

TEST REPORT

for

Regupol America LLC

11 Ritter Way

Lebanon, PA 17042

Florian Sassmannshausen / 717-675-2190

Impact Sound Transmission Test

ASTM E 492 – 09 / ASTM E 989 – 06

On

**6 Inch Concrete Slab Floor – Ceiling Assembly
Overlaid with 2 layers of Regupol Vibration 200 (17 mm)
and a 4 Inch Concrete Slab**

Report Number: NGC 7016081

Assignment Number: G-1296

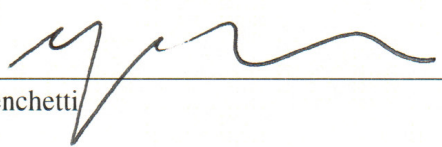
Test Date: 05/09/2016

Report Approval Date: 05/19/2016

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: 05/19/2016	Original issue date: 05/19/2016 Original NGCTS report #: NGC 7016081

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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/ E 989-06.

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

Specimen Description: 6 inch concrete slab floor-ceiling assembly, overlaid with according to client, 2 layers of Regupol Vibration 200 (17 mm) and a 4 inch concrete slab.

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

- 101.6 mm (4 in.) thick reinforced concrete slab, weighing: 223.30 kg/m² (45.74 PSF)
- 2 layers of, according to the client, Regupol Vibration 200 (17 mm). The Regupol Vibration 200 (17 mm) was floating on the 6 inch concrete slab. Measured thickness: 36.58 mm (1.44 in.). Measured weight: 10.35 kg/m² (2.12 PSF)
- 152.4 mm (6 in.) thick reinforced concrete slab, weighing: 366.15 kg/m² (75.0 PSF)

The overall weight of the test assembly is: 599.80 kg/m² (122.86 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 / ASTM E 989 - 06						
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Specimen Size [m ²]: 17.8						
Source room				Receiving room		
Rm Temp [°C]: 19				Volume [m ³]: 128		
Humidity [%]: 61				Rm Temp [°C]: 19		
				Humidity [%]: 61		
Impact Insulation Class IIC [dB]: 65						
Sum of Unfavorable Deviations [dB]: 25						
Max. Unfavorable Deviation [dB]: 5				at 1600 Hz		
Frequency	L _n	L ₂	d	Corr.	u.Dev.	ΔL _n
[Hz]	[dB]	[dB]	[dB/s]	[dB]	[dB]	
80	55	55.3	29.47	-0.3		1.56
100	49	50.1	21.57	-1.1	2	1.95
125	50	51.7	17.82	-1.7	3	0.81
160	51	53.4	16.30	-2.4	4	0.86
200	49	52.4	14.37	-3.4	2	1.06
250	49	52.0	15.45	-3.0	2	0.86
315	45	48.1	14.69	-3.1		0.53
400	45	47.8	15.81	-2.8		0.71
500	42	44.0	17.09	-2.0		0.37
630	37	39.4	16.61	-2.4		0.46
800	35	37.8	17.10	-2.8		0.40
1000	35	37.1	16.69	-2.1		0.51
1250	40	42.0	18.04	-2.0	1	0.40
1600	41	42.3	19.45	-1.3	5	0.66
2000	36	37.0	22.20	-1.0	3	0.59
2500	31	31.6	24.14	-0.6	1	0.64
3150	29	29.1	25.95	-0.1	2	0.64
4000	22	22.3	30.02	-0.3		0.89
5000	22	21.6	34.11	0.4		0.95
L _n = Normalized Sound Pressure Level, dB L ₂ = 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 / ASTM E 989 - 06

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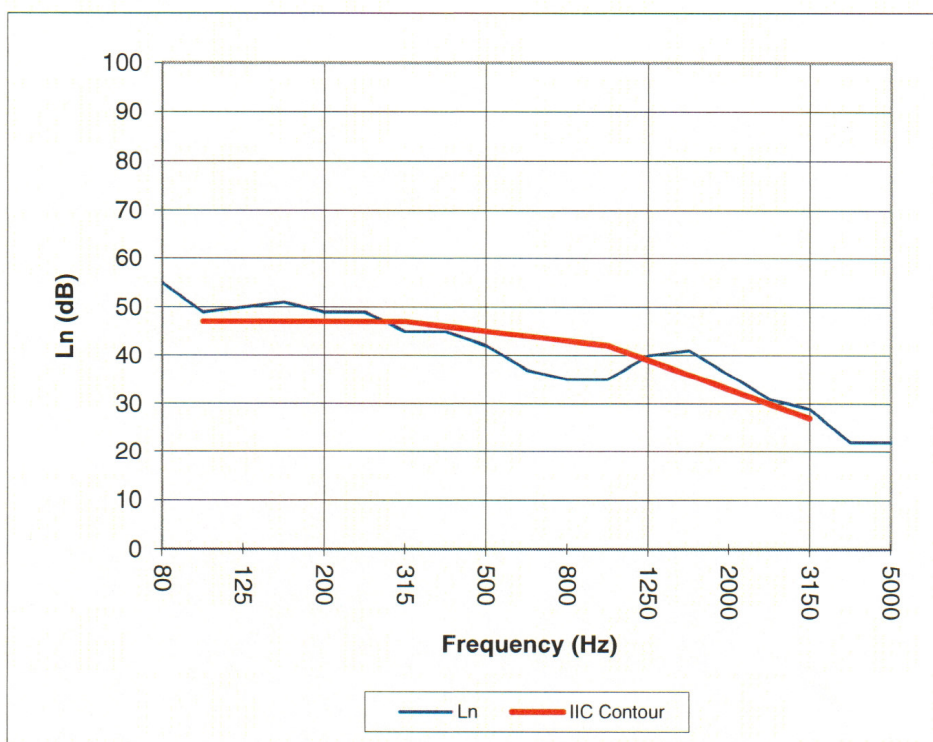
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Test Date: 5/9/2016

Specimen Size [m²]: 17.8

Impact Insulation Class IIC [dB]: 65

Frequency	L _n
[Hz]	[dB]
80	55
100	49
125	50
160	51
200	49
250	49
315	45
400	45
500	42
630	37
800	35
1000	35
1250	40
1600	41
2000	36
2500	31
3150	29
4000	22
5000	22



* 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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