

TEST REPORT

for

Sound Seal
50 H.P. Almgren Drive
Agawam, MA 01001
Michael Keeney / 413-789-1770

Impact Sound Transmission Test

ASTM E 492 – 09 (2016) / ASTM E 989 – 18

On

**6 Inch (152 mm) Concrete Slab Floor- Ceiling Assembly
Overlaid with 3/8" Engineered Wood Flooring
over CeraZorb 10mm 1.9# Underlayment**

Report Number: NGC 7019153

Assignment Number: G-1649

Test Date: 12/04/2019

Report Date: 12/19/2019

Submitted by:


Anthony J. Rivers
Test Technician

Reviewed by:


Robert J. Menchetti
Director

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

Revision Summary:

Date	SUMMARY
Approval Date: 12/19/2019	Original issue date: 12/19/2019 Original NGCTS report: NGC 7019153

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Test Method: This test method is in accordance with American Society for Testing and Materials Standard Test Method for Laboratory Measurement of Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine - Designation: E 492-09 (2016) / E 989-18.

The uncertainty limits of each tapping machine location met the precision requirements of section A1.4 of ASTM E 492-09 (2016).

Specimen Description: 6 inch concrete slab floor ceiling assembly overlaid with, according to client, 3/8" Engineered Wood Flooring over CeraZorb 10mm 1.9# underlayment.

The test specimen was a floor assembly and was observed to consist of the following:
All weights and dimension are averaged:

- 1 layer of, 3/8" Engineered Wood flooring. The flooring was floating on the CeraZorb 10mm 1.9# underlayment. Measured thickness: 9.65 mm (0.38 in.). Measured weight: 5.78 kg/m² (1.18 PSF)
- 1 layer of, CeraZorb 10mm 1.9# underlayment. The underlayment was floating on the concrete slab. Measured thickness: 10.41 mm (0.41 in.). Measured weight: 0.20 kg/m² (0.04 PSF)
- 152.4 mm (6 in.) thick reinforced concrete slab, weighing: 366.2 kg/m² (75.00 PSF)

The overall weight of the test assembly is: 372.11 kg/m² (76.22 PSF)

The perimeter of the test frame was sealed with a rubber gasket and a sand filled trough.

The test frame was structurally isolated from the receiving room.

Specimen size: 3657.6 mm x 4876.8 mm (12 ft. x 16 ft.)

Conditioning: Concrete slab cured for a minimum of 28 days.

Test Results: The results of the tests are given on pages 4 and 5 of the report.

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Normalized impact sound pressure level						
Test: ASTM E 492 - 09 (2016) / ASTM E 989 - 18						
Test Report: NGC7019153				Date: 12/4/2019		
Specimen Size [m ²]: 17.8				Page 4 of 5		
Source room			Receiving room			
Rm Temp [°C]: 23			Volume [m ³]: 128			
Humidity [%]: 56			Rm Temp [°C]: 22			
			Humidity [%]: 56			
Impact Insulation Class IIC [dB]: 51						
Sum of Unfavorable Deviations [dB]: 30						
Max. Unfavorable Deviation [dB]: 8			at 125 Hz			
Frequency	L _n	L2	d	Corr.	u.Dev.	ΔL _n
[Hz]	[dB]	[dB]	[dB/s]	[dB]	[dB]	
80	56	56.7	23.09	-0.7		1.69
100	59	60.1	21.16	-1.1		1.27
125	69	71.4	17.67	-2.4	8	2.33
160	66	68.8	14.96	-2.8	5	1.65
200	67	70.0	14.63	-3.0	6	0.57
250	68	71.0	15.57	-3.0	7	1.53
315	63	66.0	15.21	-3.0	2	0.57
400	62	63.9	16.98	-1.9	2	0.58
500	55	56.7	17.75	-1.7		0.45
630	48	50.2	17.73	-2.2		0.53
800	44	45.8	18.46	-1.8		0.60
1000	40	41.6	18.28	-1.6		0.70
1250	36	38.1	19.47	-2.1		0.56
1600	31	32.9	21.12	-1.9		0.67
2000	26	27.0	23.26	-1.0		0.67
2500	25	25.2	25.35	-0.2		1.03
3150	22	22.0	27.85	0.0		0.84
4000	20	19.8	32.88	0.2		0.84
5000	16	16.1	37.31	-0.1		0.91
L _n = Normalized Sound Pressure Level, dB L2 = Receiving Room Level, dB d = Decay Rate, dB/second ΔL _n = Uncertainty for 95% Confidence Level						

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Normalized impact sound pressure level

Test: ASTM E 492 - 09 (2016) / ASTM E 989 - 18

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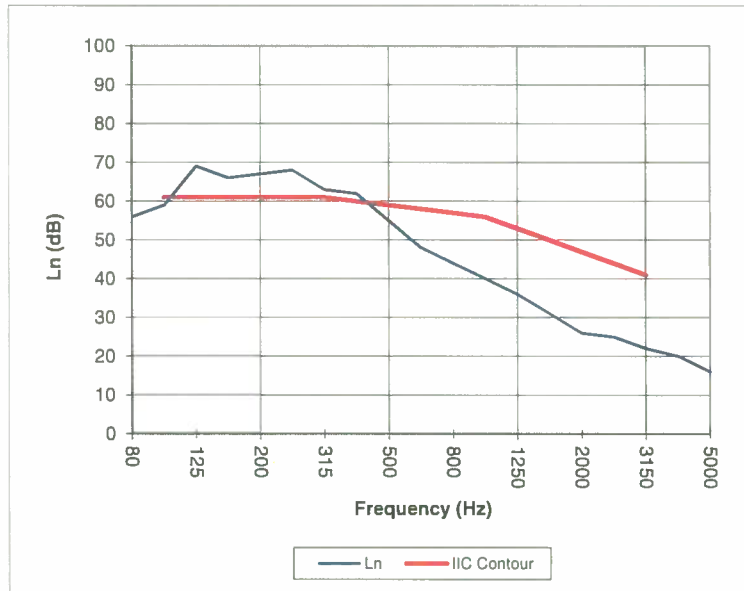
Test Report: NGC7019153

Test Date: 12/4/2019

Specimen Size [m²]: 17.8

Impact Insulation Class IIC [dB]: 51

Frequency [Hz]	L _n [dB]
80	56
100	59
125	69
160	66
200	67
250	68
315	63
400	62
500	55
630	48
800	44
1000	40
1250	36
1600	31
2000	26
2500	25
3150	22
4000	20
5000	16



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

L_n = Normalized Sound Pressure Level, dB

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