REPORT

FOR: Panelfold, Inc.

ON: Sonicwal/1212 Folding Partition

CONDUCTED: 22 September 1977
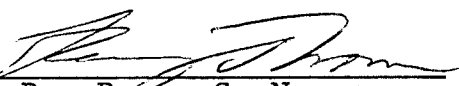
Sound Transmission Loss
Test TL 78-18

TEST METHOD: Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the American Society for Testing and Materials Designations E 90-75 and E413-73, as well as other pertinent standards.

DESCRIPTION OF THE SPECIMEN: The Panelfold Sonicwal/1212 partition was 14 feet (4.3 m) wide by 9 feet (2.7 m) high. The specimen was made of 11-1/2 inch (0.29 m) wide specially laminated panels of wood particle core, hinged with dual-wall vinyl extrusions. Panels were arranged in a twin row, accordion configuration with a single overhead supporting track and a single lead post. Continuous sweep seals were installed at the top and bottom, both sides of the partition to provide a perimeter seal. The lead post was equipped with a single action draw type positive latch. The operable partition weighed 641 pounds (290.8 kg), an average of 5.10 pounds per square foot (24.8 kg/m^2). The specimen contained 7 volutes and had a stack depth of 28-3/4 inches (0.73 m). The partition was opened and closed 10 times in a normal manner and measurements were made with no further adjustments. The transmission area, S, used in the computation was 126 square feet (11.7 m^2). A clearance of 1/2 inch (12.7 mm) was provided at the top between the specimen and ceiling, and a 3/4 inch (19.1 mm) clearance at the bottom between the specimen and floor. A description of the construction is in the laboratory file.

RESULTS OF MEASUREMENTS: Sound transmission loss values are tabulated at the eighteen standard frequencies. An explanation of the sound transmission class rating, a grphic presentation of the data, and additional information appear on the following pages.

FREQUENCY, Hertz (cps)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TRANSMISSION LOSS, dB	23	30	27	32	36	40	39	41	43	45	48	50	49	49	47	46	49	53
DEFICIENCIES		5	3	2	1	5	4	3	2						2	3		

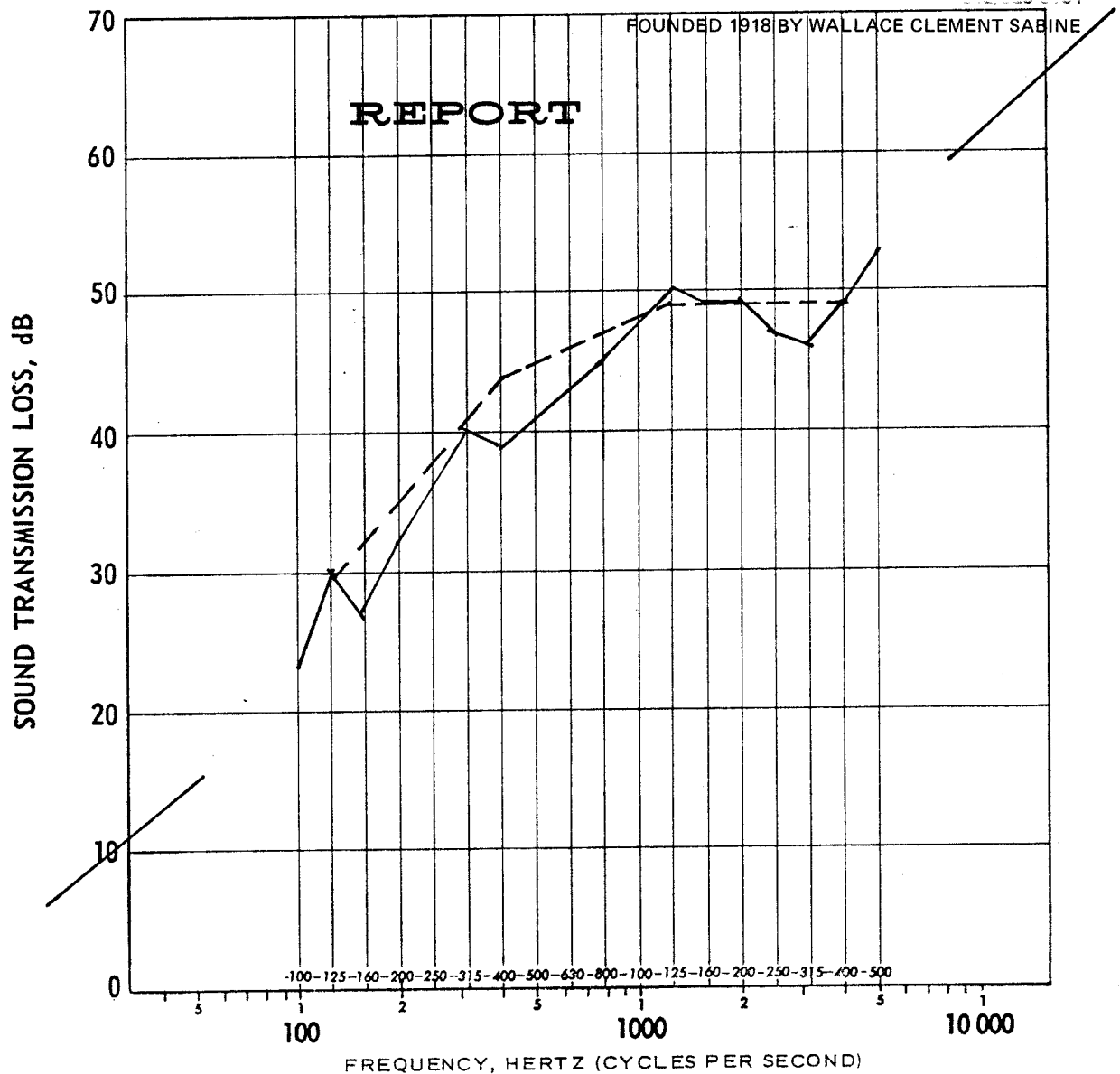SOUND TRANSMISSION CLASS 45

Approved _____
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RIVERBANK ACOUSTICAL LABORATORIES

OF IIT RESEARCH INSTITUTE

FOUNDED 1918 BY WALLACE CLEMENT SABINE

REPORT

SOUND TRANSMISSION LOSS, dB vs **FREQUENCY, HERTZ (CYCLES PER SECOND)**

PAGE 2 OF 2 , TL 78-18   THIS PAGE ALONE IS NOT A COMPLETE REPORT

THE SOUND TRANSMISSION LOSS OF THE TESTED SPECIMEN IS SHOWN BY THE
CURVED LINE IN THE ABOVE GRAPH. THE BROKEN LINE IS THE LIMITING
SOUND TRANSMISSION CLASS CONTOUR. THE GRAPH WAS PREPARED ON CODEX
PAPER NO. 31, 462.

THE THEORETICAL TRANSMISSION LOSS OF THAT LIMP MASS HAVING THE SAME
WEIGHT PER SQUARE FOOT AS THE SPECIMEN CAN BE LOCATED BY DRAWING A
STRAIGHT LINE BETWEEN THE TWO SLASH MARKS ON THE EDGES OF THE GRID.
THIS WAS DERIVED FROM THE EQUATION: TL = 20 LOG W + 20 LOG F - 33,
WHERE W IS WEIGHT IN POUNDS PER SQUARE FOOT, AND F IS FREQUENCY IN
HERTZ (CYCLES PER SECOND).