

Eckel Orchestrates Sound Solution for Great Salt Bay School Gym

Anyone who has ever attended a child's school concert will tell you that the quality of the sound can be the difference between an enjoyable experience and a blistering headache. Great Salt Bay Community School in Damariscotta, Maine utilizes its gymnasium not only for athletics, but also for concerts and presentations. After a sound system failure forced faculty to prematurely end a concert, school administrators knew it was time to upgrade the space.

The school pursued the installation of multiple sound systems, but was told by every company that the reverberation quality of the room was too poor for a new sound system to make a noticeable difference. So, school officials had to first search for an acoustics solution. This led them to seek the advice and services of Eckel Noise Control Technologies, a leader in noise control products that produce the best possible environments for sound.

Alan Eckel, president of Eckel Noise Control Technologies, visited the school to perform an evaluation of the gymnasium. He noted the hard surfaces of concrete block walls and linoleum tile floors, which present a challenging atmosphere for sound intelligibility. Alan conducted acoustic tests that revealed the gym had a reverberation time of 4.1 seconds at 500 Hz, a level at which musical clarity is very difficult to achieve. Based on findings in the analysis of the structure, Alan recommended the installation of 36 Eckel Eckoustic Functional Panels, or EFPs.

After a year of fundraising for the project, Great Salt Bay Community School proceeded with the installation of the panels. The project included 24 ceiling panels, 10 panels on the far wall from the stage, and one vertical panel on each side of the stage. The ceiling panels were painted a light brown color to match the wooden cathedral ceiling, while the wall panels were painted a dark blue color to contrast and complement the lighter blue walls. From start to finish, the installation was completed by Alan and the Eckel team in less than two weeks.



After the panel installation, the school purchased a new sound system for the gymnasium and has experienced what Choral Director Anne Marie D'Amico described as a "total transformation." The reverb time has dropped to 1.7 seconds at 500 Hz, an ideal level for clarity of music and speech. Alan Eckel personally attended the first concert in the new gym to assess the acoustic difference in the space. The faculty and staff at Great Salt Bay Community School have received so much positive feedback that they are currently engaging in a series of fundraisers to finance the installation of Eckel EFPs to address similar acoustic issues in the cafeteria and allow that space to serve multiple functions.