

## WESTERN ELECTRO - ACOUSTIC LABORATORY

A division of Veneklasen Associates, Inc.

TESTING CALIBRATION RESEARCH

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### SOUND TRANSMISSION LOSS TEST REPORT NO. TL10-568

CLIENT:

**Timely Industries** 

Page 1 of 2

10241 Norris Ave.

3 September 2010

Pacoima, Ca 91331

TEST DATE: 18 August 2010

#### INTRODUCTION

The methods and procedures used for each test conform to the provisions and requirements of ASTM E 90-09, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04<sup>el</sup>, Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods. Copies of the test standard are available at www.astm.org. The test chamber source and receiving room volumes are 204 and 148.4 cubic meters respectively. Western Electro-Acoustic Laboratory is accredited by NVLAP (National Voluntary Laboratory Accreditation Program) Lab Code 100256-0 for this test procedure. NVLAP is part of the United States Department of Commerce, National Institute of Standards and Technology (NIST). This test report relates only to the item(s) tested. This report must not be used to claim product certification, approval, or endorsement by WEAL, NVLAP, NIST or any agency of the federal government.

#### DESCRIPTION OF TEST SPECIMEN

The test specimen was an operable door assembly with a Timely model 47CK steel frame. Installed in the test opening on the top and sides was a simulated wall opening consisting of two 2 X 4 studs and a layer of 5/8 inch drywall on each side. The steel frame was installed on the simulated wall opening with screws thru the frame at the head and sides. The specimen was sealed into the test chamber opening with silicone caulking around the entire perimeter of the frame on both sides. A sheet of 6 mm (1/4 inch) hard board was installed at the sill to simulate a flat floor surface. The door panel was an ABS Prime Coat Hard Board wood door. The overall thickness of the door panel was 44.5 mm (1-3/4 inches) and it was hung on three 102 mm (4 inch) hinges. A single passage latch was used with knob handles. A kerfed foam filled leaf seal, model number TA46 was used on the top and sides of the interior of the frame. A Pemko model 411 automatic door bottom was attached on the interior surface of the door panel. The overall dimensions of the door assembly were 940 mm (37 inches) wide by 2.16 m (85 inches) high by 152 mm (6 inches) deep. The overall weight of the door assembly was 63.7 kg (140.5 lbs). The overall dimensions of the door panel were 908 mm (35-3/4 inches) wide by 2.13 m (84 inches) high. The overall weight of the door panel was 48.3 kg (106-1/2 lbs.) for a calculated surface density of 23.8 kg/m<sup>2</sup> (4.88 lbs./ft<sup>2</sup>). The door was opened and closed five times immediately prior to the test.

## RESULTS OF THE MEASUREMENTS

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One-third octave band sound transmission loss values are plotted and tabulated on the attached sheet. ASTM minimum volume requirements are met at 80 Hz and above. The Outdoor-Indoor Transmission Class rating determined in accordance with ASTM E 1332-90(2003) was OITC-26. The Sound Transmission Class rating determined in accordance with ASTM E 413-04 was STC-27.

Approved:

Respectfully submitted,

Western Electro-Acoustic Laboratory

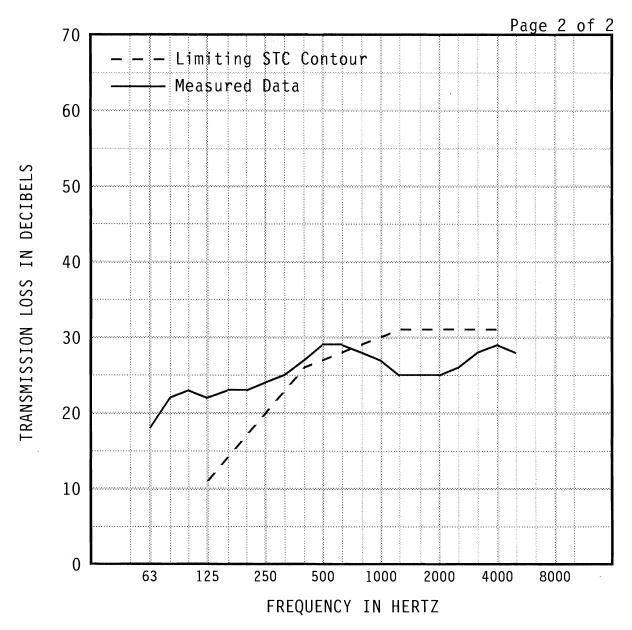
Laboratory Director

Acoustical Test Technician

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# WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL10-568



1/3 OCT BND CNTR FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB 95% Confidence in dB deficiencies	18 1.42	22 1.92	23 2.07	22 1.47	23 0.89	23 0.76	24 0.80			29 0.38
1/3 OCT BND CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB 95% Confidence in dB deficiencies	29 0.29	28 0.44 (1)	27 0.38 (3)		0.36	25 0.56 (6)				28 0.50

OITC **EWR** 30 26

Specimen Area: 21.84 sq.ft. Temperature: 76.6 deg. F

Relative Humidity: 35 %

Test Date: 18 August 2010

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STC

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