



# WESTERN ELECTRO - ACOUSTIC LABORATORY

A division of Veneklasen Associates, Inc.

TESTING • CALIBRATION • RESEARCH

25132 Rye Canyon Loop Santa Clarita, California 91355 Tel: (661) 775-3741 Fax: (661) 775-3742 www.weal.com

## SOUND TRANSMISSION LOSS TEST REPORT NO. TL05-387

CLIENT: International Materials Corporation (Intermat)  
2045 Placentia Avenue  
Costa Mesa, CA 92627

Page 1 of 2  
18 January 2006

TEST DATE: 17 November 2005

### INTRODUCTION

The methods and procedures used for this test conform to the provisions and requirements of ASTM E 90-04, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions*. Copies of the test standard are available at [www.astm.org](http://www.astm.org). The test chamber source and receiving room volumes are 204 and 148.4 cubic meters respectively. Western Electro-Acoustic Laboratory is accredited by NVLAP (National Voluntary Laboratory Accreditation Program) Lab Code 100256-0 for this test procedure. NVLAP is part of the United States Department of Commerce, National Institute of Standards and Technology (NIST). This test report relates only to the item(s) tested. Any advertising that utilizes this test report or test data must not imply product certification or endorsement by WEAL, NVLAP, NIST or the U.S. Government.

### DESCRIPTION OF TEST SPECIMEN

The test specimen was a single sided wall assembly constructed from wood studs and Interimat Series 200 Sure-Board. The 2 x 4 wood studs were spaced horizontally at 16 inches (406 mm) O.C. and had a single 2 x 4 sill and double 2 x 4 head. The wood stud structure was caulked and nailed directly to the test chamber opening. On the source room side, 5/8 inch (15.9 mm) thick Internat Series 200 Sure-Board was screwed to the studs with 2-1/2" #8 drywall screws at 8 inches (203 mm) O.C. at the perimeter and 12 inches (305 mm) O.C. in the field. The Sure-Board was oriented vertically. The panel edges, joints, and screw heads were sealed with metal tape. The overall dimensions of the wall assembly were 96 inches (2.44 m) wide by 96 inches (2.44 m) high by 4-1/8 inches (105 mm) thick. The overall weight of the assembly was estimated to be 310 lbs. (141 kg) for a calculated surface density of 4.84 lbs./ft<sup>2</sup> (23.6 kg/m<sup>2</sup>).

### RESULTS OF THE MEASUREMENTS

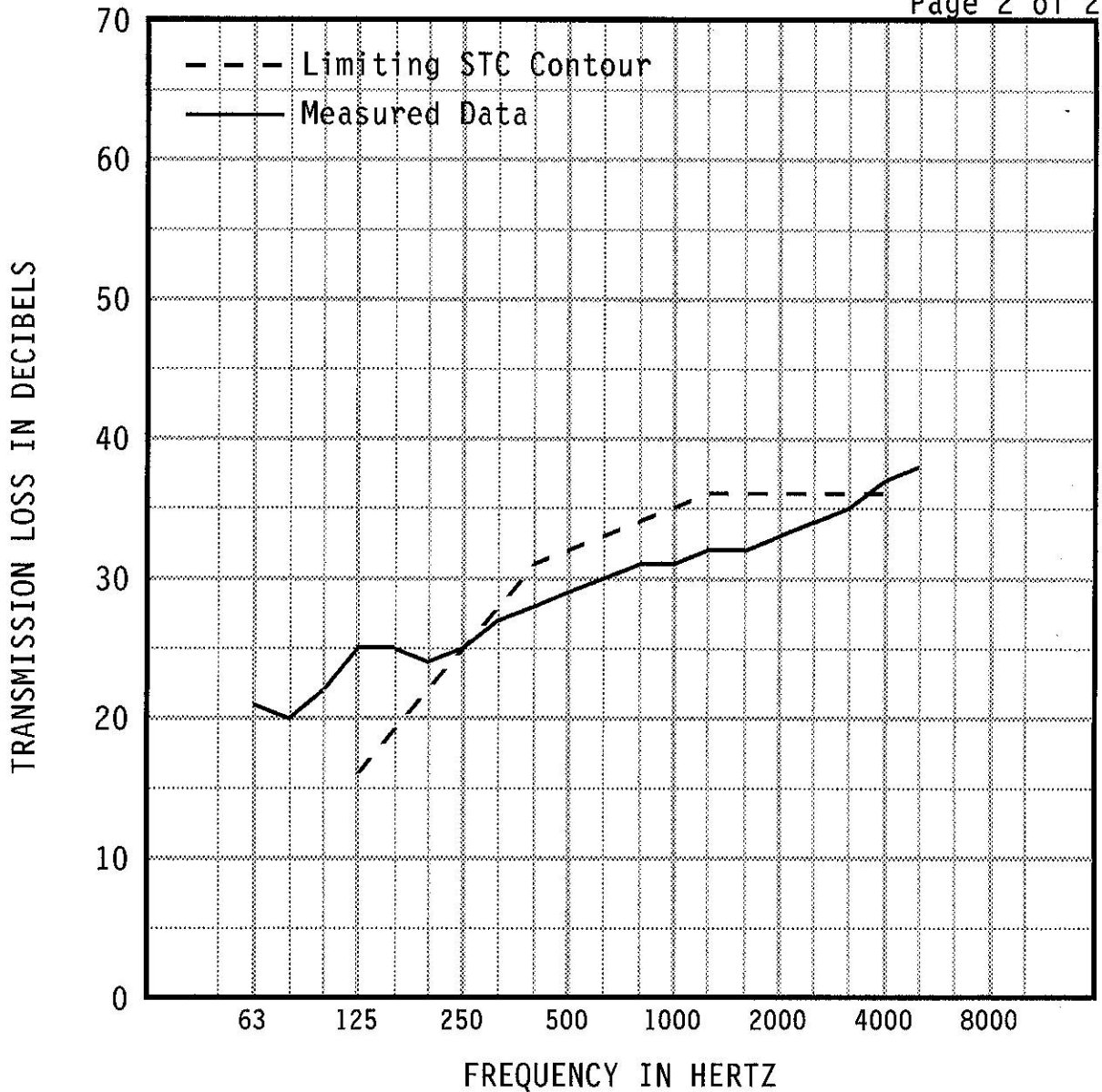
One-third octave band sound transmission loss values are plotted and tabulated on the attached sheet. ASTM minimum volume requirements are met at 80 Hz and above. The Sound Transmission Class rating determined in accordance with ASTM E 413-04 was STC-32.

Respectfully submitted,  
Western Electro-Acoustic Laboratory

Gary E. Mange  
Laboratory Manager

# WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL05-387



1/3 OCT BND CNTR	FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB		21	20	22	25	25	24	25	27	28	29
95% Confidence in dB deficiencies		1.42	1.92	2.07	1.47	0.89	0.76	0.80 (0)	0.52 (1)	0.36 (3)	0.38 (3)
1/3 OCT BND CNTR	FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB		30	31	31	32	32	33	34	35	37	38
95% Confidence in dB deficiencies		0.29 (3)	0.44 (3)	0.38 (4)	0.39 (4)	0.36 (4)	0.56 (3)	0.55 (2)	0.31 (1)	0.32	0.50

EWR	OITC
34	28

Specimen Area: 64 sq.ft.  
 Temperature: 74.4 deg. F  
 Relative Humidity: 41 %  
 Test Date: 17 November 2005

STC
32 (31)