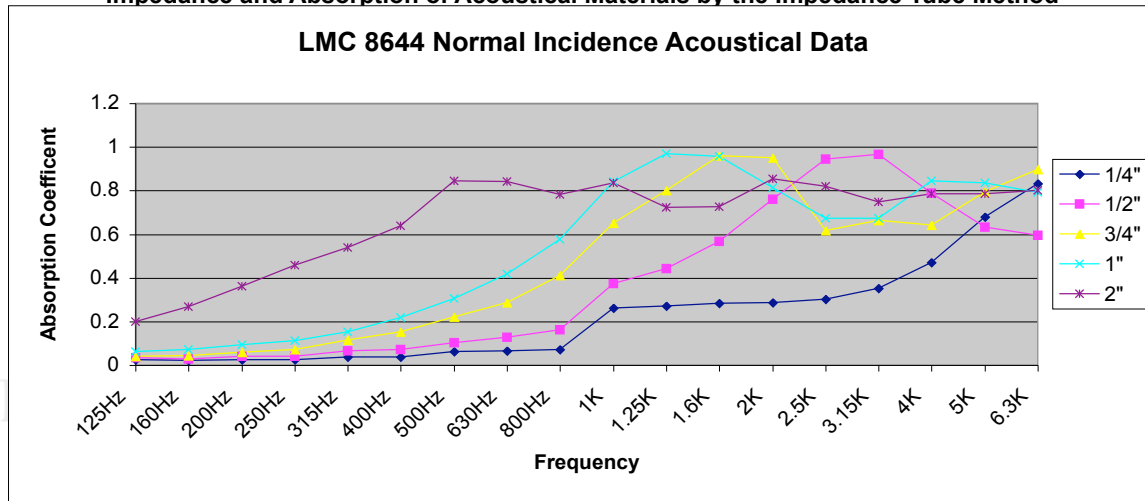


ACOUSTICAL DATA FOR LMC 8644

The following data was compiled following ASTM Test Method C 384-95
 "Impedance and Absorption of Acoustical Materials by the Impedance Tube Method"



Frequency	Material Thickness				
	1/4"	1/2"	3/4"	1"	2"
125Hz	0.026	0.033	0.039	0.061	0.199
160Hz	0.022	0.029	0.045	0.071	0.267
200Hz	0.026	0.039	0.058	0.093	0.361
250Hz	0.024	0.042	0.073	0.112	0.458
315Hz	0.038	0.064	0.116	0.152	0.539
400Hz	0.036	0.073	0.154	0.217	0.639
500Hz	0.062	0.104	0.221	0.307	0.846
630Hz	0.065	0.127	0.286	0.419	0.843
800Hz	0.071	0.163	0.411	0.577	0.782
1K	0.262	0.375	0.652	0.842	0.834
1.25K	0.272	0.443	0.801	0.969	0.722
1.6K	0.283	0.567	0.961	0.958	0.727
2K	0.287	0.761	0.952	0.815	0.853
2.5K	0.302	0.945	0.618	0.672	0.821
3.15K	0.351	0.965	0.665	0.673	0.748
4K	0.471	0.788	0.641	0.846	0.786
5K	0.678	0.632	0.795	0.834	0.785
6.3K	0.832	0.595	0.897	0.792	0.801
	Absorption Coefficient				
NRC	28.5	48	60.8	67.8	92.5

Summary of Test Method

A plane wave traveling in one direction down a tube is reflected back by the test specimen to produce a standing wave that can be explored with a microphone. The normal incidence sound absorption coefficient is determined from the standing wave ratio at the face of the test specimen. To determine the impedance ratio a measurement of the position of the standing wave with reference to the face of the material is needed. The absorption coefficient and impedance ratio are functions of frequency. Measurements are made with pure tones at a number of frequencies chosen, unless there are compelling reasons to do otherwise, from those specified.

Significance and Use

The acoustical impedance properties of a sound absorptive material are related to its physical properties, such as airflow resistance, porosity, elasticity, and density. As such, the measurements described in this test method are useful in basic research and product development of sound absorptive materials....

The listed Summary of Test Method and Significance and Use information was taken directly from the ASTM Standard listed. Any further test procedure information required please contact ASTM directly for a copy of the Test Methods.

The testing was conducted by the supplier of the foam to LMC and is believed to be valid. Any further testing requirements will have to be discussed with a LMC representative.

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