

TEST REPORT

for

Novateck USA dba Silent Blue
1040 SW 10th Avenue #6
Pompano Beach, Florida 33069
Frederick Leonard / 954-960-5425

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 SPC Floor, 1220mm x 178mm x 5.5mm (0.5mm / 21mil) + Ceramic
Bead overlay with 1.5mm W23 underlayment attached,
Unilin klikc, embossed surface, virgin material**

Report Number: NGC 7019114

Assignment Number: G-1638

Test Date: 10/21/2019

Report Date: 10/28/2019

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: 10/28/2019 | Original issue date: 10/28/2019 Original NGCTS report: NGC 7019114 |

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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, SPC Floor, 1220mm x 178mm x 5.5mm (0.5mm / 22mil) + Ceramic Bead overlay with 1.5mm W23 underlayment attached, Unilin click, embossed surface, virgin material.

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

- 1 layer of, according to the client, SPC Floor, 1220mm x 178mm x 5.5mm (0.5mm / 22mil) + Ceramic Bead overlay with 1.5mm W23 underlayment attached, Unilin click, embossed surface, virgin material. The flooring was floating on the concrete slab. Measured average thickness: 5.59 mm (0.22 in.). Measured average weight: 8.25 kg/m² (1.69 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: 374.40 kg/m² (76.69 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 - 06 (2012) | | | | | | |
| Test Report: NGC7019114 | | | | | Date: 10/18/2019 | |
| Specimen Size [m ²]: 17.8 | | | | | Page 4 of 5 | |
| Source room | | | Receiving room | | | |
| Rm Temp [°C]: 24 | | | Volume [m ³]: 127 | | | |
| Humidity [%]: 58 | | | Rm Temp [°C]: 22 | | | |
| | | | Humidity [%]: 56 | | | |
| Impact Insulation Class IIC [dB]: 51 | | | | | | |
| Sum of Unfavorable Deviations [dB]: 32 | | | | | | |
| Max. Unfavorable Deviation [dB]: 8 | | | at 125 Hz | | | |
| Frequency [Hz] | L _n [dB] | L ₂ [dB] | d [dB/s] | Corr. [dB] | u.Dev. [dB] | ΔL _n |
| 80 | 58 | 59.6 | 22.60 | -1.6 | | 1.80 |
| 100 | 59 | 60.5 | 22.31 | -1.5 | | 2.10 |
| 125 | 69 | 71.0 | 18.14 | -2.0 | 8 | 2.03 |
| 160 | 67 | 69.5 | 16.05 | -2.5 | 6 | 1.56 |
| 200 | 68 | 70.6 | 14.91 | -2.6 | 7 | 0.56 |
| 250 | 68 | 70.7 | 15.60 | -2.7 | 7 | 1.01 |
| 315 | 63 | 65.4 | 16.18 | -2.4 | 2 | 0.65 |
| 400 | 62 | 64.4 | 17.40 | -2.4 | 2 | 0.55 |
| 500 | 55 | 56.8 | 17.65 | -1.8 | | 0.44 |
| 630 | 52 | 53.6 | 18.46 | -1.6 | | 0.42 |
| 800 | 53 | 54.7 | 19.05 | -1.7 | | 0.60 |
| 1000 | 44 | 46.4 | 18.52 | -2.4 | | 0.64 |
| 1250 | 40 | 41.5 | 19.86 | -1.5 | | 0.51 |
| 1600 | 36 | 37.1 | 21.37 | -1.1 | | 0.55 |
| 2000 | 31 | 31.9 | 24.00 | -0.9 | | 0.65 |
| 2500 | 27 | 27.1 | 26.37 | -0.1 | | 0.86 |
| 3150 | 22 | 22.4 | 28.78 | -0.4 | | 0.75 |
| 4000 | 20 | 20.0 | 32.68 | 0.0 | | 0.80 |
| 5000 | 17 | 16.8 | 37.71 | 0.2 | | 0.87 |
| 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

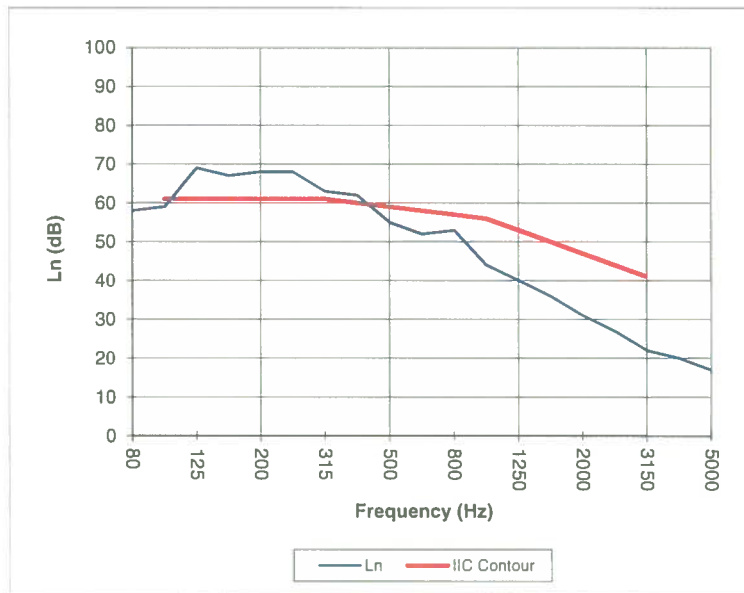
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Test Report: NGC7019114
 Test Date: 10/18/2019
 Specimen Size [m²]: 17.8

Impact Insulation Class IIC [dB]: 51

| Frequency [Hz] | L _n [dB] |
|-------------------|------------------------|
| 80 | 58 |
| 100 | 59 |
| 125 | 69 |
| 160 | 67 |
| 200 | 68 |
| 250 | 68 |
| 315 | 63 |
| 400 | 62 |
| 500 | 55 |
| 630 | 52 |
| 800 | 53 |
| 1000 | 44 |
| 1250 | 40 |
| 1600 | 36 |
| 2000 | 31 |
| 2500 | 27 |
| 3150 | 22 |
| 4000 | 20 |
| 5000 | 17 |



* 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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