

Field Sound Transmission Test Report

Noise Isolation Class (NIC)

Report Date:	4/9/25		
Test Date:	4/7/25		
DLAA Test No	1.1.1	Source Room:	513
Test Site	Kaanapali Shores	Receiver Room:	413
Client	Kaanapali AOA	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 requirements for measuring and reporting Airborne Sound Attenuation between Rooms in Buildings (ATL) and Noise Isolation Class (NIC) were met.

TEST ENVIRONMENT:

The source room was 513. The space was Finished, furnished. The floor was Tile. 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 2382.8 cu. ft.

The receiver room was 413. The space was Finished, Furnished. The floor was Tile. 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 2382.8 cu. ft.

The test assembly measured approximately 15.2x13, and had an area of approximately 224.8 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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Source Room: 513
Receiver Room: 413
Test Assembly: Floor-ceiling

TEST PROCEDURE:

Determination of space-average sound pressure levels was performed via the manually scanned microphones technique, described in ASTM 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 AISC Test Procedure ASTM E1007-14

TEST INSTRUMENTATION:

Equipment Type	Manufacturer	Model Number	Serial Number	Last NIST Traceable Calibration	Last Local Calibration
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)	Noise Reduction, NR (dB)	
100	101.8	65.7	37.7	0.589	36.1
125	99.0	63.1	39.6	0.604	35.8
160	98.8	61.1	38.8	0.420	37.7
200	94.9	56.2	37.4	0.548	38.6
250	91.8	52.8	38.4	0.608	38.9
315	90.3	47.2	31.9	0.503	43.1
400	91.0	43.5	30.2	0.471	47.5
500	88.1	38.5	27.5	0.414	49.6
630	85.7	38.5	26.5	0.351	47.3
800	87.8	38.5	25.5	0.391	49.3
1000	86.5	33.7	23.7	0.397	52.7
1250	85.4	31.4	22.5	0.401	54.1
1600	81.3	29.6	20.8	0.357	51.8
2000	79.1	27.9	20.8	0.341	51.2
2500	83.0	26.1	18.7	0.344	56.9
3150	84.5	24.2	15.7	0.366	60.3
4000	85.0	22.1	14.4	0.340	62.9

NIC: 51

The Noise Isolation Class (NIC) of 51 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 ASTM 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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DLAA Test No 1.1.1

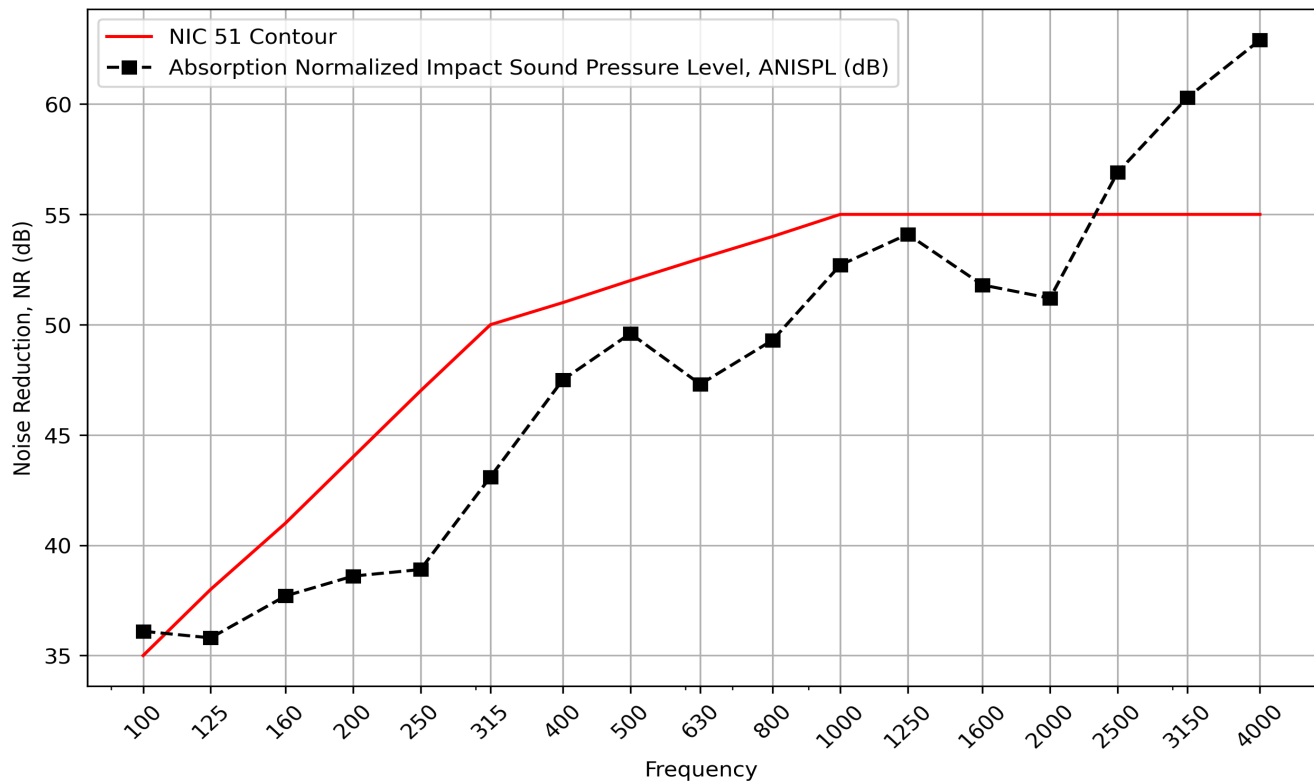
Test Site Kaanapali Shores

Client Kaanapali AOA

Source Room: 513

Receiver Room: 413

Test Assembly: Floor-ceiling



NIC: 51

Test Conducted By:

Jake Pfitsch, Project Consultant

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