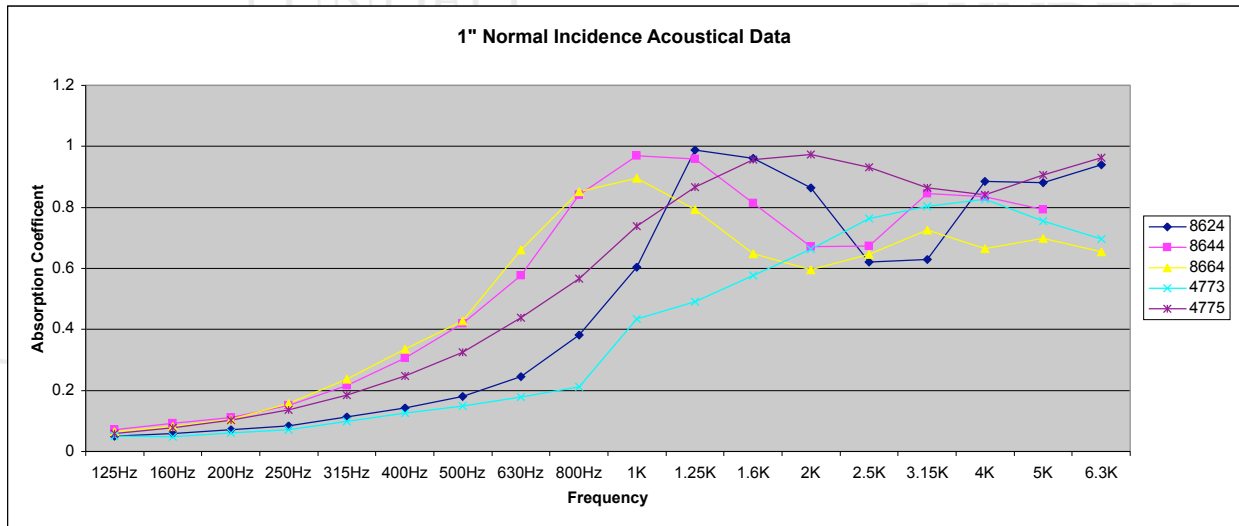


1" ACOUSTICAL DATA

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



Frequency	LMC Material Designation				
	8624	8644	8664	4773	4775
125Hz	0.051	0.061	0.064	0.051	0.059
160Hz	0.059	0.071	0.081	0.048	0.077
200Hz	0.071	0.093	0.104	0.061	0.103
250Hz	0.083	0.112	0.157	0.071	0.136
315Hz	0.113	0.152	0.237	0.099	0.185
400Hz	0.143	0.217	0.335	0.125	0.248
500Hz	0.181	0.307	0.429	0.148	0.325
630Hz	0.246	0.419	0.661	0.179	0.439
800Hz	0.382	0.577	0.852	0.211	0.566
1K	0.605	0.842	0.895	0.435	0.738
1.25K	0.988	0.969	0.794	0.491	0.866
1.6K	0.961	0.958	0.649	0.576	0.956
2K	0.865	0.815	0.596	0.662	0.973
2.5K	0.622	0.672	0.646	0.764	0.931
3.15K	0.629	0.673	0.725	0.804	0.865
4K	0.886	0.846	0.665	0.826	0.842
5K	0.882	0.834	0.699	0.755	0.906
6.3K	0.939	0.792	0.654	0.696	0.963

Absorption Coefficient

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.

gfc-15Jan99

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....