

LUINDELL





A SERVICE DISABLED VETERAN OWNED SMALL BUSINESS - SDVOSB

MANUFACTURING CORPORATION

ACOUSTICAL DATA FOR LMC 8621 The following data was compiled following ASTM Test Method C 384-95 "Impedance and Absorption of Acoustical Materials by the Impedance Tube Method" LMC 8621 Normal Incidence Acoustical Data 1 0.9 Absorption Coefficent 0.8 0.7 - 1/4" 0.6 1/2" 0.5 3/4" 0.4 1" 0.3 2" 0.2 0.1 0 250Hz 500Hz 125Hz 1K 1.6K 2K 3.15K 4K 6.3K Frequency **Material Thickness** 1/4' 2" Frequency 1/2" 3/4 1' 125Hz 0.06 0.08 Summary of Test Method 250Hz A plane wave traveling in one direction down a tube is 0.09 0.16 500Hz reflected back by the test specimen to produce a 0.2 0.43 1K 0.4 0.88 standing wave that can be explored with a microphone. The normal incidence sound absorption coefficient is 1.6K 0 64 08 2K 0.76 0.88 determined from the standing wave ratio at the face 3.15K 0.88 0.75 of the test specimen. To determine the impedance ratio 0.74 a measurement of the position of the standing wave with 4K 08 6.3K reference to the face of the material is needed. 0.73 0.8 The absorption coefficient and impedance ratio are Absorption Coefficent 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.

ben-6Nov98

CUSTOM FABRICATOR OF FLEXIBLE MATERIALS SINCE 1978

File:8621-sound-data.xls Rev:9/24/09