Field Impact Sound Transmission Test Report

Apparent Impact Insulation Class (AIIC)

Report Date:	4/7/25		
Test Date:	4/7/25		
DLAA Test No	1.3.1	**Source Room:**	648
Test Site	Kaanapali Shores	**Receiver Room:**	548
Client	Kaanapali AOAO	**Test Assembly:**	Floor-ceiling

STANDARDS:

ASTM E1007-14	Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structure
ASTM E413-16	Standard Classification for Rating Sound Insulation
ASTM E1007-14	Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structure
ASTM E989-06(2012)	Standard Classification for Determination of Impact Insulation Class (IIC)
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 E1007-14, ASTM E413-16, ASTM E2235-04(2012), and ASTM E989-06(2012), with exceptions noted below. All requrements for measuring abd reporting Absorption Normalized Impact Sound Pressure Level (ANISPL) and Apparent Impact Insulation Class (AIIC) were met.

TEST ENVIRONMENT:

The source room was 648. The space was Finished, furnished. 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 2867.0 cu. ft.

The receiver room was 548. The space was Finished, Furnished. 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 2867.0 cu. ft.

The test assembly measured approximately 15.25x23.5, and had an area of approximately 358.4 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
Tapping Machine	Norsonics	CAL200	2775671	9/19/2022	N/A

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STATEMENT OF TEST RESULTS:

Frequency (Hz)	Absorption Normalized Impact Sound Pressure Level, ANISPL (dB)	Average Receiver Background Level (dB)	Average RT60 (seconds)	Exceptions noted to ASTM E1007-14	Backgrnd check Exceptions
100	63.0	36.0	0.443	0	0
125	64.1	34.4	0.487	0	0
160	69.0	33.6	0.382	0	0
200	67.9	33.2	0.355	0	0
250	66.6	33.3	0.378	0	0
315	64.8	32.0	0.357	0	0
400	61.4	30.0	0.357	0	0
500	57.9	29.3	0.273	1	0
630	50.9	26.9	0.333	1	0
800	46.5	27.5	0.294	1	0
1000	43.7	26.6	0.301	1	0
1250	38.4	24.1	0.345	1	0
1600	34.7	22.4	0.322	1	0
2000	31.5	22.1	0.306	1	0
2500	29.3	21.6	0.314	1	0
3150	28.3	19.5	0.300	1	0

AIIC: 51

The Apparent Impact Insulation Class (AIIC) of 51 was calculated. The AIIC rating is based on Absorption Normalized Impact Sound Pressure Level (ANISPL), and includes the effects of noise flanking. The AIIC reference contour is shown on the next page, and has been fit to the Absorption Normalized Impact Sound Pressure Level 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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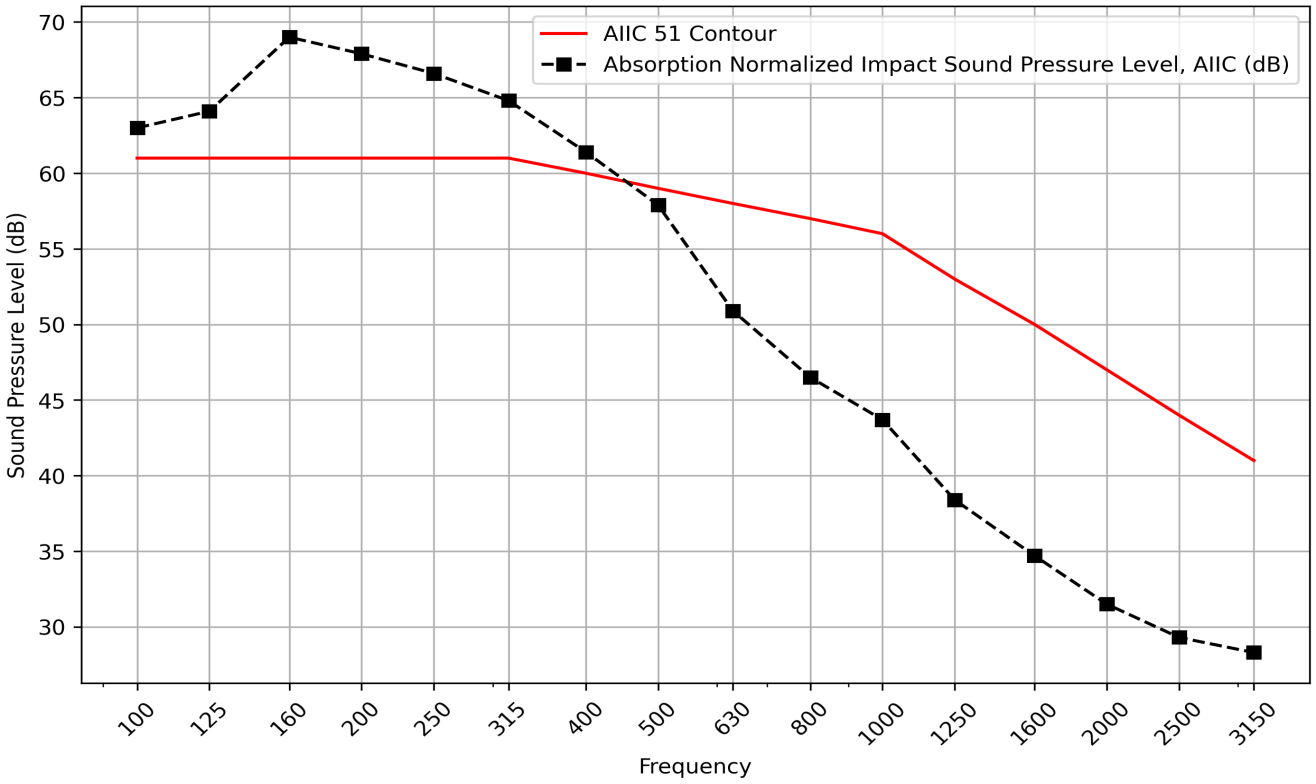

AIIC: 51

Test Conducted By:

Jake Pfitsch, Project Consultant

Zane Wright, Project Consultant

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