

TEST REPORT

FOR: Panelfold, Inc.

Sound Transmission Loss Test

RAL™-TL02-169

ON: Panelfold Operable Wall

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CONDUCTED: 8 August 2002

RESULT: STC 44

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-99 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 (NVLAP) for this test procedure. A description of the measuring technique is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as a Panelfold operable wall. The specimen was fully operable and was comprised of interlocking panels arranged in a flat configuration and supported by an overhead track. The nominally 83 mm (3.25 in.) thick panels were constructed of high density faces with metal frames and interior sound retarding material. The abutting edges between panels consisted of interlocking vertical stiles incorporating vertical sound seals. A continuous vinyl seal installed on each side of each panel closed the clearance between the top of the panels and the soffit. A mechanical seal in each panel closed the clearance between the bottom of the panels and the floor. An expanding panel provided final closure. The manufacturer installed the specimen directly into the laboratory's 4.27 m (14 ft) wide by 2.74 m (9 ft) high wood-lined frame. Each panel was 83 mm (3.25 in.) thick by 1.27 m (50 in.) wide by 2.59 m (102 in.) high including seals. Each panel weighed an average of 83.4 kg (184 lb), or 25.3 kg/m² (5.2 lb/ft²), including trolley. The expanding panel was nominally 330 mm (13 in.) wide by 2.59 m (102 in.) high and weighed 82.3 kg (181.5 lbs). The overall nominal dimensions of the test specimen installed and tested as measured were 4.27 m (168 in.) wide by 2.57 m (101 in.) high and 83 mm (3.25 in.) thick. The weight of the entire specimen as measured was 382 kg (843 lbs.), an average of 34.7 kg/m² (7.1 lbs/ft²). The transmission area used in the calculations was 11 m² (118 ft²). The source and receiving room temperatures at the time of the test were 27°C (80°F) and 58±1% relative humidity. The source and receive reverberation room volumes were 179m³ (6,298 ft³) and 177 m³ (6,255 ft³), respectively. Laboratory personnel performed a full inspection on the test specimen. A detailed description is on file and has been intentionally withheld from this report in order that the manufacturer may control full proprietary rights regarding its product. The operable wall was opened and closed at least five times, and the test was conducted with no further adjustments.

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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 is within the limits set by the ASTM Standard E90-99.

<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	13	0.34		800	47	0.34	
125	21	0.37	7	1000	51	0.34	
160	29	0.33	2	1250	53	0.25	
200	33	0.41	1	1600	54	0.23	
250	34	0.31	3	2000	53	0.23	
315	38	0.43	2	2500	50	0.18	
400	39	0.40	4	3150	44	0.17	4
500	41	0.34	3	4000	49	0.12	
630	44	0.36	1	5000	54	0.14	

STC=44

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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Tested by _____ Approved by _____

Dean Victor Senior Experimentalist David L. Moyer Laboratory Manager

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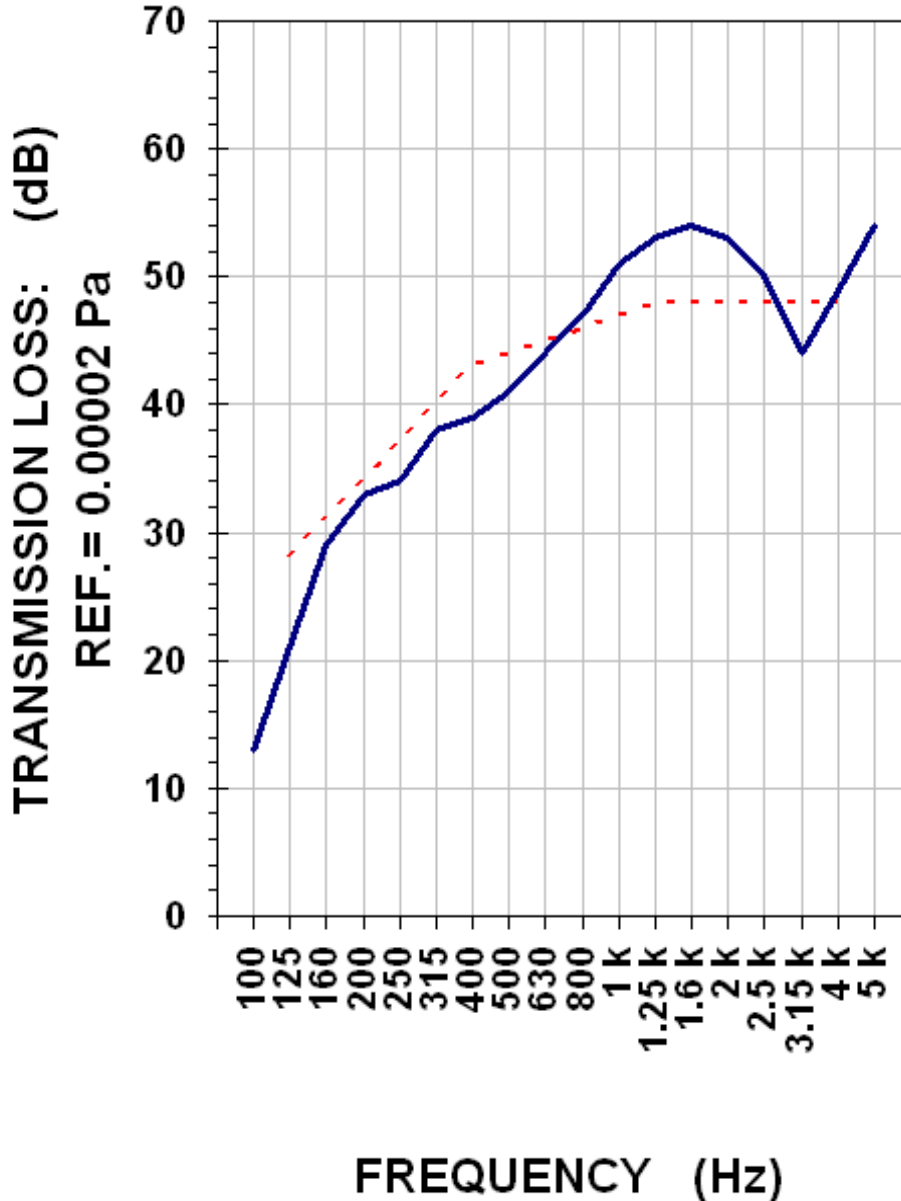
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TEST REPORT

**TRANSMISSION LOSS REPORT
TL02-169**



— TRANSMISSION LOSS
- - - SOUND TRANSMISSION CLASS CONTOUR

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