

## 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

**8 Inch (203 mm) Concrete Slab Floor- Ceiling Assembly  
Overlaid with 3/8" Engineered Wood Flooring  
over CeraZorb 3mm 1.9# Underlayment**

Report Number: NGC 7019159

Assignment Number: G-1649

Test Date: 12/06/2019

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:**

<b>Date</b>	<b>SUMMARY</b>
Approval Date: 12/19/2019	Original issue date: 12/19/2019 Original NGCTS report: NGC 7019159

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Page 3 of 5

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: 8 inch concrete slab floor ceiling assembly overlaid with, according to client, 3/8" Engineered Wood Flooring over CeraZorb 3mm 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 3mm 1.9# underlayment. Measured thickness: 9.65 mm (0.38 in.). Measured weight: 5.78 kg/m<sup>2</sup> (1.18 PSF)
- 1 layer of, CeraZorb 3mm 1.9# underlayment. The underlayment was floating on the concrete slab. Measured thickness: 3.05 mm (0.12 in.). Measured weight: 0.10 kg/m<sup>2</sup> (0.02 PSF)
- 203.2 mm (8 in.) thick reinforced concrete slab, weighing: 488.2 kg/m<sup>2</sup> (100.00 PSF)

The overall weight of the test assembly is: 494.06 kg/m<sup>2</sup> (101.20 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.)

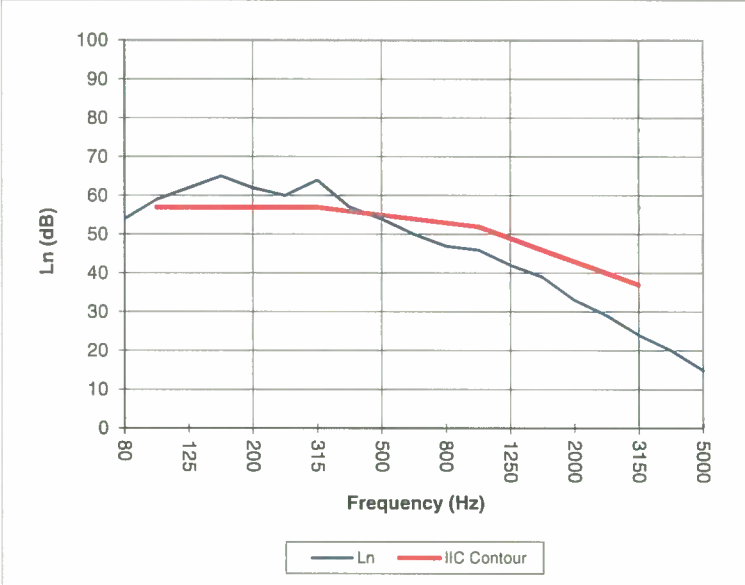
Conditioning: Concrete slab cured for a minimum of 28 days.

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: NGC7019159				Date: 12/6/2019		
Specimen Size [m <sup>2</sup> ]: 17.8				Page 4 of 5		
<b>Source room</b>			<b>Receiving room</b>			
Rm Temp [°C]: 23			Volume [m <sup>3</sup> ]: 128			
Humidity [%]: 56			Rm Temp [°C]: 22			
			Humidity [%]: 53			
<b>Impact Insulation Class IIC [dB]: 55</b>						
Sum of Unfavorable Deviations [dB]: 31						
Max. Unfavorable Deviation [dB]: 8			at 160 Hz			
Frequency	L <sub>n</sub>	L <sub>2</sub>	d	Corr.	u.Dev.	ΔL <sub>n</sub>
[Hz]	[dB]	[dB]	[dB/s]	[dB]	[dB]	
80	54	54.7	24.53	-0.7		1.51
100	59	58.9	26.93	0.1	2	1.48
125	62	63.6	21.36	-1.6	5	0.84
160	65	67.7	15.02	-2.7	8	1.05
200	62	65.3	13.89	-3.3	5	0.83
250	60	63.1	15.06	-3.1	3	0.84
315	64	66.4	15.43	-2.4	7	0.69
400	57	59.7	16.94	-2.7	1	0.63
500	54	56.4	18.58	-2.4		0.59
630	50	52.1	19.18	-2.1		0.51
800	47	48.2	20.07	-1.2		0.61
1000	46	47.2	19.88	-1.2		0.71
1250	42	43.6	20.66	-1.6		0.40
1600	39	40.0	21.48	-1.0		0.50
2000	33	33.8	23.56	-0.8		0.54
2500	29	29.6	25.70	-0.6		0.70
3150	24	24.4	28.17	-0.4		0.79
4000	20	19.8	32.18	0.2		0.73
5000	15	15.5	36.50	-0.5		0.81
L <sub>n</sub> = Normalized Sound Pressure Level, dB L <sub>2</sub> = Receiving Room Level, dB d = Decay Rate, dB/second ΔL <sub>n</sub> = Uncertainty for 95% Confidence Level						

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