RIVERBANK ACOUSTICAL LABORATORIES
OF
IIT RESEARCH INSTITUTE
1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134
708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

FOR: Panelfold, Inc.

Sound Transmission Loss
Test RAL™-TL90-273

ON: Panelfold
Operable Wall

CONDUCTED: 3 October 1990

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-87 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. The serial number of the measuring microphone was 951371.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as a fully operable Panelfold Operable Wall comprised of interlocking panels arranged in a flat configuration and supported by an overhead track. The manufacturer's description was as follows: The nominally 76 mm (3.0 in.) thick panels were constructed of high density faces laminated to metal frames with interior sound retarding material. The abutting edges between panels consisted of interlocking vertical stiles incorporating vertical sound seals. The clearance between the top of the panels and the soffit was closed by a flexible vinyl sweep seal installed on each side of each panel. The clearance between the bottom of the panels and the floor was closed by a mechanical seal in each panel. A single closure jamb provided final closure. The specimen was installed by the manufacturer directly into the laboratory's 2.74 m (9 ft) by 4.27 m (14 ft) wood-lined steel frame. Each panel was nominally 1.22 m (48 in.) wide by 2.60 m (102.5 in.) high including seals. Each panel weighed an average of 73 kg (160 lbs), or 22.9 kg/m^2 (4.7 lbs/ft^2), including trolley. The entire specimen weighed 260 kg (574 lbs). The transmission area used in the calculations was 10.9 m^2 (117 ft^2). A full internal inspection was performed on the test specimen by Riverbank personnel. 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 the standard prescribed amount of times, and the test was conducted with no further adjustments. The source and receiving room temperatures at the time of the test were 21°C (69±2°F) and 55±2% relative humidity.

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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 E90-87.

FREQ	T.L.	C.L.	DEF.	FREQ	T.L.	C.L.	DEF.
100	13	0.34	0	800	36	0.54	4
125	18	0.43	4	1000	35	0.56	6
160	24	0.53	1	1250	38	0.38	4
200	29	0.58	0	1600	40	0.35	2
250	33	0.48	0	2000	41	0.31	1
315	33	0.49	1	2500	42	0.25	0
400	34	0.49	3	3150	43	0.18	0
500	36	0.54	2	4000	40	0.16	2
630	37	0.54	2	5000	39	0.17	0

STC = 38

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

Submitted by _____ Reviewed by _____

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