

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: TL07-119 TEST DATE: MAY 08, 2007

CLIENT: Quiet Solution, LLC
 DESIGNATION: One layer of 510 on both outer walls\ Area Separation Wall per UL design U347 (1" Fire-shield Shaft liner material. Double-wood studs 16" oc R-13 both sides)

DIMENSIONS: 168" wide x 108" high x 11.5" thick
 AREA: 126.0 ft²
 WEIGHT: 1931 lbs AREA WEIGHT: 15.33 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_119_070508_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	35	0.89		800	73	0.31	
125	45	0.49	8	1k	75	0.18	
160	49	0.58	7	1.25k	77	0.12	
200	53	0.52	6	1.6k	79	0.15	
250	57	0.53	5	2k	81	0.24	
315	62	0.33	3	2.5k	86	0.62	
400	66	0.38	2	3.15k	90	0.16	
500	69	0.19		4k	91	0.23	
630	70	0.24		5k	88	0.57	

Sound Transmission Class (STC) = 69

Total Deficiencies = 31

Extended Frequency Data

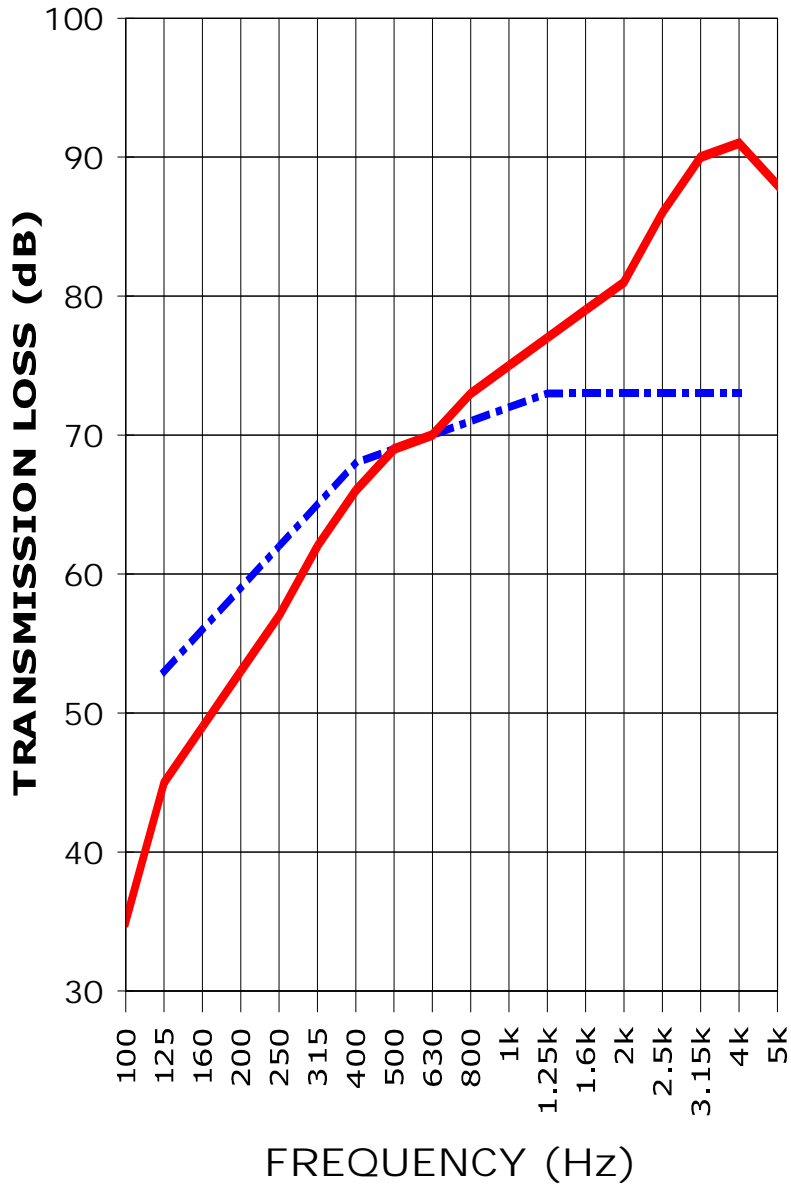
FREQ.	T.L.	UNC.	DEF.	FREQ.	T.L.	UNC.	DEF.
40	24	0.64		6.3k	85	1.01	
50	18	1.02		8k	82	0.24	
63	22	0.82		10k	77	0.22	
80	33	0.42					

R: 67
 OITC: 49

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 - TL07-119



STC = 69



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

TEST NUMBER: TL07-119 TEST DATE: MAY 08, 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	NA		22.9		97.1	73.5	23.6	0.8	24.5	24.0	104.4	0.64
50			27.3		98.0	80.2	17.9	0.5	18.3	18.0	112.9	1.02
63			31.9		101.5	79.4	22.1	-0.1	22.0	22.0	128.7	0.82
80			33.5		99.7	66.9	32.8	0.6	33.3	33.0	110.3	0.42
100			23.1		102.5	67.9	34.6	0.6	35.2	35.0	109.3	0.89
125			28.1		101.3	57.8	43.5	1.8	45.3	45.0	83.7	0.49
160			20.6		106.1	59.7	46.4	2.4	48.8	49.0	73.1	0.58
200			20.1		105.1	55.4	49.7	3.4	53.1	53.0	57.8	0.52
250			15.7		101.2	47.9	53.3	3.4	56.7	57.0	57.7	0.53
315			22.1		104.2	45.7	58.6	3.4	61.9	62.0	58.1	0.33
400			18.6		104.9	42.4	62.5	3.3	65.8	66.0	58.7	0.38
500			16.8		102.8	37.1	65.7	3.4	69.1	69.0	57.6	0.19
630			14.5		103.8	37.2	66.5	3.5	70.1	70.0	55.9	0.24
800			16.6		101.8	32.8	69.0	3.6	72.6	73.0	55.4	0.31
1k			16.4		100.4	28.7	71.7	3.3	75.0	75.0	59.3	0.18
1.25k			11.1		102.2	27.6	74.6	2.7	77.3	77.0	67.4	0.12
1.6k			10.6		102.2	26.1	76.0	2.5	78.5	79.0	71.6	0.15
2k			9.2		101.1	22.4	78.7	2.0	80.7	81.0	78.8	0.24
2.5k			9.8	*	103.1	18.6	84.5	1.5	86.0	86.0	88.7	0.62
3.15k			9.1	*	103.0	14.0	89.1	1.2	90.2	90.0	96.7	0.16
4k			8.9	***	101.7	10.8	90.8	0.5	91.3	91.0	112.4	0.23
5k			12.2	***	99.6	11.4	88.2	-0.3	87.9	88.0	136.0	0.57
6.3k			10.0	***	96.9	10.7	86.1	-1.4	84.8	85.0	172.7	1.01
8k			9.8	***	95.2	11.0	84.2	-2.6	81.7	82.0	227.5	0.24
10k			9.6	***	92.9	11.8	81.1	-3.8	77.3	77.0	300.1	0.22

STC = 69 Def = 31

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:	74°F 51 % RH	Receive Room Start:	74°F 51 % RH
Source Room Comp:	74°F 50 % RH	Receive Room Comp:	74° F 51 % RH
Source RUN Key:	TL07_119_S2_070508_A	Receive RUN Key:	TL07_119_R1_070508_A
		Ambient RUN KEY:	AMB1_070508_A
		SPECIMEN AREA:	126.0 ft²
FILE NAME:	TL07_119_070508_A.doc	FILLER WALL:	NA

'*' or '***' on right of AMB see Receive raw data

Test Conducted by: Marc Sciaky