

# Acoustical Damping for Poly Canyon Village’s Music Room

Poly Canyon Village was a project by Clark Construction and Architect Niles Bolton Associates that was completed in 2009 that provided housing for upcoming and continuing students. One of the buildings, labeled “Aliso” has constructed the music practice room for students to either play their musical instruments or have it become a convenient area to record, with one particular band “Tin Kitty” having problems with being too loud. Even so, there is potential for this music room to become much more than what it currently is. This paper is a research paper that covers the various materials and methods of acoustical damping, or sound proofing, and various methods used in typical music studio rooms that can further be applied for Poly Canyon Village’s Music Practice Room. The research will provide a background of what acoustical damping is to have readers be familiar with the concept and why each material and method presented can and will be beneficial. This will also be an opportunity to allow readers to be familiar with the concept as it is being applied for a possible renovation for the music room.

**Key Words:** Acoustical Damping, Soundproofing, Poly Canyon Village, Cal Poly, Music Studio Room



PCV Music Practice Room (Current)



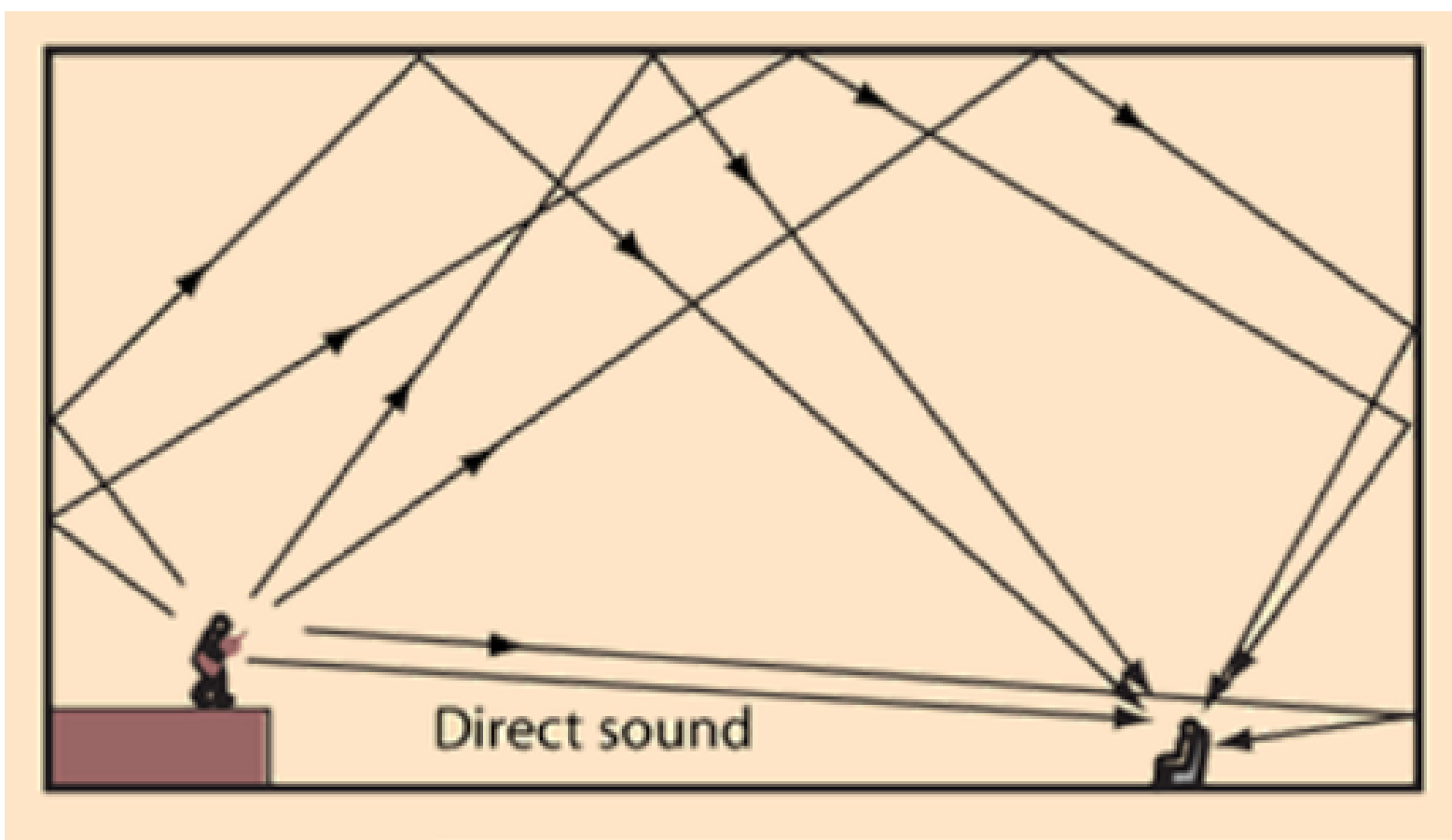
Pink Partition Acoustic Batt Insulation



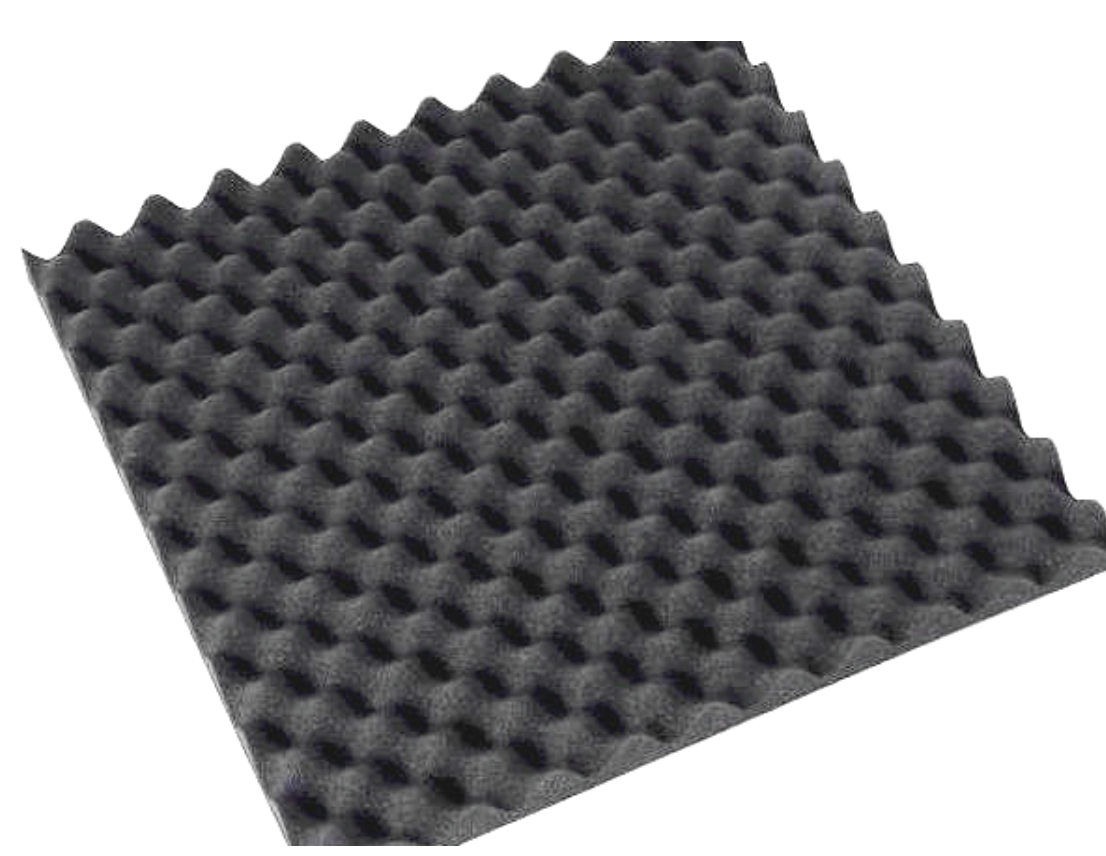
Broadband Absorption Acoustic Panel

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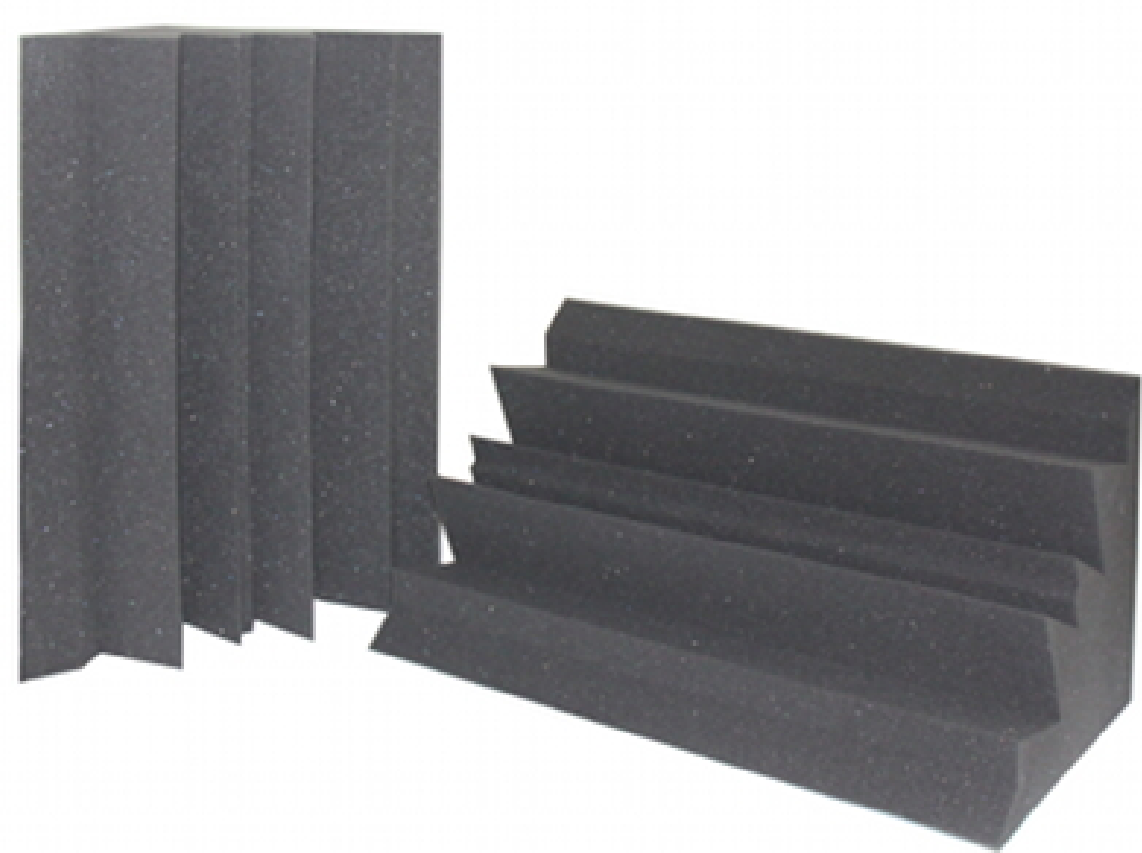
Sound Transmission Class (STC)		
Sound Pressure Levels & Loudness Sensation (dBa)		
	Source	Sensation
130	Jet Aircraft at 100'	Physical Pain
	Bass Drum at 3'	
120	Thunder, Artillery	Deafening
	Nearby Riveter	
110	Elevated Train	Very Loud
	Discotheque	
100	Loud Street Noise	Loud
	Noisy Factory	
90	Truck Un-muffled	Moderate
	Police Whistle	
80	Cocktail Party	Faint
	Noisy office	
70	Average Street Noise	Whisper
60	Average Radio	
	Average Factory	Threshold of Audibility
50	Noisy Home	
	Inside general office	
40	Conversation	
	Quiet Radio	
30	Quiet Home	
	Private Office	
20	Empty Auditorium	
	Quiet Conversation	
10	Rustle of Leaves	
	Soundproof Room	
0	Threshold of Audibility	



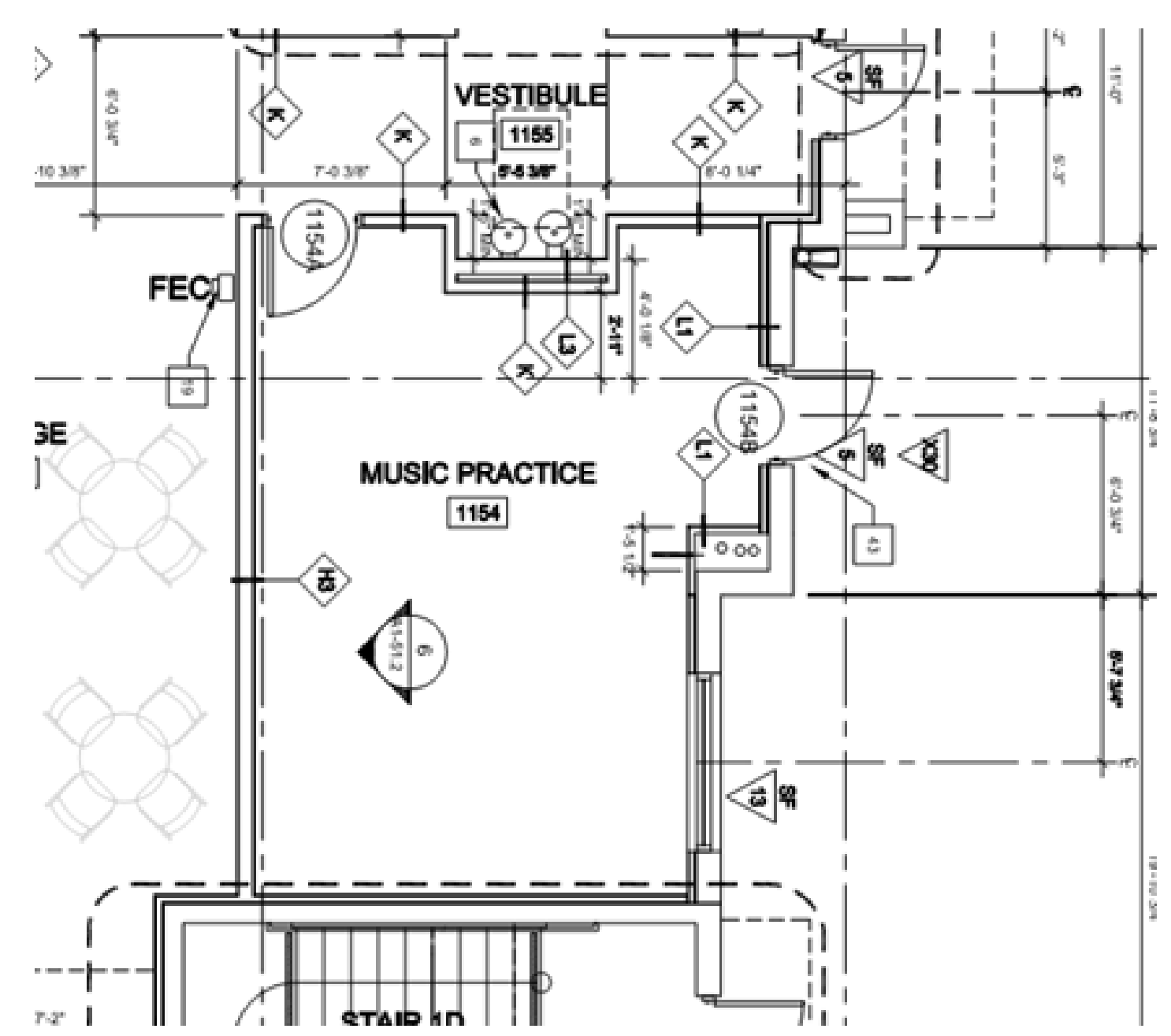
Act of Reverberation



Foam Diffuser



Acoustic Foam Bass Traps



PCV Music Room Planset