

RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134

OF
IIT RESEARCH INSTITUTE

708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

708/232-0104 **REPORT**

FOR: P.K. Insulation Mfg. Co., Inc.

Sound Transmission Loss

Test RAL™-TL91-166

ON: I' PK 11 Spray On Plaster Board

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CONDUCTED: 20 June 1991

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-90 and E413-87, 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 (NYLAP) for this test procedure. A description of the measuring technique is available separately. The microphone used was a Bruel & Kjaer serial number 1440522.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as I" PK II Spray on plasterboard. The overall dimensions of the specimen as measured were nominally 1.18 m (45.4 wide by 2.40 m (94.5 in.) long and 38.1 m (1.5 in.) thick. The thickness of the spray-on material was measured in ten randomly selected points. The average thickness was 22.9 mm (0.9 in.). The specimen was placed directly in the laboratory's 1.22 m (4 ft) by 2.44m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: The specimen was a wood fiber cellulose spray-on material on plasterboard. The specimen was cured in excess of eight (8) months. A visual inspection verified the manufacturer's description of the specimen. The weight of the specimen as measured was 33 kg (72.5 lbs) an average of 12 kg/m² (2.4 lbs/ft²). The transmission area used in the calculations was 2.8 m² (30.4 ft²). The source and receiving room temperatures at the time of the test were 26°C (78±2°F) and 41±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 transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data are within the limits set by the ASTM Standard E90-90.

<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	23	0.40	0	800	34	0.29	2
125	20	0.37	0	1000	36	0.24	1
<u>160</u>	<u>23</u>	<u>0.51</u>	<u>0</u>	<u>1250</u>	<u>37</u>	<u>0.21</u>	<u>1</u>
200	21	0.43	3	1600	36	0.22	2
250	24	0.38	3	2000	36	0.19	2
<u>315</u>	<u>25</u>	<u>0.39</u>	<u>5</u>	<u>2800</u>	<u>36</u>	<u>0.15</u>	<u>2</u>
400	29	0.23	4	3150	37	0.13	1
500	31	0.30	3	4000	41	0.10	0
<u>630</u>	<u>33</u>	<u>0.30</u>	<u>2</u>	<u>5000</u>	<u>46</u>	<u>0.09</u>	<u>0</u>

STC-34

ABBREVIATION INDEX

FREQ. - FREQUENCY, HERTZ, (cps)
T.L. - TRANSMISSION LOSS, dB
C.L. - UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEF. - DEFICIENCIES, dB<STC CONTOUR
STC - SOUND TRANSMISSION CLASS

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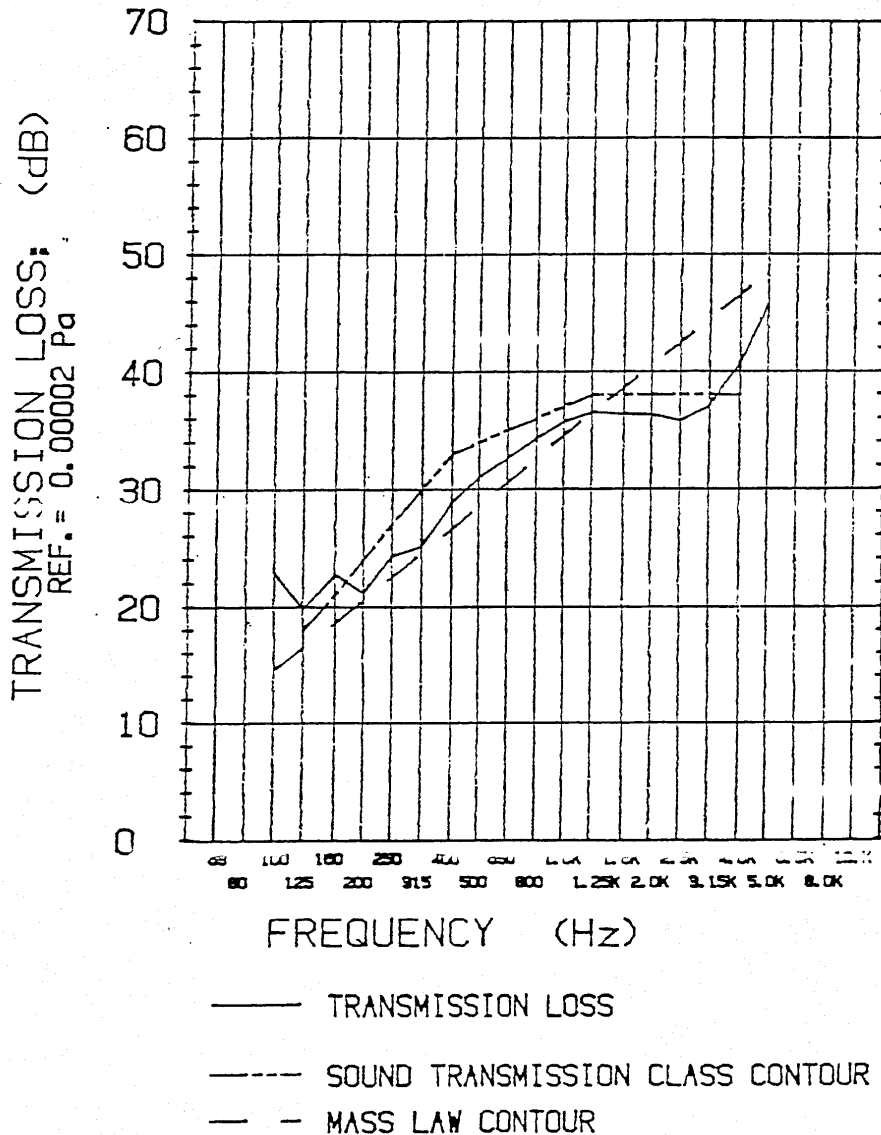
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