FOR THE SCOPE OF
ACCREDITATION UNDER NVLAP
LAB CODE 100402-0.

REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 3148942 Date: July 24, 2008

REPORT NO. 3148942CRT-002

**SOUND TRANSMISSION LOSS TESTS
AND CLASSIFICATION
OF TWO LAPOLLA WALL SAMPLES**

RENDERED TO

**LAPOLLA INDUSTRIES INC.
15402 VANTAGE PARKWAY EAST
SUITE 322
HOUSTON, TX, 77032**

INTRODUCTION

This report gives the results of Sound Transmission Loss tests and the determination of the Sound Transmission Class on two spray applied foam filled Lapolla wall samples. The test specimens were selected and supplied by the client and received at the laboratories on July 16, 2008. The samples appeared to be in a new, unused condition.

AUTHORIZATION

Signed Intertek Quotation No. 500076656.

TEST METHOD

The specimens were tested in accordance with the American Society for Testing and Materials designation ASTM E90-2004, "Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions", and classified in accordance with the American Society for Testing and Materials designation ASTM E413-2004, "Classification for Rating Sound Insulation" and ASTM Standard E1332-90 (Re-Approved 2003) entitled, "Standard Classification for Determination of Outdoor-Indoor Transmission Class".

GENERAL

The sound-insulating property of a partition element is expressed in terms of the sound transmission loss. The procedure for determining this quantity is to mount (and perimeter seal) the test specimen as a partition between two reverberation rooms. Sound is introduced in one of the rooms (the source room) and measurements are made of the noise reduction between source room (10,000 cu .ft.) and receiving room (16,640 cu. ft.). The rooms are so arranged and constructed that the only significant sound transmission between them is through the test specimen.

The test opening is constructed such that it is approximately one inch larger in size than the test specimen. The specimen is placed in the test opening an a half-inch bead of "DUX-SEAL", a dense, non-hardening, clay-like material, to isolate it from the supporting base. The space between the test specimen and the wall opening is sealed on both sides employing the same sealing material.

The purpose of the Sound Transmission Class (STC) is to provide a single figure rating that can be used for comparing the sound-insulating properties of partition elements used for general building design purposes. The higher the rating (STC) the greater the sound insulating properties of the partition.

The purpose of the Outdoor-Indoor Transmission (OITC) is to provide a single number rating that can be used for comparing building façade designs, including walls, doors, windows and combinations thereof. This rating is designed to correlate with subjective impressions of the ability of building elements to reduce the overall loudness of ground and air transportation noise. It is intended to be used as a rank ordering device.

DESCRIPTION OF TEST SPECIMENS

The test specimens consisted of Lapolla wall sections. The first sample labeled FL500 had a 0.5 pcf spray applied foamfill. The second sample labeled FL2000 had 2 .0 pcf spray applied foamfill. Each sample was 4 feet wide by 8 feet tall. The FL500 sample weighed 192.5 lbs. The FL2000 sample weighed 202.5 lbs. The construction of each of the samples was witnessed by an Intertek representative, Jeffrey Patterson, on June 16, 2008. The walls consisted of 2x4 studs with 24 inch on center spacing with 5/8” sheetrock on both sides and a foam filler.

RESULTS OF TESTS

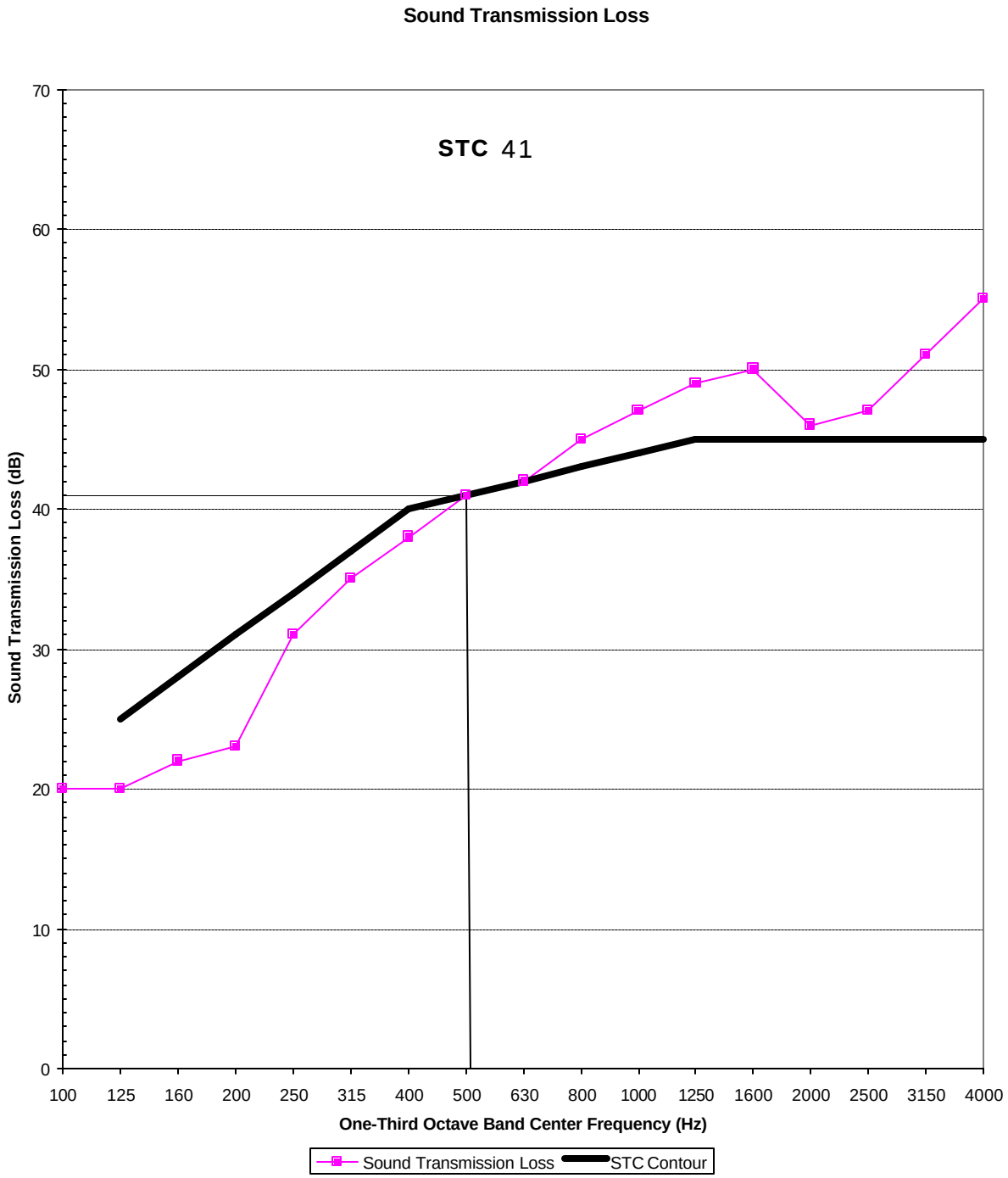
1/3 Octave Band Center Frequency Hz	Sound Transmission Loss in dB	
	FL500	FL2000
80	18	18
100	20	20
125	20	18
160	22	20
200	23	26
250	31	30
315	35	32
400	38	32
500	41	35
630	42	37
800	45	39
1000	47	41
1250	49	43
1600	50	43
2000	46	38
2500	47	40
3150	51	46
4000	55	51
5000	56	53
Sound Transmission Class	41	38
Outdoor-Indoor Transmission Class	30	28

PRECISION

For any pair of rooms and microphone system, the 95% confidence interval ?TL, for transmission loss must be less than the following.

Range of One-Third Octave Bands	Transmission Loss Uncertainty, dB	
	Required	Actual
125 and 160	3	<1.5
200 and 250	2	<1.5
315 - 4000	1	<1

FL500 WALL PANEL



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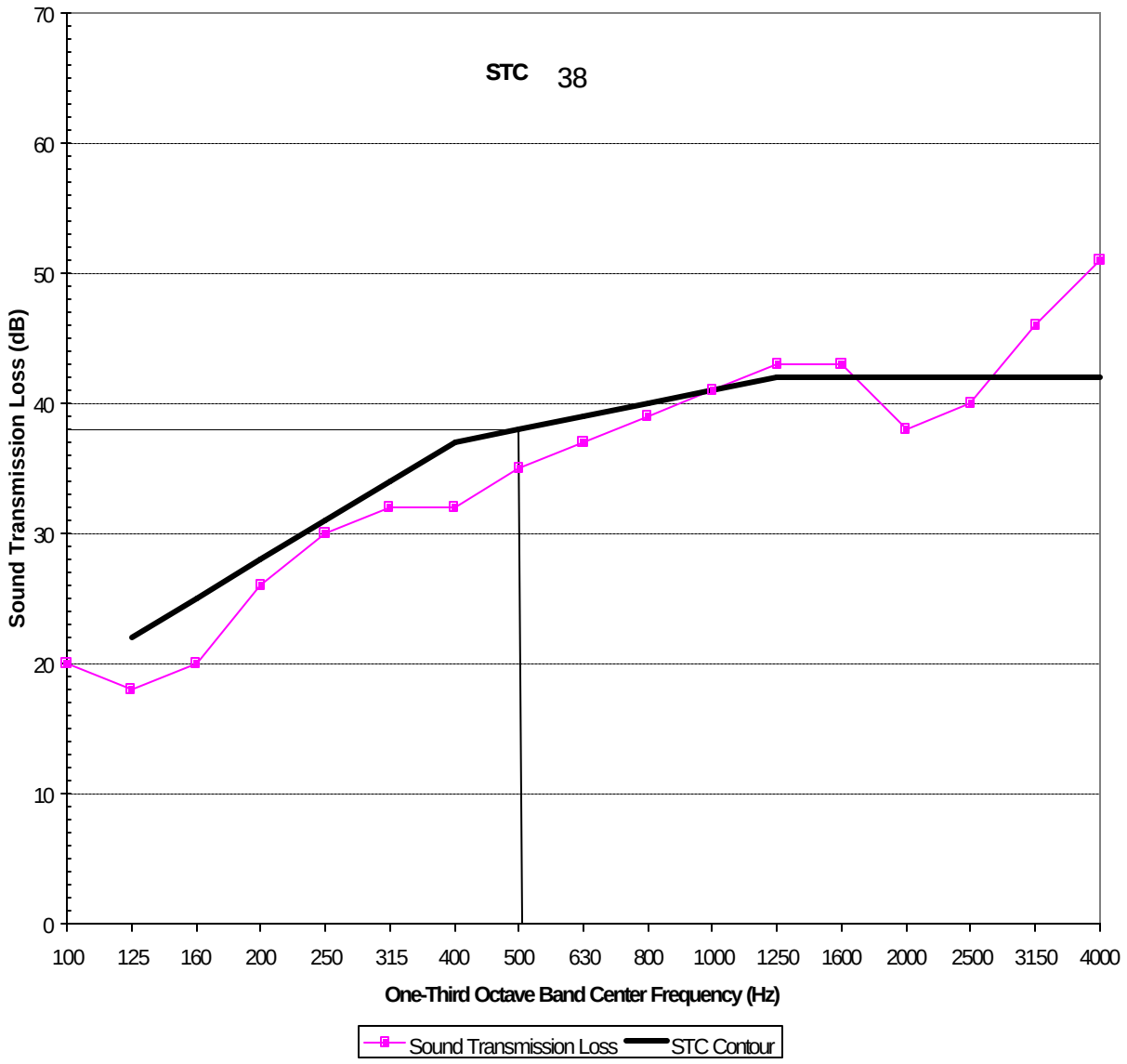
FL2000 WALL PANEL

Sound Transmission Loss



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REMARKS

1. Ambient Temperature: 71°F
2. Relative Humidity: 51%

CONCLUSION

The test method employed for this test has no pass-fail criteria, therefore, the evaluation of the test results is left to the discretion of the client.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Tests: July 24, 2008

Report Approved by:

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Report Reviewed By:

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Attachments: None