

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: TL07-392 TEST DATE: DECEMBER 21, 2007

CLIENT: Quiet Solution, LLC
 DESIGNATION: QR 527 3 5/8" double 25 steel 24 oc R-13 X QS 350

DIMENSIONS: 168" wide x 108" high x 9.5" thick
 AREA: 126.0 ft²
 WEIGHT: 755.25 lbs AREA WEIGHT: 5.99 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_392_071221_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	32	1.00		800	70	0.18	
125	40	0.73	8	1k	71	0.15	
160	44	0.76	7	1.25k	72	0.16	
200	47	0.44	7	1.6k	73	0.12	
250	52	0.54	5	2k	72	0.08	
315	58	0.29	2	2.5k	74	0.07	
400	61	0.33	2	3.15k	78	0.06	
500	65	0.19		4k	78	0.06	
630	67	0.21		5k	81	0.04	

Sound Transmission Class (STC) = 64

Total Deficiencies = 31

Extended Frequency Data

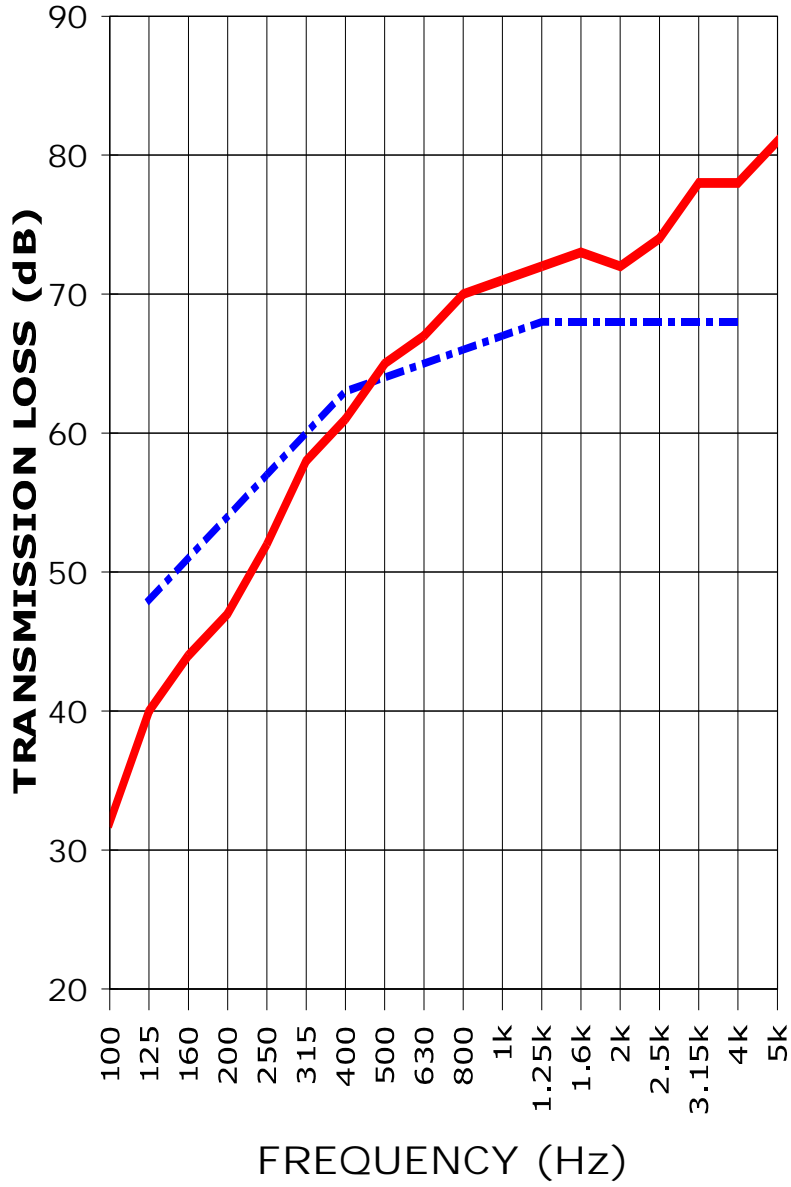
FREQ.	T.L.	UNC.	DEF.	FREQ.	T.L.	UNC.	DEF.
40	19	0.91		6.3k	83	0.07	
50	17	0.89		8k	80	0.03	
63	22	1.12		10k	76	0.04	
80	29	0.90					

R: 62
 OITC: 45

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 - TL07-392



FREQUENCY (Hz)

STC = 64



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

TEST NUMBER: TL07-392 TEST DATE: DECEMBER 21, 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		33.6		97.1	77.8	19.2	0.0	19.3	19.0	125.3	0.91
50			29.8		99.0	82.6	16.4	1.0	17.3	17.0	101.2	0.89
63			34.3		103.3	81.9	21.4	1.1	22.4	22.0	98.8	1.12
80			34.9		101.3	74.0	27.2	2.2	29.4	29.0	76.1	0.90
100			25.9		103.6	72.8	30.8	0.9	31.7	32.0	101.4	1.00
125			29.7		101.6	63.6	38.1	2.2	40.3	40.0	75.1	0.73
160			25.7		105.4	64.0	41.3	2.3	43.6	44.0	74.8	0.76
200			23.7		102.4	58.3	44.1	3.1	47.3	47.0	61.3	0.44
250			21.0		97.9	49.2	48.6	3.3	51.9	52.0	59.1	0.54
315			17.5		101.8	46.5	55.3	3.2	58.5	58.0	60.4	0.29
400			15.1		102.0	44.2	57.8	3.4	61.3	61.0	57.0	0.33
500			14.3		100.2	38.9	61.3	3.3	64.6	65.0	59.2	0.19
630			12.8		100.8	37.0	63.7	3.5	67.2	67.0	56.7	0.21
800			14.5		98.4	32.4	66.1	3.5	69.6	70.0	56.4	0.18
1k			13.0		100.2	32.8	67.4	3.2	70.7	71.0	60.2	0.15
1.25k			9.9		104.4	34.9	69.5	2.6	72.1	72.0	68.6	0.16
1.6k			7.9		104.4	33.8	70.6	2.4	73.0	73.0	73.1	0.12
2k			7.1		102.5	32.9	69.6	2.0	71.6	72.0	80.2	0.08
2.5k			7.0		103.3	30.8	72.5	1.5	73.9	74.0	90.2	0.07
3.15k			7.4		102.7	25.9	76.8	1.1	77.9	78.0	98.5	0.06
4k			8.1		101.0	23.3	77.7	0.3	78.0	78.0	116.7	0.06
5k			9.0	*	99.1	17.7	81.4	-0.6	80.9	81.0	143.1	0.04
6.3k			9.9	***	96.5	12.4	84.1	-1.5	82.6	83.0	179.4	0.07
8k			10.3	***	95.0	11.7	83.3	-2.8	80.5	80.0	239.5	0.03
10k			10.4	***	92.7	12.1	80.6	-4.1	76.5	76.0	324.5	0.04

STC = 64 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: 71°F 55 % RH	Receive Room Start: 69°F 55 % RH	
Source Room Comp: 70°F 55 % RH	Receive Room Comp: 69° F 54 % RH	
Source RUN Key: TL07_392_S2_071221_A	Receive RUN Key: TL07_392_R1_071221_A	
	Ambient RUN KEY: AMB1_071221_B	
	SPECIMEN AREA: 126.0 ft²	
FILE NAME: TL07_392_071221_A.doc	FILLER WALL: NA	

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

Test Conducted by: Marc Sciaky