



Center For Applied
Engineering, Inc.

Materials Testing Services

ACOUSTICAL LABORATORY REPORT

Acoustical Measurement of Airborne Sound Transmission Loss of Building Partitions - ASTM E90-90/NVLAP 08/P06

April 7, 1997

Client: Celotex Technical Services
4010 Boy Scout Blvd.
Tampa, FL 33607

MTS Job No.: 250031-F

Test Date: March 25, 1997

Project: Airborne Sound Transmission of 1/2" Celotex SoundStop Board (Sunbury)

Test Method: Unless otherwise indicated, the following test results were determined in conformance with the ASTM Standard Test Method E90-90 and Classification E413-87, as well as other applicable standards.

Sample Description: 1/2" Celotex SoundStop Board (Sunbury)

Surfaces (Source/Receive): 1/2" thick mineral fiberboard

Test Area: 32.0 ft² **Area Weight:** 0.81 lbs/ft²

Temperature: 69.2°F **Relative Humidity:** 44.0%

Mounting Method: Mounted directly into the nominal 4 ft. x 8 ft. opening in the laboratory filler wall. Perimeter sealed with dense mastic material.

Test Results: The sound transmission loss values for the 16 contiguous 1/3 octave bands from 125 to 4000 Hz are presented in tabular and graphical form on the following pages.

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Tested by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation
for selected test methods for Acoustical Test Services and Thermal Insulation Materials.

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TEST RESULTS

Frequency (hertz)	Sound Transmission Loss (dB)	Reference Contour Deficiencies (dB)
100*	11	
125	12	
160	12	
200	13	
250	14	2
315	15	4
400	16	6
500	18	5
630	19	5
800	21	4
1000	23	3
1250	25	2
1600	27	
2000	30	
2500	33	
3150	35	
4000	36	
5000*	36	
Sound Transmission Class (STC) = 23 Sum of Deficiencies = 31		

Transmission loss values are measured with an uncertainty of less than 3 dB for 100 to 160 Hz, 2 dB for 200 and 250 Hz, and 1 dB for 315 to 5000 Hz. * - Additional information not required by this test standard.

Tested by:

J. C. Oliver
J. C. Oliver
Laboratory Technician

Approved by:

D. M. Moyer
David L. Moyer
Research Engineer

The results reported apply to the specific sample submitted for measurement. No responsibility is assumed for performance of any other specimen.

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R. Ameller
4-15-97



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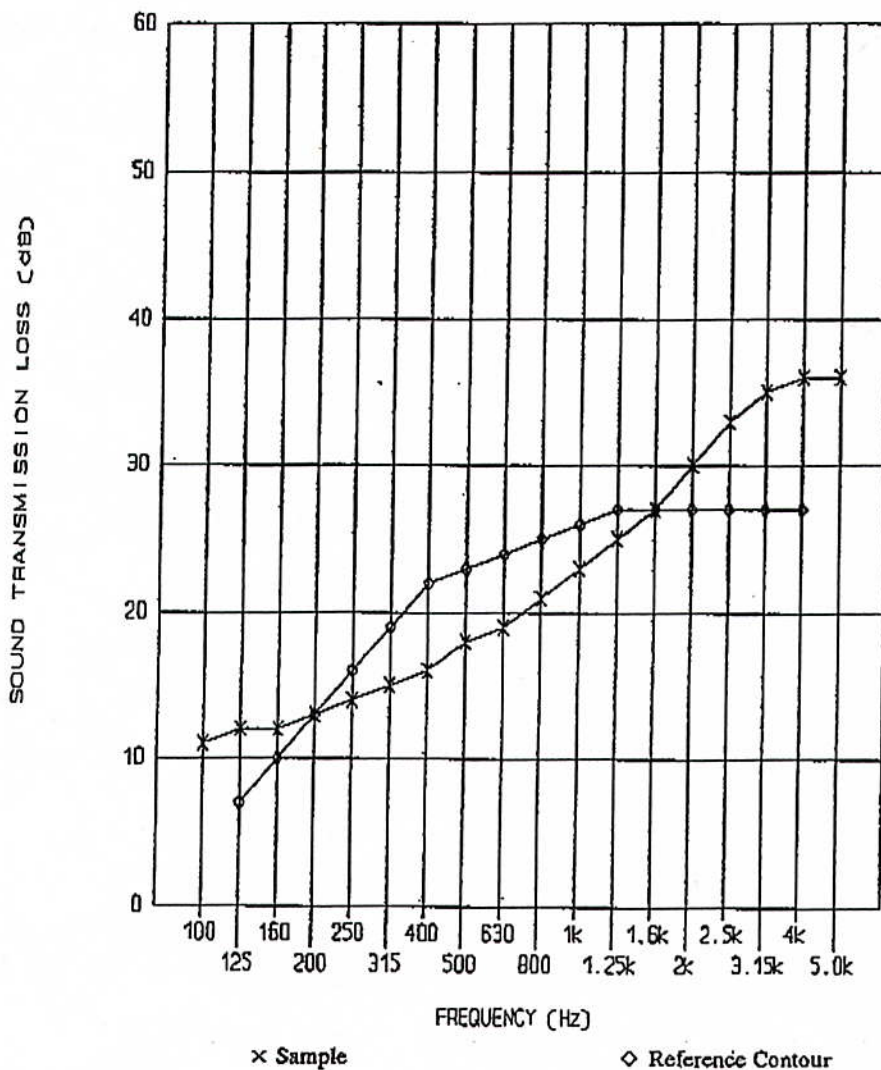
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SOUND TRANSMISSION CLASS

ASTM Classification E 413



Sound Transmission Class (STC) = 23

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