

Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center
 Laboratory Measurement of Airborne Sound Transmission Loss
 of Building Partitions ASTM E 90-04/NVLAP 08/P06

TEST NUMBER: TL07-112 TEST DATE: APRIL 27, 2007

CLIENT: Quiet Solution, LLC
 DESIGNATION: Test ID 14 QR 516A 2"x4" wood 16 OC R-13 QR 516A

DIMENSIONS: 97" wide x 108" high x 4.5" thick
 AREA: 72.5 ft² (Filler: 53.5 ft² Comp: 126.0 ft²)
 WEIGHT: 424.75 lbs AREA WEIGHT: 5.84 lbs/ft²
 SPECIMEN DETAILS:

SOURCE ROOM: Room 2 Volume = 6297.6 ft³ Area = 2066.2 ft²
 RECEIVE ROOM: Room 1 Volume = 6254.5 ft³ Area = 2042 ft²
 FILE NAME: TL07_112_070427_A.doc

FREQ. (Hz)	T.L. (dB)	UNC. (dB) 95%CL	DEF. (dB) <CONT	FREQ. (Hz)	T.L. (dB)	UNC. (dB) 95%CL	DEF. (dB) <CONT
100	11	0.69		800	52	0.15	
125	26	0.45	7	1k	54	0.13	
160	36	0.45		1.25k	55	0.18	
200	41	0.66		1.6k	57	0.13	
250	37	0.45	5	2k	59	0.11	
315	38	0.28	7	2.5k	60	0.09	
400	44	0.28	4	3.15k	60	0.06	
500	45	0.19	4	4k	60	0.04	
630	48	0.23	2	5k	61	0.04	

Sound Transmission Class (STC) = 49

Total Deficiencies = 29

Extended Frequency Data

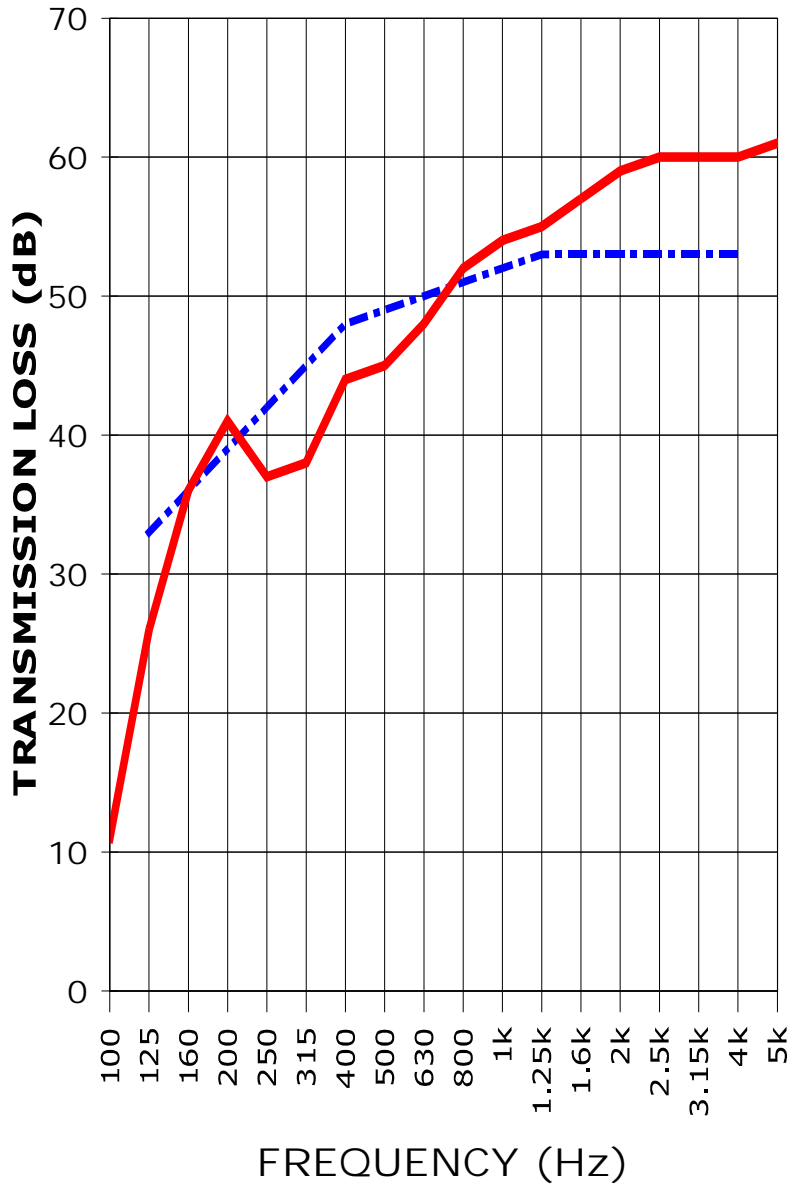
FREQ.	T.L.	UNC.	DEF.	FREQ.	T.L.	UNC.	DEF.
40	25	0.67		6.3k	57	0.06	
50	22	1.22		8k	60	0.06	
63	16	0.88		10k	63	0.02	
80	12	0.52					

R: 46
 OITC: 26

Test Conducted by: Marc Sciaky

This single report page and accompanying graph contain the instantaneous raw data as provided to the client after testing of the specimen. This data, although accurate, is incomplete without the full specimen description, mounting details and signature pages. The full report referenced by the RAL test number above should be consulted for further information regarding these results.

SOUND TRANSMISSION REPORT
RAL - TL07-112



STC = 49



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

TEST NUMBER: TL07-112 TEST DATE: APRIL 27, 2007

ASTM E90 RAW DATA ANALYSIS TLALCS

FREQ	FILL	+	AMB	*	SOR	-REC	=NR	+10 Log (Sc/A)	TLc	TLs	Abs	Unc w/95 % C.L.
40	38.0	+	25.5		97.6	70.6	27.0	0.3	27.4	25.0	116.5	0.67
50	34.0	+	28.4		99.1	77.7	21.4	2.4	23.8	22.0	71.9	1.22
63	40.0		32.2		102.4	85.2	17.3	1.4	18.7	16.0	90.4	0.88
80	43.0		37.2		101.0	87.8	13.2	0.9	14.1	12.0	102.9	0.52
100	44.0		29.5		102.3	89.6	12.6	0.3	12.9	11.0	117.2	0.69
125	49.0		34.3		102.1	75.9	26.2	2.0	28.2	26.0	79.9	0.45
160	51.0		27.3		106.4	70.8	35.7	2.6	38.2	36.0	69.6	0.45
200	55.0		21.0		105.4	65.8	39.5	3.5	43.0	41.0	56.4	0.66
250	58.0		18.1		101.2	64.7	36.5	3.3	39.9	37.0	58.4	0.45
315	64.0		19.0		104.3	66.9	37.4	3.4	40.8	38.0	57.4	0.28
400	65.0		15.9		104.7	61.4	43.3	3.3	46.6	44.0	58.3	0.28
500	65.0		15.1		102.6	58.2	44.4	3.1	47.6	45.0	61.1	0.19
630	66.0		11.6		103.6	56.7	47.0	3.3	50.3	48.0	58.3	0.23
800	68.0		15.1		102.0	51.2	50.7	3.5	54.2	52.0	56.7	0.15
1k	70.0		18.3		100.1	47.4	52.8	3.2	56.0	54.0	60.5	0.13
1.25k	71.0		11.2		101.9	46.8	55.1	2.7	57.8	55.0	68.2	0.18
1.6k	71.0		8.8		101.9	44.7	57.2	2.4	59.6	57.0	73.2	0.13
2k	70.0	+	7.9		100.8	41.7	59.1	1.9	61.0	59.0	80.8	0.11
2.5k	75.0		8.3		102.9	41.8	61.1	1.5	62.6	60.0	89.9	0.09
3.15k	80.0		8.0		102.9	41.5	61.4	1.0	62.4	60.0	98.9	0.06
4k	83.0		8.2		101.5	39.4	62.1	0.4	62.4	60.0	116.2	0.04
5k	86.0		11.2		99.3	35.9	63.5	-0.5	63.0	61.0	142.2	0.04
6.3k	84.0		9.3		96.7	35.4	61.3	-1.6	59.7	57.0	181.3	0.06
8k	81.0		9.9		95.0	29.4	65.6	-2.8	62.8	60.0	240.1	0.06
10k	76.0	+	9.7		92.6	23.6	69.0	-4.1	64.9	63.0	322.2	0.02

STC = 49 Def = 29

INPUTS:

PULSE PROGRAM TEMPLATE: TL_Sor2_Rec1_Pre-c.plt		AVERAGING TIME: 32 sec	
FREQUENCY RANGE: 40 Hz to 10000 Hz		NUM OF MEASUREMENTS: 5	
Environmental Conditions			
Source Room Start:	70°F 52 % RH	Receive Room Start:	69°F 51 % RH
Source Room Comp:	70°F 51 % RH	Receive Room Comp:	68° F 54 % RH
Source RUN Key:	TL07_112_S2_070427_A	Receive RUN Key:	TL07_112_R1_070427_A
		Ambient RUN KEY:	AMB1_070427_A
		SPECIMEN AREA:	72.5 ft²
FILE NAME:	TL07_112_070427_A.doc	FILLER WALL:	RAL Frame 05