

RIVERBANK ACOUSTICAL LABORATORIES1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134OF
IIT RESEARCH INSTITUTE630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE**REPORT**

FOR: Kährs International, Inc.

Impact Sound Transmission
Test RAL™-IN96-51ON: Kährs 15 mm Engineered Wood Flooring
On 3.2 mm Foam Underlay Pad Set On
1.25 mm Nobleseal SIS™ Sheet Over A
Flexicore® Precast Concrete Slab Floor,
No CeilingPage 1 of 3

CONDUCTED: 3 December 1996

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E492-90 and E989-89, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately. The serial number of the measuring microphone was 951371.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated as Kährs 15 mm Engineered Wood Flooring on 3.2 mm foam underlay pad set on 1.25 mm Nobleseal SIS™ Sheet over a Flexicore™ precast concrete slab floor, no ceiling. The overall dimensions of the specimen were nominally 4.27 m (168 in.) wide by 6.10 m (240 in.) long and 222.5 mm (8.76 in.) thick. The specimen was constructed directly in the laboratory's 4.27 m (14 ft) by 6.10 m (20 ft) test opening and was sealed on the periphery (both sides) with a dense mastic. The description of the specimen was as follows: From the top down, the floor consisted of 15 mm (0.59 in.) thick Kährs Engineered Wood Flooring set over a layer of 3.2 mm (0.12 in.) thick foam underlay pad which was laid over a layer of 1.25 mm (0.047 in.) thick Nobleseal SIS™ sound isolation sheet. The Nobleseal was laid directly over a 203 mm (8 in.) thick concrete slab sub-floor. The sub-floor consisted of ten nominally 610 mm (24 in.) wide by 4.24 m (167 in.) long by 203 mm (8 in) thick Flexicore® Model #824A-D-22 precast concrete slabs. The gaps between the slabs were filled with sand. At the request of the manufacturer the details of the construction were purposely withheld from this report in order that the manufacturer may control full proprietary rights regarding the product. The weight of the specimen as determined was 7,704.6 kg (16,985.5 lbs) an average of 296.3 kg/m² (60.7 lbs/ft²). The source and receiving room temperatures at the time of the test were 19°C (66±2°F) and 53±2% relative humidity.

THE RESULTS REPORTED ABOVE APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR MEASUREMENT. NO RESPONSIBILITY IS ASSUMED FOR PERFORMANCE OF ANY OTHER SPECIMEN.



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TEST RESULTS


Sound pressure levels at 1/3 octave intervals, normalized to 10 square meters, are given in tabular form. The impact insulation class, IIC, was computed in accordance with ASTM E492-90 and ASTM E989-89.

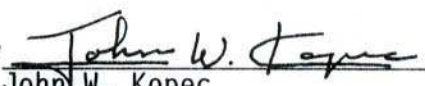
<u>FREQ.</u>	<u>L_n</u>	<u>C.L.</u>	<u>DEV.</u>	<u>FREQ.</u>	<u>L_n</u>	<u>C.L.</u>	<u>DEV.</u>
100	63	0.47	2	630	55	0.19	0
125	60	0.51	0	800	51	0.13	0
160	64	0.43	3	1000	48	0.18	0
200	64	0.12	3	1250	48	0.20	0
250	63	0.23	2	1600	45	0.12	0
315	69	0.55	8	2000	43	0.26	0
400	66	0.21	6	2500	38	0.23	0
500	61	0.25	2	3150	30	0.35	0

IIC = 51

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)
L_n = NORMALIZED IMPACT SOUND PRESSURE LEVEL, dB
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEV. = DEVIATION
IIC = IMPACT INSULATION CLASS

Submitted by 
Peter E. Straus
Senior Experimentalist

Reviewed by 
John W. Kopec
Laboratory Manager

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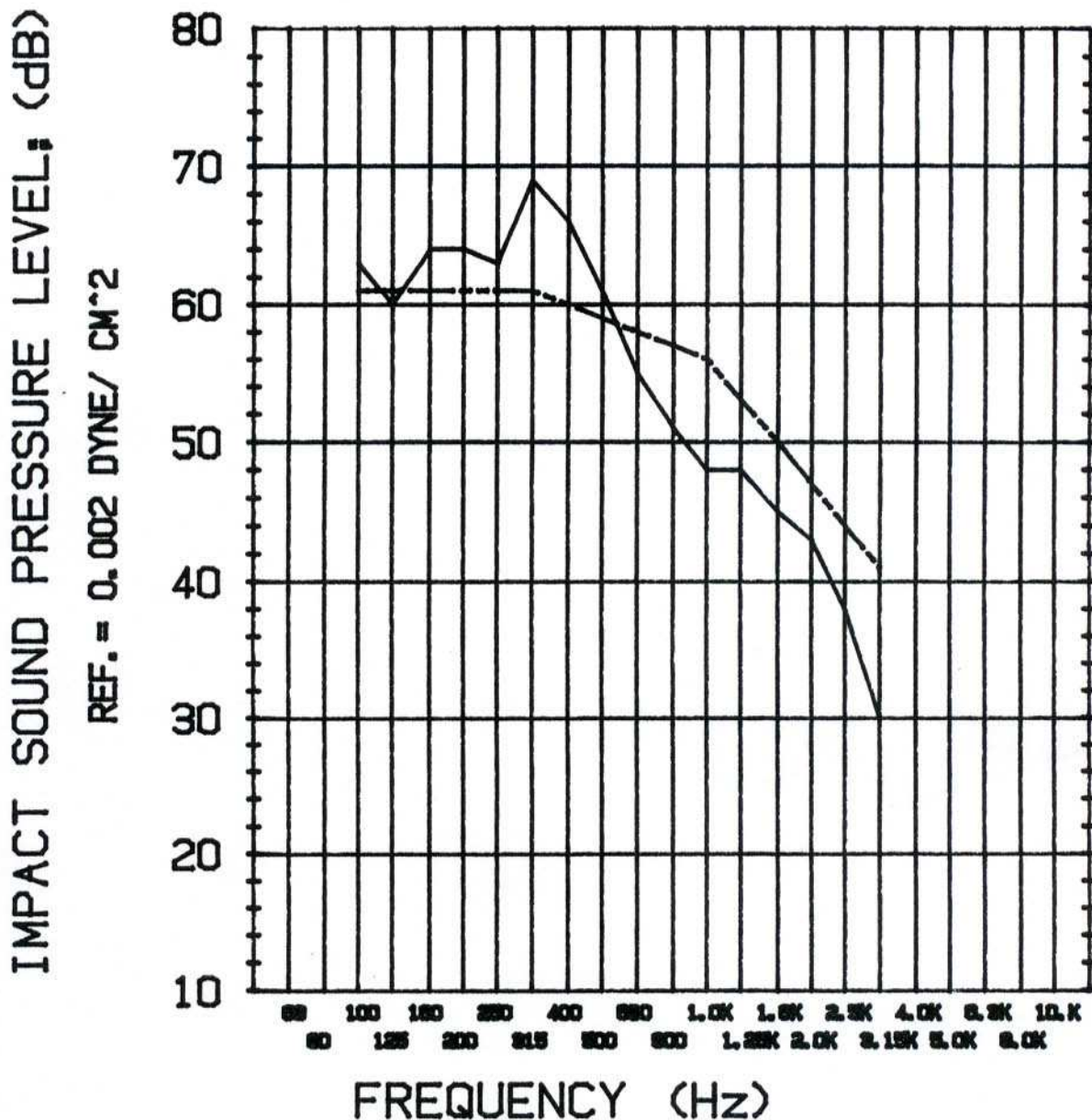


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REPORT

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—— IMPACT SOUND PRESSURE LEVEL
----- IMPACT INSULATION CLASS CONTOUR

IIC = 51

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