Field Sound Transmission Test Report

Noise Isolation Class (NIC)

Report Date:	2024-04-15		
Test Date:	2024-04-04		
DLAA Test No	1.1.1	**Source Room:**	2nd Floor Great Room
Test Site	apartments	**Receiver Room:**	1st Floor Great Room/Kitchen
Client	GC	**Test Assembly:**	Floor-ceiling

STANDARDS:

ASTM E336-16	Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings
ASTM E413-16	Standard Classification for Rating Sound Insulation
ASTM E2235-04(2012)	Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods

STATEMENT OF CONFORMANCE:

Testing was conducted in accordance with ASTM E336-20, ASTM E413-16, and ASTM E2235-04(2012), with exceptions noted below. All requrements for measuring abd reporting Airborne Sound Attenuation between Rooms in Buildings (ATL) and Noise Isolation Class (NIC) were met.

TEST ENVIRONMENT:

The source room was 2nd Floor Great Room. The space was finished, unfurnished. The floor was Carpet. The ceiling was gyp. The walls were gyp. All doors and windows were closed during the testing period. The source room had a volume of approximately 3949.0 cu. ft.

The receiver room was 1st Floor Great Room/Kitchen. The space was finished unfurnished. The floor was LVT. The ceiling was gyp. The walls were gyp. All doors and windows were closed during the testing period. The source room had a volume of approximately 3949.0 cu. ft.

The test assembly measured approximately 14.8x29.583, and had an area of approximately 428.0 sq. ft.

TEST ASSEMBLY:

The tested assembly was the Floor-ceiling The assembly was not field verified, and was based on information provided by the client and drawings for the project. The client advised that no slab treatment or self-leveling was applied. Results may vary if slab treatment or self-leveling or any adhesive is used in other installations.

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TEST PROCEDURE:

Determination of space-average sound pressure levels was performed via the manually scanned microphones techique, described in ASTC Test Procedure ASTM E336-16, Paragraph 11.4.3.3.The source room was selected in accordance with ASTM E336-11 Paragraph 9.2.5, which states that 'If a corridor must be used as one of the spaces for measurement of ATL or FTL, it shall be used as the source space.'

Flanking transmission was not evaluated.
To evaluate room absorption, 1 microphone was used to measure 4 decays at 4 locations around the receiving room for a total of 16 measurements, per AIIC Test Procedure ASTM E1007-14

TEST INSTRUMENTATION:

Equipment Type	Manufacturer	Model Number	Serial Number	Last NIST Traceable Calibration	Last Local Calibration
Sound Level Meter	Larson Davis	831	4328	10/24/2022	4/4/2024
Microphone Pre-Amp	Larson Davis	PRM831	046469	10/24/2022	4/4/2024
Microphone	Larson Davis	377B20	168830	10/20/2022	4/4/2024
Calibrator	Larson Davis	CAL200	5955	10/26/2022	N/A
Amplified Loudspeaker	QSC	K10	GAA530909	N/A	N/A
Noise Generator	NTi Audio	MR-PRO	0162	N/A	N/A

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STATEMENT OF TEST RESULTS:

Frequency (Hz)	L1, Average Source Room Level (dB)	L2, Average Corrected Receiver Room Level (dB)	Average Receiver Background Level (dB)	Average RT60 (seconds)	Noise Reduction, NR (dB)	Backgrnd check Exceptions
100	95.8	78.2	35.4	0.911	17.6	0
125	95.0	79.5	39.2	0.723	15.5	0
160	91.4	73.0	33.0	0.618	18.4	0
200	90.0	65.6	37.1	0.846	24.4	0
250	91.6	61.6	34.4	0.633	30.0	0
315	89.7	57.6	33.7	0.996	32.1	0
400	88.8	52.7	33.3	1.023	36.1	0
500	84.7	47.5	32.5	1.137	37.2	0
630	82.5	42.0	31.2	1.345	40.5	0
800	84.5	39.9	30.6	1.262	44.6	0
1000	83.0	33.7	29.6	1.141	49.3	0
1250	83.8	30.4	28.9	1.118	53.4	1
1600	81.4	28.2	28.5	1.287	53.2	1
2000	79.8	25.5	24.9	1.459	54.3	1
2500	82.4	22.1	20.6	1.518	60.3	1
3150	84.0	19.6	18.5	1.461	64.4	1
4000	85.0	17.7	17.6	1.393	67.3	1

NIC: 39

The Noise Isolation Class (NIC) of 39 was calculated. The NIC rating is based on Noise Reduction (NR), and includes the effects of noise flanking. The NIC reference contour is shown on the next page, and has been fit to the Noise Reduction values, in accordance with the procedure of ASTC Test Procedure ASTM E336-16
The results stated in this report represent only the specific construction and acoustical conditions present at the time of the test. Measurements performed in accordance with this test method on nominally identical constructions and acoustical conditions may produce different results.

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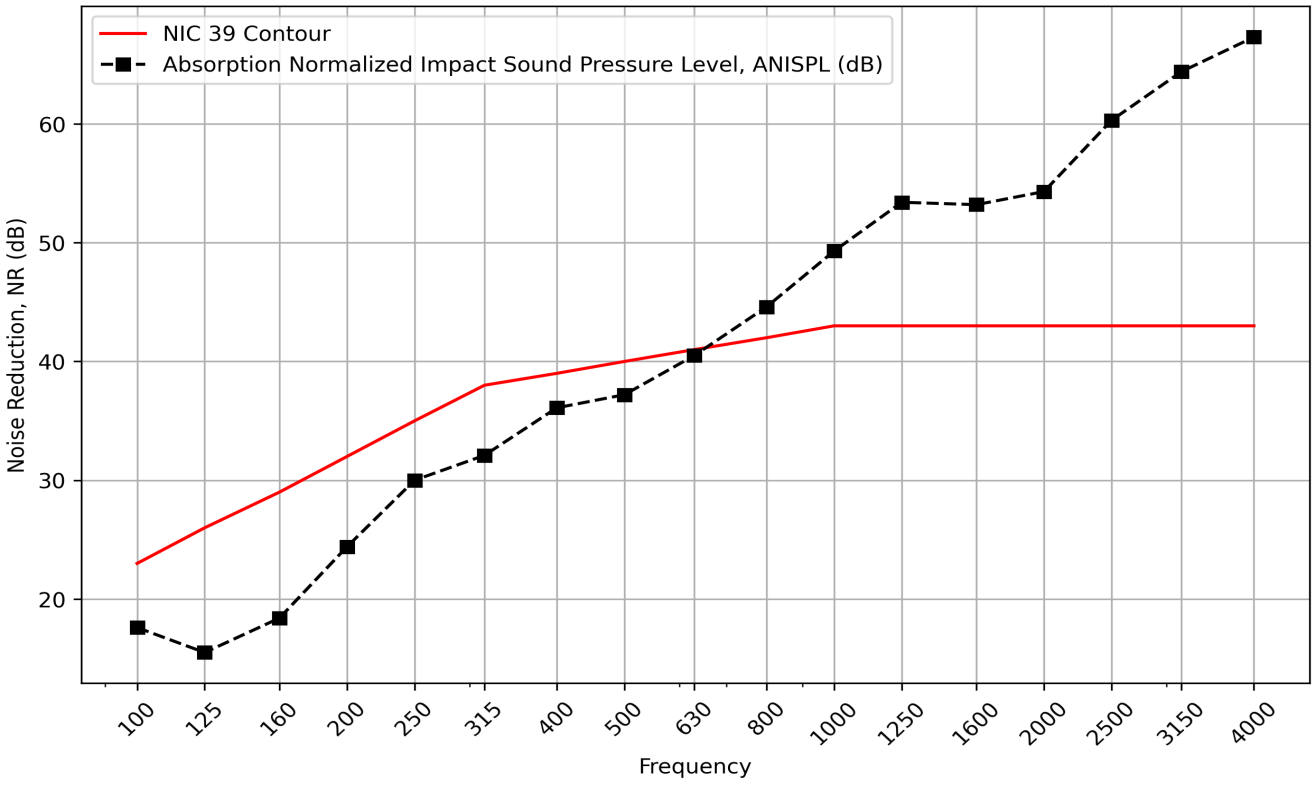

NIC: 39

Test Conducted By:

SIGNATURE 1

One Consultant, Project Consultant

SIGNATURE 2

Two Consultant, Project Consultant

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