Field Impact Sound Transmission Test Report
Apparent Impact Insulation Class (AIIC)

Report Date:	April 18, 2024	Source Room:	2nd Floor Kitchen, Volume: 3949 cu. ft.
Test Date:	April 04, 2024	Receiver Room:	1st Floor Great Room/Kitchen, Volume: 3949 cu. ft.
DLAA Test No:	1.2.1	Test Assembly:	Floor-ceiling, Area: 428 sq. ft.

Test Site:	Ka'ulu by Gentry
Client:	Gentry Builders, LLC

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 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 general accordance with ASTM E1007-14, with all exceptions noted below. All requirements for measuring and reporting Absorption Normalized Impact Sound Pressure Level (ANISPL) and Apparent Impact Insulation Class (AIIC) were met.

TEST ENVIRONMENT:

The source room was 2nd Floor 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 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 receiver room had a volume of approximately 3949 cu. ft.

The test assembly measured approximately 14.8x29.583, and had an approximate area of 428 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.

970 N. Kalaheo Ave. Suite A311
Kailua, HI 96734
www.dlaa.com
808.254.3318

Field Impact Sound Transmission Test Report
Apparent Impact Insulation Class (AIIC)

Report Date:	April 18, 2024	Source Room:	2nd Floor Kitchen, Volume: 3949 cu. ft.
Test Date:	April 04, 2024	Receiver Room:	1st Floor Great Room/Kitchen, Volume: 3949 cu. ft.
DLAA Test No:	1.2.1	Test Assembly:	Floor-ceiling, Area: 428 sq. ft.

Test Site:	Ka'ulu by Gentry
Client:	Gentry Builders, LLC

TEST PROCEDURE:

The test was performaned in general accordance with ASTM E1007-14. Determination of Space-Average Levels performed via the manually scanned microphones techique, described in ASTM E1007-14, Paragraph 11.4.2.2.

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 ASTM E2235-04(2012).

TEST INSTRUMENTATION:

Equipment Type	Manufacturer	Model Number	Serial Number	Last NIST Traceable Calibration	Last Local Calibration
Tapping Machine:	Norsonics	CAL200	2775671	9/19/2022	N/A
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

970 N. Kalaheo Ave. Suite A311
Kailua, HI 96734
www.dlaa.com
808.254.3318

Field Impact Sound Transmission Test Report
Apparent Impact Insulation Class (AIIC)

Report Date:	April 18, 2024	Source Room:	2nd Floor Kitchen, Volume: 3949 cu. ft.
Test Date:	April 04, 2024	Receiver Room:	1st Floor Great Room/Kitchen, Volume: 3949 cu. ft.
DLAA Test No:	1.2.1	Test Assembly:	Floor-ceiling, Area: 428 sq. ft.
Test Site:	Ka'ulu by Gentry		
Client:	Gentry Builders, LLC		

STATEMENT OF TEST RESULTS:

Frequency	Absorption Normalized Impact Sound Pressure Level, ANISPL (dB)	Average Receiver Background Level	Average RT60 (Seconds)	Exceptions noted to ASTM E1007-14	
100 Hz	82.0	35.4	0.62		
125 Hz	83.0	39.2	0.85		
160 Hz	79.0	33.0	0.63		
200 Hz	76.0	37.1	1.00		
250 Hz	77.0	34.4	1.02		
315 Hz	74.0	33.7	1.14		
400 Hz	69.0	33.3	1.34		
500 Hz	63.0	32.5	1.26		
630 Hz	56.0	31.2	1.14		
800 Hz	50.0	30.6	1.12		
1000 Hz	46.0	29.6	1.29		
1250 Hz	47.0	28.9	1.46		
1600 Hz	45.0	28.5	1.52		
2000 Hz	45.0	24.9	1.46		
2500 Hz	41.0	20.6	1.39		
3150 Hz	38.0	18.5	1.40		
4000 Hz	34.0	17.6	1.39		
5000 Hz	31.0	15.1	1.32		

AIIC: 38

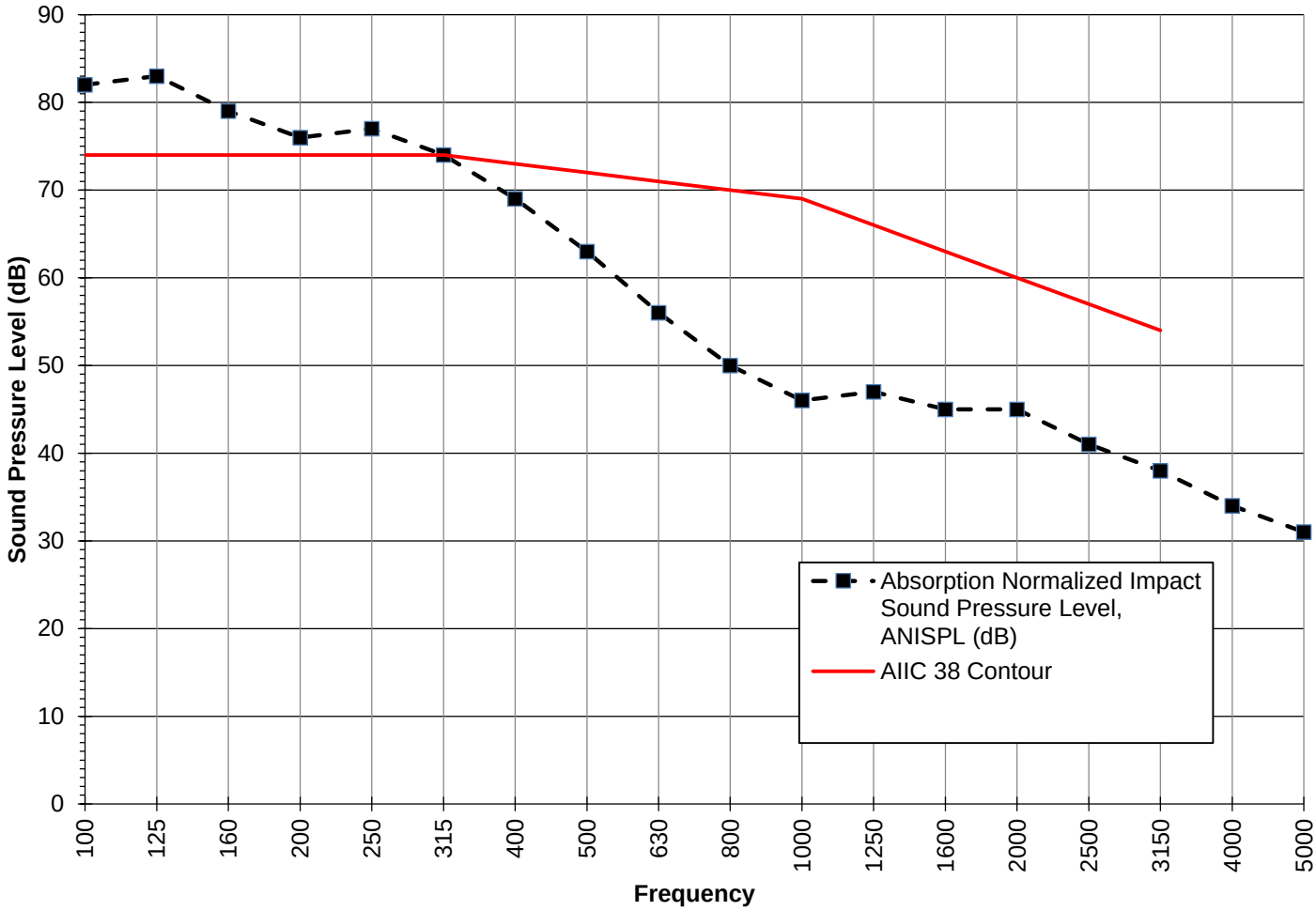
An Apparent Impact Insulation Class (AIIC) of 38 and an Impact Sound Rating (ISR) of 42 was calculated. The AIIC rating is based on Absorption Normalized Impact Sound Pressure Level (ANISPL), and includes the effects of noise flanking. The AIIC reference contour is shown on the next page, and has been “fit” to the ANISPL values, in accordance with the procedure of ASTM E989-06(2012).

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.

970 N. Kalaheo Ave. Suite A311
Kailua, HI 96734
www.dlaa.com
808.254.3318

Field Impact Sound Transmission Test Report
Apparent Impact Insulation Class (AIIC)

Report Date:	April 18, 2024	Source Room:	2nd Floor Kitchen, Volume: 3949 cu. ft.
Test Date:	April 04, 2024	Receiver Room:	1st Floor Great Room/Kitchen, Volume: 3949 cu. ft.
DLAA Test No:	1.2.1	Test Assembly:	Floor-ceiling, Area: 428 sq. ft.
Test Site:	Ka'ulu by Gentry		
Client:	Gentry Builders, LLC		



AIIC: 38

Test Conducted By:

Zane Wright, Project Consultant

Jake Pfitsch, Project Consultant

970 N. Kalaheo Ave. Suite A311
Kailua, HI 96734
www.dlaa.com
808.254.3318