

Fame Hardwoods Floor Evaluation

Acoustical Review
Project No. 25.0134

May 9, 2025

Page Nazarian, *Founder & Chief Wood Expert*

Fame Hardwoods

8444 Melrose Avenue
West Hollywood, California 90069

Dear Page,

Westside Acoustics and Vibration Engineering (Westside) has performed a sound study of the of the testing that has been performed for 5mm and 10mm rubber mats. The purpose, as we understand it, if that Fame Hardwoods has created an integral matting for the material and this integral matting means that a separate underlayment (matting) product is not required. There was interest in how the matting compared with no matting present and separate 5mm and 10mm rubber matting. This report documents the results and our evaluation.

History and Project Manager

Westside Acoustics boasts technical staff with over 100 years of combined experience in architectural and environmental acoustics. The staff has managed approximately 700 projects per year for the past 10 years. Westside Acoustics staff are industry leaders in the field. The team distinguishes itself not only through project experience, but through technical innovation. This team developed the theoretical basis for new impact noise classifications, ultimately published as ASTM standards E3222 and E3207, which revolutionizes impact noise assessment. This team utilizes statistical methods to assess performance, allowing for precise design approach and better understanding of potential risk, providing clients with improved decision-making tools.

Westside team members participated in the development of the ICC Code+ Guideline for Acoustics which establishes performance threshold levels above code-minimum for both airborne and impact noise. This tool is useful for designers and developers alike, as it provides context for establishing performance targets for clients that want to exceed code-minimum performance while remaining competitive. Westside has designed literally thousands of buildings worldwide:

- Civic & Government Agencies
- Courthouses & Public Safety
- Education - College & University + K-12
- Commercial Buildings & Corporate Interiors
- Hotels, Resorts & Casinos
- Studios & Entertainment Facilities
- Condominiums & Apartments
- Performing Arts Complexes

- Transportation, including Airports & Rail
- Museums & Cultural Centers
- Medical Centers & Hospitals
- Places of Worship

John LoVerde is known throughout the country for his work as an acoustical consultant as well as his leadership in testing, research, and reporting methodology, particularly in the field of sound and impact isolation. John has lent his expertise to the design of walls for application in military, multifamily residential developments, educational buildings, performance venues, hotels and resorts, office campuses and hospitals. He has served as Project Manager for many notable projects and is often called upon to provide expert testimony. On average, John manages the design and construction of approximately 700 projects per year.

After obtaining a Bachelor of Science degree in Mechanical Engineering from California State Polytechnic University, Pomona (1989), John went on to earn a Master's Degree in Acoustics from the University of California, Los Angeles (UCLA). At UCLA he worked on the link between acoustical energy and listener reaction to sound within auditoria. Since his consultant career began in 1989, John has published over 170 technical papers. In November 2009 he was appointed to ASA's Technical Committee on Architectural Acoustics, and in 2013 John was further recognized in the field as a full Member of the ASA. In June of 2018, John became a Fellow of the Acoustical Society of America with citing the following: "For contribution to quantification and understanding of building response to sound and impact." In 2025, John was appointed as the liaison between for ASTM in all ISO acoustical standards.

Note that John is author and creator of the following impact metrics found within ASTM standards E1007, E3222 and E3207: Impact Sound Rating (ISR), Normalized Impact Sound Rating (NISR), Low Frequency Impact Insulation Class (LIIC), Low Frequency Impact Sound Rating (LIR), High Frequency Impact Insulation Class (HIIC), Delta High Frequency Impact Insulation Class (Δ HIIC), High Frequency Apparent Impact Sound Rating (AHIR), Normalized High Frequency Impact Sound Rating (NHIR) and High Frequency Impact Rating (HIR).

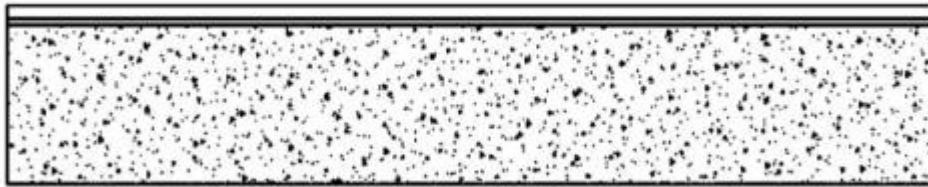
Floor Detailing

The floor detail type and described and shown in the figure below. In general, the floor ceiling detail evaluated is a finish floor over 8 inches of concrete, which was tested in the lab and is common among manufacturers for testing. The floor ceiling is

- Fame Hardwood (adhered)
- 8 inch concrete

For other floors in this report, we have used the following:

- Engineered wood (adhered)
- Resilient matting (underlayment) either 5 or 10mm
- 8 inch concrete



Westside has reviewed the material and summarize the acoustical performance below for the testing. The Fame Hardwood system with 8 inch thick concrete was witnessed by Westside and conducted in an accredited lab. The remainder of the comparisons provided are based on a wide array of data available.

Given the finish flooring system has little/no effect on the STC rating and the LIIC rating, these are not presented in the table below.

Table 1 – Acoustical Test Comparisons

Finish Floor	Resilient Matting (underlayment)	IIC	HIIC
Fame Hardwood	None	53	53
Fame Hardwood	Integrated with Product	57	58
Engineered Wood	5mm rubber	55	60
Engineered Wood	10mm rubber	56	64

Codes and Standards:

The International Building Code requires that floor ceiling assemblies between residential and residential; and commercial spaces have a minimum laboratory rating of IIC 50 as defined within Chapter 12 of the International Building Code.

Evaluation:

All of the measurements shown in Table 1 comply with minimum International Building Code requirements for floor assemblies. Additionally, the following conclusions can be drawn:

- The presence of the matting significantly improves the acoustical impact performance.
- The estimated reduction in loudness in the Fame Hardwoods material with the integrated matting is 30% quieter than without it. This is a significant and clearly audible difference.
- Based on the measured data, on average, the Fame Hardwood with the integrated matting is performing similar to 5mm rubber matting. This would mean that the installation of the matting in the field is not required if the Fame Hardwood product is installed.

- In looking at the Fame Hardwood product when compared with the 10mm matting indicated that the 10mm product is quieter. Based on our analysis, where the Fame product performs close to the 5mm product, the 10mm product is approximately 30% quieter than the Fame Hardwood with integrated matting meaning that an engineered wood installed with 10mm rubber product will result in a reduction of approximately 33% decrease in level when compared with the Fame Hardwood integrated matting product.

Please feel free to contact us with any questions.

Sincerely,
Westside Acoustics

A handwritten signature in black ink, appearing to read 'John LoVerde', with a red dot at the end of the signature.

John LoVerde, FASA
Acoustician

APPENDIX

**TUDELU SYSTEM INFORMATION
CLIMAPLUS DOCUMENTATION**

