voices to the archives, the Old U.S. Mint decided it needed a separate recording room. For this, the Mint turned to Eckel Noise Control Technologies of Cambridge, Massachusetts to provide a sound-insulated space where musical and vocal recordings free of background noise could be produced.

"The objective was to create a room that was completely sonically isolated," according to Russ Todd, Principal of Akustiks, LLC, the acoustical consultant on the project.

The Eckel recording room is constructed of heavy gauge steel with integrated acoustical material to provide sound isolation. It is 5 ft. wide by 11 ft. long by 9 ft. high, and features a 44 in. by 12 in. horizontal window into the control room to facilitate communication between the performer or speaker and the sound engineer. A 3 ft. by 6½ ft. entry/exit door is sealed by a double magnetic gasket and features a 16 in. by 24 in. window. The door and both windows are STC-rated assemblies that provide a high degree of sound separation between the recording room and the control room.

The recording room wall, ceiling and door systems incorporate acoustical treatment to provide an ideal environment for vocal recordings. The walls are 4 in. thick, while the ceiling was designed 7 in. thick to accommodate a special low volume, low noise, recessed ventilation system that quietly delivers 200 CFM of air into the room. The walls, ceiling and door comprise a mixture of perforated absorptive and reflective acoustic panels to achieve the desired amount of sonic liveliness. The internal design of the panels combined with their solid outer face play the additional role of preventing any background noise from entering the room. The recording room also features four recessed ceiling lights and AC power. Microphones and amplifiers are connected by audio cables to the control room.



Having once been a working U.S. Mint, the original floors were built extra thick to accommodate rolling carts of precious metals and finished coins. An inherent benefit is that the existing floors help keep errant sounds from being transmitted. Normally, Eckel recording rooms are built with isolated floors that prevent the transmission of noise through vibrations.

In addition to digitizing historical recordings and recording onsite interviews, the recording room is being used to create overdubs, voiceovers and performance enhancements, as well as to produce audio guides for museum and walking tours, and radio announcements.

"One of the advantages of the recording room is that you can work on a musical or vocal project while something else is happening in the main room," according to Danny Kadar, Sound Engineer at the Old U.S. Mint. *"In doing guitar or bass overdubs, the musician can be in the control room with the amp in the recording room, facilitating better communication between the sound engineer and the performer,"* according to Kadar, who adds, *"The room provides a very clean, quiet sound."*

With Eckel's sound-insulated recording room, The Old U.S. Mint is letting the good times roll—with a pristine soundtrack that captures the flavor of NOLA.