RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE **GENEVA, ILLINOIS 60134**

OF **IIT RESEARCH INSTITUTE**

630/232-0104 **FOUNDED 1918 BY WALLACE CLEMENT SABINE**

REPORT

Badger Cork FOR:

Impact Sound Transmission Test RAL™-IN98-4

ON:

Wood Flooring With Badger Cork

6 mm AcoustiCORK® On 6" Concrete Slabs

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CONDUCTED: 5 February 1998

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 wood flooring with Badger Cork 6 mm AcoustiCORK underlayment on 6" concrete slabs. The overall dimensions of the specimen were nominally 4.27 m (168 in.) wide by 6.10 m (240 in.) long and 173 mm (6.8 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 14 mm (0.56 in.) thick pre-finished wood flooring set on Badger Cork 6 mm (0.236 in.) thick, AcoustiCORK underlayment. The 6 mm AcoustiCORK was set directly on the concrete slab sub-floor. The sub-floor consisted of ten nominally 610 mm (24 in.) wide by 4.23 m (166.5 in.) by 152 mm (6 in.) thick wire reinforced concrete slabs. The weight of the entire specimen as calculated was 9.717 kg (21,421.5 lbs) an average of 373.7 kg/m² (76.5 lbs/ft^2) . The source and receiving room temperatures at the time of the test were 19°C (67+2°F) and 51+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 E989-89 and ASTM E492-90.

FREQ.	<u>Ln</u>	<u>C.L.</u>	DEV.	FREQ.	<u>Ln</u>	C.L.	DEV.
100	68	0.27	6	630	57	0.26	0
125	63	0.34	1	800	51	0.32	0
160	6 5	0.42	3	1000	48	0.23	0
200	66	0.32	4	1250	42	0.25	0
250	67	0.27	5	1600	41	0.24	0
315	69	0.21	7	2000	36	0.20	0
400	65	0.21	4	2500	29	0.22	0
500	61	0.25	1	3150	26	0.24	0

IIC = 50

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

Ln = NORMALIZEÓ IMPACT SOUNÓ PRESSURE LEVEL, dB

C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT

DEV. = DEVIATION

IIC = IMPACT INSULATION CLASS

Tested and Submitted by

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John W. Kopec

Laboratory Manager

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