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TEST REPORT

for

CAC Group Investment LLC
12879 SW 62 Lane
Miami, FL 33183
Carlos Gaitan / 786-285-6005

Impact Sound Transmission Test

ASTM E 492 – 09 (2016) / ASTM E 989 – 06 (2012)

On

8 Inch (203 mm) Concrete Slab Floor- Ceiling Assembly
Overlaid Ceramic Tile and SoundMiami SM12MM Rubber Underlayment

Report Number: NGC 7017446

Assignment Number: G-1551

Test Date: 08/24/2020

Report Revision Date: 08/27/2020

Submitted by: _____
Anthony J. Rivers
Test Technician

Reviewed by: _____
Robert J. Menchetti
Director

Revision Summary:

Date	SUMMARY
Approval Date: 24/08/2020	Original issue date: 04/19/2020 Original NGCTS report: NGC 7017446

Report Number: NGC 7017446

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 989-06 (2012).

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, Ceramic Tile over SoundMiami SM12MM Rubber 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, according to client, Ceramic Tile. The tile was adhered to the SoundMiami SM12MM Rubber Underlayment using Versabond mortar. The mortar was applied using a 6.35 mm x 9.53 mm x 6.35 mm (1/4 in. x 3/8 in. x 1/4 in.) square notch trowel. The tile was grouted using Mapei Keracolor S grout. The measured thickness of the tile was 8.13 mm (0.32 in.), Measured weight of 17.43 kg/m^2 (3.57 PSF)

- 1 layer of, according to client, SoundMiami SM12MM Rubber Underlayment. The underlayment was adhered to the concrete slab using SMCAC08 Multi-Purpose adhesive. The adhesive was applied using a 4.76 mm x 3.97 mm (3/16 in. x 5/32 in.) square notch trowel. The measured thickness of the underlayment was 5.08 mm (0.20 in.), Measured weight of 3.81 kg/m^2 (0.78 PSF)

- 203.2 mm (8 in.) thick reinforced concrete slab, weighing: 488.2 kg/m^2 (100.0 PSF)

The overall weight of the test assembly is: 509.44 kg/m^2 (104.35 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. Adhesive cured a minimum of 24 hours.

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: NGC 7017446 Date: 24/08/2020
Specimen Size [m²]: 17.8

Source room
Rm Temp [°C]: 18.7
Humidity [%]: 60

Receiving room
Volume [m³]: 128
Rm Temp [°C]: 19.8
Humidity [%]: 61

Impact Insulation Class IIC [dB]: 55
Sum of Unfavorable Deviations [dB]: 29
Max. Unfavorable Deviation [dB]: 6 at 100 Hz

Frequency [Hz]	L_n [dB]	L2 [dB]	T [s]	Corr. [dB]	u.Dev. [dB]	ΔL_n
100	63.0	68.6	2.75	-5.6	6.0	0.232
125	60.0	65.2	2.59	-5.2	3.0	0.328
160	63.0	69.7	3.12	-6.7	6.0	0.340
200	63.0	68.8	3.03	-5.8	6.0	0.169
250	58.0	64.4	2.99	-6.4	1.0	0.172
315	61.0	67.2	2.91	-6.2	4.0	0.122
400	56.0	62.0	2.90	-6.0	-.-	0.117
500	54.0	59.3	2.71	-5.3	-.-	0.075
630	52.0	57.3	2.37	-5.3	-.-	0.097
800	48.0	53.4	2.43	-5.4	-.-	0.066
1000	53.0	57.7	2.26	-4.7	1.0	0.059
1250	51.0	55.8	2.03	-4.8	2.0	0.042
1600	44.0	48.0	1.96	-4.0	-.-	0.044
2000	37.0	41.1	1.86	-4.1	-.-	0.044
2500	34.0	38.1	1.66	-4.1	-.-	0.046
3150	31.0	34.7	1.50	-3.7	-.-	0.046
4000	28.0	31.1	1.35	-3.1	-.-	0.050
5000	24.0	26.2	1.21	-2.2	-.-	0.048

L_n = Normalized Sound Pressure Level, dB
L2 = Receiving Room Level, dB
T = Reverberation Time, seconds
ΔL_n = Uncertainty for 95% Confidence Level

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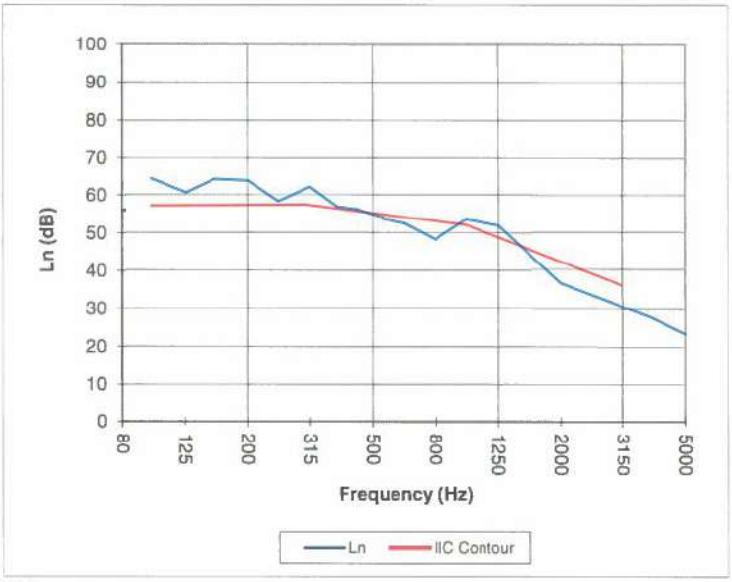
Test Report: NGC 7017446
Test Date: 24/08/2020
Specimen Size [m²]: 17.8

Impact Insulation Class IIC [dB]: 55

Frequency [Hz]	L_n [dB]
100	63
125	60
160	63
200	63
250	58
315	61
400	56
500	54
630	52
800	48
1000	53
1250	51
1600	44
2000	37
2500	34
3150	31
4000	28
5000	24

* 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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