

REPORT

FOR: Tile Institute of America

Impact Sound Transmission
Test RAL™-IN95-11ON: Badger Cork 6 mm AcoustiCORK™
Underlayment With Ceramic Tile On A
California Lightweight FloorPage 1 of 3

CONDUCTED: 14 April 1995

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 1440522.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated as Badger Cork 6 mm AcoustiCORK™ underlayment with ceramic tile on a California lightweight floor. The overall dimensions of the specimen were nominally 4.27 m (168 in.) wide by 6.10 m (240 in.) long and 361 mm (14.2 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 standard grade 152 mm (6 in.) by 152 mm (6 in.) by 6.4 mm (0.25 in.) thick quarry tile by Summitville grouted with Summitville sanded tile grout. The tile was set to 11 mm (0.438 in.) thick Hardibacker glass mesh mortar units with Bonsal flexible multi-purpose thin set mortar. The glass mesh mortar units were set on Badger Cork 6 mm (0.236 in.) thick, AcoustiCORK™ underlayment. The 6 mm AcoustiCORK™ was laid on a nominally 41 mm (1.625 in.) thick, 111.6 pcf density Gyp-Crete 2000 floor. The Gyp-Crete 2000 was poured over a layer of 15# roofing felt which was laid directly on the 19/32 plywood sheathing sub-floor. The plywood was attached to two-by-ten wood joists that were spaced on 406 mm (16 in.) centers. The cavities between the joists contained 89 mm (3.5 in.) thick R-11 fiberglass insulation batt. RC-1 resilient channels were attached to the joists and the 16 mm (0.625 in.) thick Type X drywall ceiling was attached to the RC-1 channels. The specimen was allowed to cure a minimum of 28 days prior to testing. A visual inspection verified the description of the specimen. The weight of the entire specimen as determined was 3971.5 kg (8755.5 lbs) an average of 152.75 kg/m² (31.3 lbs/ft²). The source and receiving room temperatures at the time of the test were 20°C (68±2°F) and 63±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.
ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST.

The logo for the National Voluntary Laboratory Accreditation Program (NVLAP), featuring the letters 'NVLAP' in a stylized, bold font.

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RAL™-IN95-11

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Page 2 of 3

TEST RESULTS

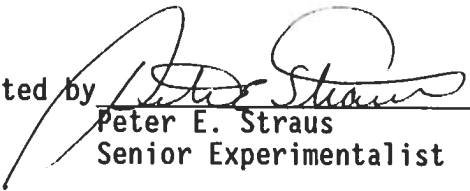
Sound pressure levels at 1/3 octave intervals, normalized to 10 square meters, are given in tabular form. The impact insulation class, IIC, was computed in accordance with ASTM E989-89 and ASTM E492-90.

<u>FREQ.</u>	<u>ISL</u>	<u>C.L.</u>	<u>DEV.</u>	<u>FREQ.</u>	<u>ISL</u>	<u>C.L.</u>	<u>DEV.</u>
100	61	0.49	6	630	51	0.16	0
125	58	0.41	3	800	49	0.13	0
160	56	0.35	1	1000	47	0.16	0
200	56	0.25	1	1250	44	0.10	0
250	56	0.22	1	1600	44	0.13	0
315	57	0.15	2	2000	45	0.10	4
400	55	0.27	1	2500	45	0.20	7
500	54	0.13	1	3150	38	0.25	3

IIC = 57

ABBREVIATION INDEX

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

Submitted by 
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 John W. Kopec
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Revision 9 June 1995

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