

6 inch concrete slab, suspended gypsum board ceiling overlaid with: 9/16" hardwood floating floor over 1/8" PlybooQuiet MMS underlayment.



## Acoustical Testing Laboratory



Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 200291

Sound Transmission Loss Test Data							
Test: ASTM E 90 - 04 / ASTM E 413 - 10							
Test Report: NGC5012002						Date: 1/18/2012	
Specimen Size [m <sup>2</sup> ]: 17.8						Page 3 of 4	
<b>Source room</b>				<b>Receiving room</b>			
Volume [m <sup>3</sup> ]: 53.2				Volume [m <sup>3</sup> ]: 60			
Rm Temp [°C]: 18				Rm Temp [°C]: 18			
Humidity [%]: 53				Humidity [%]: 53			
<b>Sound Transmission Class STC [dB]: 66</b>							
Sum of Unfavorable Deviations [dB]: 26							
Max. Unfavorable Deviation [dB]: 7 at 315 Hz							
Frequency [Hz]	STL [dB]	L1 [dB]	L2 [dB]	d [dB/s]	Corr. [dB]	u.Dev. [dB]	ΔSTL
100	48	105.4	62.4	35.2	5.0		2.35
125	49	105.5	63.9	21.3	7.4	1	2.50
160	52	108.3	65.0	16.5	8.7	1	2.20
200	52	106.5	62.7	16.0	8.3	4	1.29
250	53	104.2	58.7	17.7	7.5	6	1.21
315	55	99.9	52.5	17.6	7.6	7	0.46
400	59	100.7	49.4	17.8	7.7	6	0.89
500	65	102.7	45.8	18.4	8.0	1	0.42
630	69	104.0	42.6	20.7	7.6		0.37
800	72	103.6	38.8	20.7	7.2		0.69
1000	75	100.3	32.6	22.8	7.3		0.70
1250	78	97.1	25.1	25.0	6.0		0.37
1600	81	99.1	24.6	26.8	6.4		0.46
2000	79	100.2	27.1	30.9	5.9		0.73
2500	79	101.3	27.4	33.8	5.1		0.93
3150	80	100.5	25.2	36.2	4.8		0.85
4000	82	97.9	19.8	41.9	3.9		1.55
5000	84	92.2	12.1	48.3	3.8		1.84

STL = Sound Transmission Loss, dB  
 L1 = Source Room Level, dB  
 L2 = Receiving Room Level, dB  
 d = Decay Time, dB/second  
 Δ STL = Uncertainty for 95% Confidence Level

The results reported above apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. This report may not be reproduced except in full, without the written approval of the laboratory. The laboratory's accreditation or any of its test reports in no way constitutes or implies product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.



## Acoustical Testing Laboratory



Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 200291

### Sound Transmission Loss Test Data

Page 4 of 4

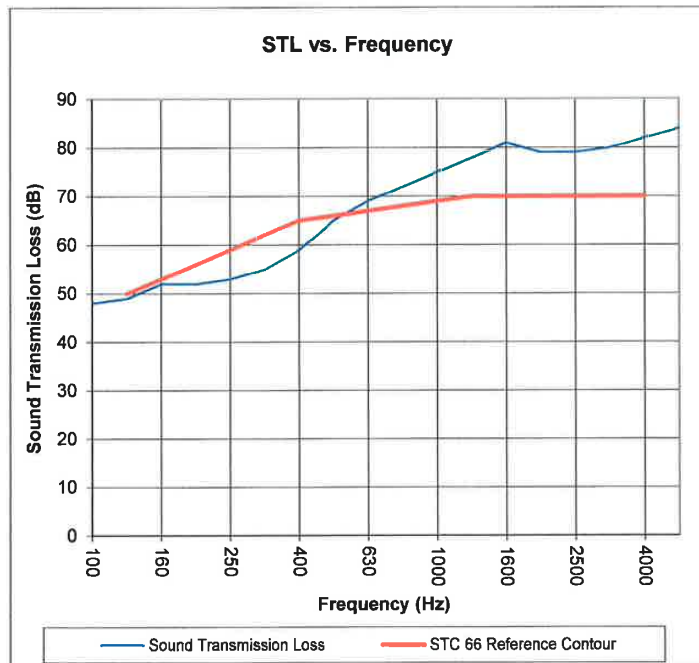
Per: ASTM E 90 - 04 / ASTM E 413 - 10

Test Report: NGC5012002  
Test Date: 1/18/2012  
Specimen Size [m<sup>2</sup>]: 17.8

**Sound Transmission Class STC = 66 dB**

Frequency [Hz]	STL [dB]	ΔSTL
100	48	2.35
125	49	2.50
160	52	2.20
200	52	1.29
250	53	1.21
315	55	0.46
400	59	0.89
500	65	0.42
630	69	0.37
800	72	0.69
1000	75	0.70
1250	78	0.37
1600	81	0.46
2000	79	0.73
2500	79	0.93
3150	80	0.85
4000	82	1.55
5000	84	1.84

\* Due to high insulating value of specimen, background levels limit results at these frequencies.



STL = Sound Transmission Loss, dB  
Δ STL = Uncertainty for 95% Confidence Level

The results reported above apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. This report may not be reproduced except in full, without the written approval of the laboratory. The laboratory's accreditation or any of its test reports in no way constitutes or implies product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.