# Field Sound Transmission Test Report
# Apparent Sound Transmission Class (ASTC)

| | | | |
|---|---|---|---|
| **Report Date:** | 2024-04-15 00:00:00 | **Source Room:** | 2nd Floor Kitchen |
| **Test Date:** | 2024-04-04 00:00:00 | **Receiver Room:** | 1st Floor Great Room/Kitchen |
| **DLAA Test No** | 1.2.1 | **Test Assembly:** | Floor-ceiling |

STANDARDS:

| | |
|---|---|
| ASTM E336-20 | Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildin |
| 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 Method |

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 Apparent Sound Transmission Class (ASTC) 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 3,949 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 3,949 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, perAIIC Test Procedure ASTM E1007-14

TEST INSTRUMENTATION:

| | | | | | |
|---|---|---|---|---|---|
| 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) | NR (dB) | Background (dB) | RT60 (s) | Sabines |
|---|---|---|---|---|
| 125 | 15.5 | 39.2 | 0.846 | 229 |
| 160 | 18.4 | 33.0 | 0.633 | 306 |
| 200 | 24.4 | 37.1 | 0.996 | 194 |
| 250 | 30.0 | 34.4 | 1.023 | 189 |
| 315 | 32.1 | 33.7 | 1.137 | 170 |
| 400 | 36.1 | 33.3 | 1.345 | 144 |
| 500 | 37.2 | 32.5 | 1.262 | 153 |
| 630 | 40.5 | 31.2 | 1.141 | 170 |
| 800 | 44.6 | 30.6 | 1.118 | 173 |
| 1000 | 49.3 | 29.6 | 1.287 | 150 |
| 1250 | 53.4 | 28.9 | 1.459 | 133 |
| 1600 | 53.2 | 28.5 | 1.518 | 127 |
| 2000 | 54.3 | 24.9 | 1.461 | 132 |
| 2500 | 60.3 | 20.6 | 1.393 | 139 |
| 3150 | 64.4 | 18.5 | 1.403 | 138 |

The Apparent Sound Transmission Class (ASTC) of 40 was calculated. The ASTC rating is based on Apparent Transmission Loss (ATL), and includes the effects of noise flanking. The ASTC reference contour is shown on the next page, and has been “fit” to the Apparent Transmission Loss values, in accordance with the procedure of ASTC Test Procedure ASTM E336-16

*This test does fully conform to the requirements of ASTM E336-20, ASTM E413-16, and ASTM E2235-04(2012), with exceptions noted below.

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test_engineer
test_engineer_signature
test_date