

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

FOR: Healthier Choice Flooring
Dalton, GA

Sound Transmission Loss Test
RAL™-TL05-207

ON: Balterio Ambassador Laminate Flooring with
Sound Solution™ Vapor Bloc Underlayment on
6 Inch Concrete Floor

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CONDUCTED: 2 December 2005

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-04 and E413-04, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure (NVLAP Lab Code: 100227-0). A description of the measuring technique is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Balterio Ambassador Laminate Flooring with Sound Solution™ Vapor Bloc underlayment on 6 inch concrete floor. The overall dimensions of the specimen as measured were nominally 4.27 m (168 in.) wide by 6.10 m (240 in.) high and 161.5 mm (6.36 in.) thick. The specimen was constructed directly in the laboratory's 4.27 m (14 ft) by 6.10 m (20 ft) test opening and was sealed on the periphery (both sides) with a dense mastic.

The weight of the specimen as measured was 8,789 kg (19,377 lbs.), an average of 338 kg/m² (69.2 lbs/ft²). The transmission area used in the calculations was 26 m² (280 ft²). The source and receiving room temperatures at the time of the test were 22±1°C (72±1°F) and 52±1% relative humidity. The source and receive reverberation room volumes were 140 m³ (4,929 ft³) and 87 m³ (3,073 ft³), respectively.

The description of the specimen was as follows: From the top down, the floor consisted of 7 mm (0.28 in.) thick laminate wood flooring with 2 mm (0.08 in.) thick underlayment over 152 mm (6 in.) thick wire reinforced concrete. A more detailed description of the test assembly appears in the following sections.

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Prefinished Laminate Wood Flooring With Underlayment

The finished floor consisted of Balterio Ambassador Laminate Flooring measuring 7 mm (0.28 in.) thick and provided as 189 mm (7.44 in.) wide by 1.26 m (49.625 in.) long planks with tongue and groove edging. Prior to installation of the laminate floor, Sound Solution™ Vapor Block underlayment was loose laid over the concrete floor. The underlayment provided in 1.83 m (72 in.) wide rolls was measured as 8 mm (0.32 in.) thick. Total weight of the wood floor and underlayment was 190 kg (419 lbs).

Concrete Floor

The concrete slab sub-floor consisted of ten nominally 610 mm (24 in.) wide by 4.23 m (166.5 in.) long by 152 mm (6 in.) thick wire reinforced concrete slabs. Weight of the concrete slab was 8,599 kg (18,958 lbs).

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TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data is within the limits set by the ASTM Standard E90-04.

<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	33	0.97		800	59	0.26	
125	39	1.33		1000	63	0.23	
160	37	0.70	1	1250	66	0.22	
200	38	0.67	3	1600	69	0.15	
250	37	0.67	7	2000	73	0.14	
315	39	0.76	8	2500	77	0.18	
400	43	0.49	7	3150	79	0.12	
500	47	0.44	4	4000	78	0.20	
630	54	0.37		5000	80	0.82	

STC=51

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

T.L. = TRANSMISSION LOSS, dB

C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT

DEF. = DEFICIENCIES, dB<STC CONTOUR (SUM OF DEF = 30)

STC = SOUND TRANSMISSION CLASS

Tested by _____ Approved by _____
Marc Sciaky David L. Moyer
Senior Technician Laboratory Manager

TO BE OFFICIALLY VALID, THIS DOCUMENT MUST CONTAIN ALL SIGNATURES INDICATED

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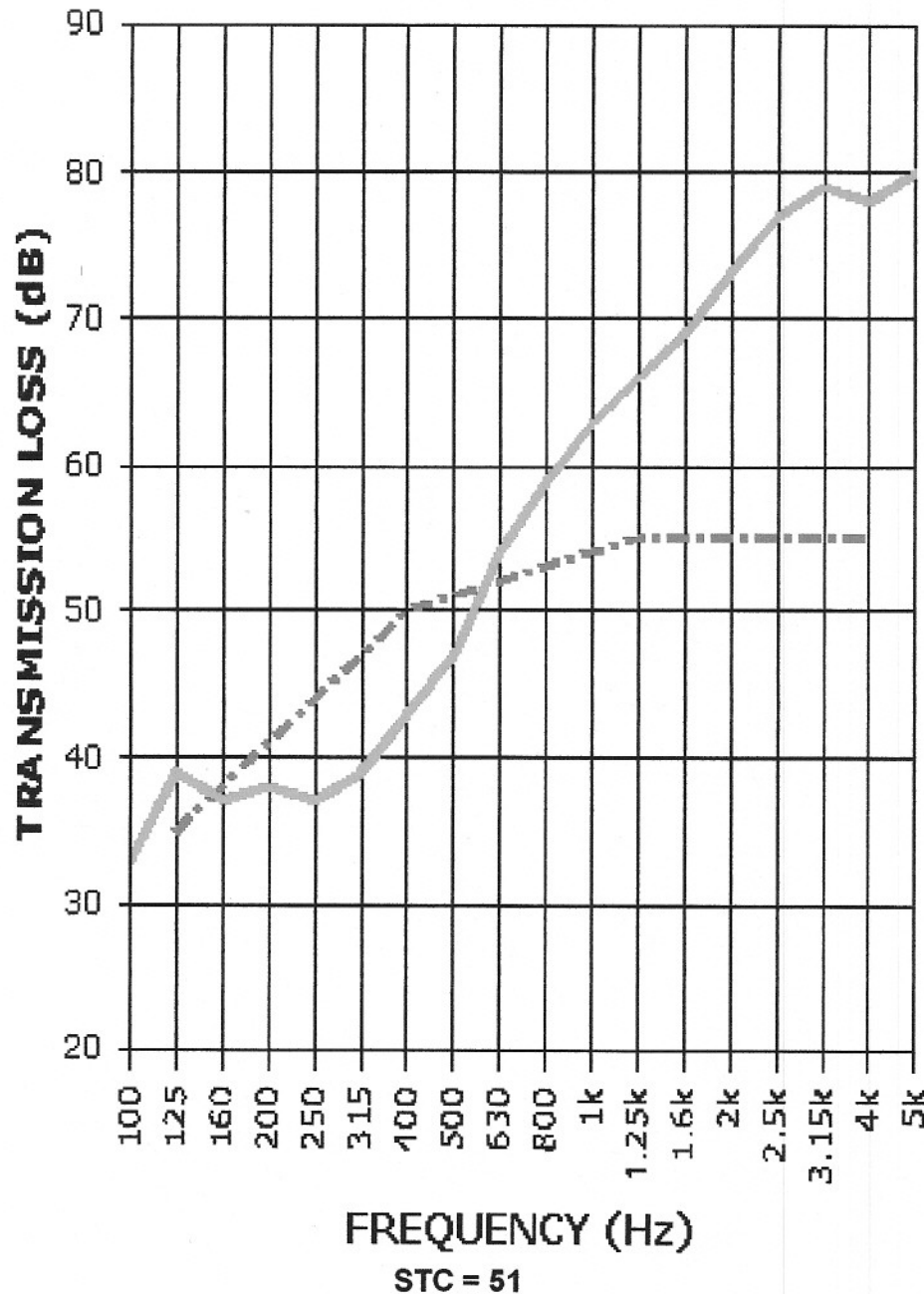
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FREQUENCY (Hz)

STC = 51



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

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NVLAP

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