

RSIC-1 ACOUSTIC ASSEMBLY

WALL / MULLION ASSEMBLY



DIRECT FIX TO STEEL STUD / RSIC WINDOW MULLION



RSIC-AMI STC 58

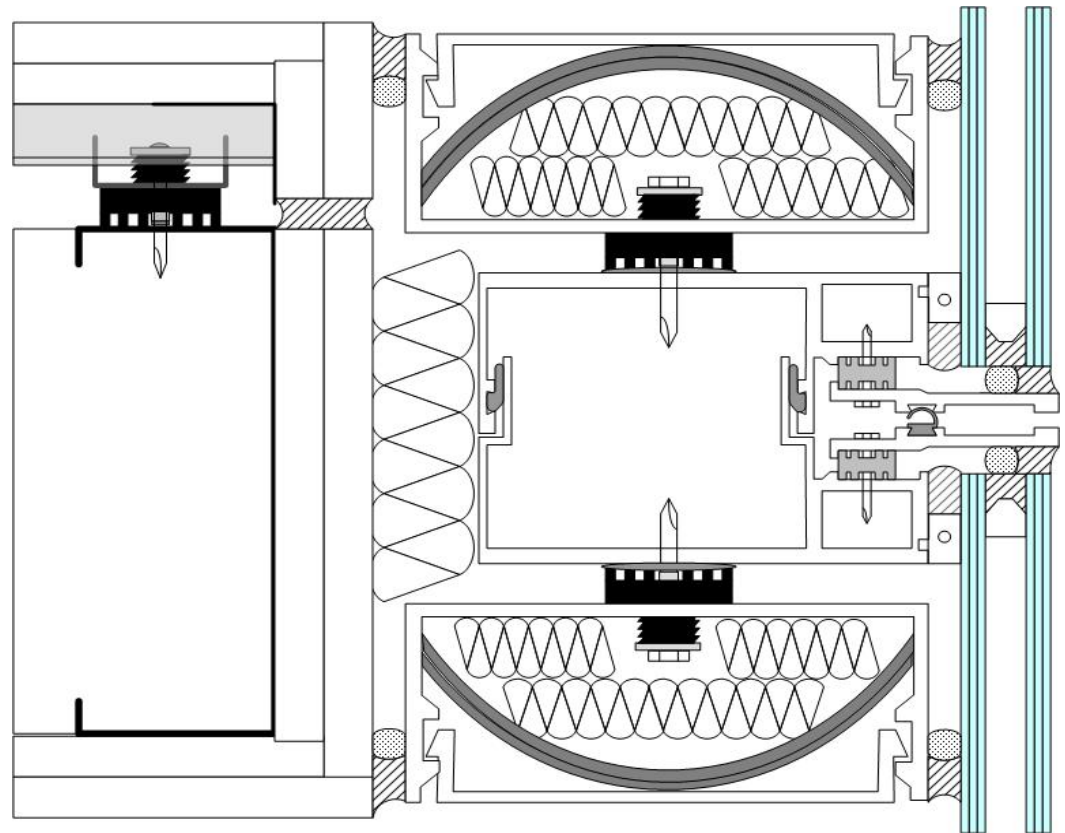
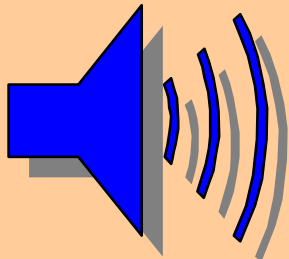
WALL CONSTRUCTION STC 64

- * 2 layers 5/8" Gypsum Board
- * 3.5" 20 Ga Steel Stud at 24" oc
- * R-19 Insulation 5.5"
- * RSIC-1 48" oc.
- * Drywall Furring Channel at 24" oc
- * 2 layers 5/8" Gypsum Board

MULLION CONSTRUCTION STC 58

- * RSIC-AMI Window mullion

RAL-TL05-167



TEST REPORT

PAC International, Inc.

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covers were fastened to the channel along the sides into the flange of the channels. The overall dimensions of the cover and pan assembly were nominally 124 mm (4.825 in.) wide by 41 mm (1.625 in.) deep.

Wall Panel

The wall specimen was designated by the client as Wall System – Load bearing steel studs 3.625" x 20 ga. (0.033") x 1.625" flange, fiberglass batt insulation 6", RSIC-1, drywall furring channels 7/8" x 25 ga., gypsum board 5/8" 2 x 2, UL Design U419 & U423, STC 64 Design. A visual inspection verified the manufacturer's description of the specimen. The description of the specimen was as follows: The wall consisted of 92 mm (3.625 in.) steel studs at 508 mm (20 in.) centers with 156 mm (6.25 in.) thick R-19 fiberglass batt insulation and a double layer of 16 mm (0.625 in.) Firecode 'C' Type X gypsum board on the receive side. RSIC-1 clips and drywall channel ("DWC") were used on the source side with a double layer of 16 mm (0.625 in.) Firecode 'C' Type X gypsum board. On the side of the wall panel being mated with the mullion section, the exposed vertical stud was covered with two layers of 16 mm (0.625 in.) gypsum board and a caulked sectional break maintained between the RSIC suspended gypsum board and the direct mounted gypsum board and studs.

The overall dimensions of the mullion section as measured were 124 mm (4.875 in.) wide by 2.43 m (95.625 in.) high and 184 mm (7.25 in.) thick, and the section weighed 32 kg (70.5 lbs.). The overall dimensions of the wall panel as measured were 1.08 m (42.5 in.) wide by 2.43 m (95.5 in.) high and 203 mm (8 in.) thick, and the wall panel weighed 139 kg (308.5 lbs.). The cavity between the mullion and the wall panel was filled with fiberglass insulation and the exposed vertical seams on the face of each side were sealed with an acoustical caulk. A manufacturer's detailed drawing is maintained on file.

The weight of the entire specimen as measured was 173.7 kg (383 lbs.), an average of 58.7 kg/m² (12 lbs/ft²). The transmission area used in the calculations was 3 m² (32 ft²). The source and receiving room temperatures at the time of the test were 25°C (78±1°F) and 51±1% relative humidity. The source and receive reverberation room volumes were 178 m³ (6,298 ft³) and 140 m³ (4,930 ft³), respectively.

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RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

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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 E90-04.

<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	39	0.61		800	59	0.18	1
125	41	0.43	1	1000	61	0.16	
160	44	0.47	1	1250	61	0.14	1
200	45	0.48	3	1600	61	0.14	1
250	48	0.47	3	2000	61	0.10	1
315	51	0.31	3	2500	62	0.08	
400	54	0.26	3	3150	64	0.08	
500	55	0.30	3	4000	66	0.13	
630	58	0.24	1	5000	67	0.31	

STC=58

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 (SUM OF DEF = 22)
STC = SOUND TRANSMISSION CLASS

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Tested by _____ Approved by _____

Marc Sciaky
Senior Technician

David L. Moyer
Laboratory Manager

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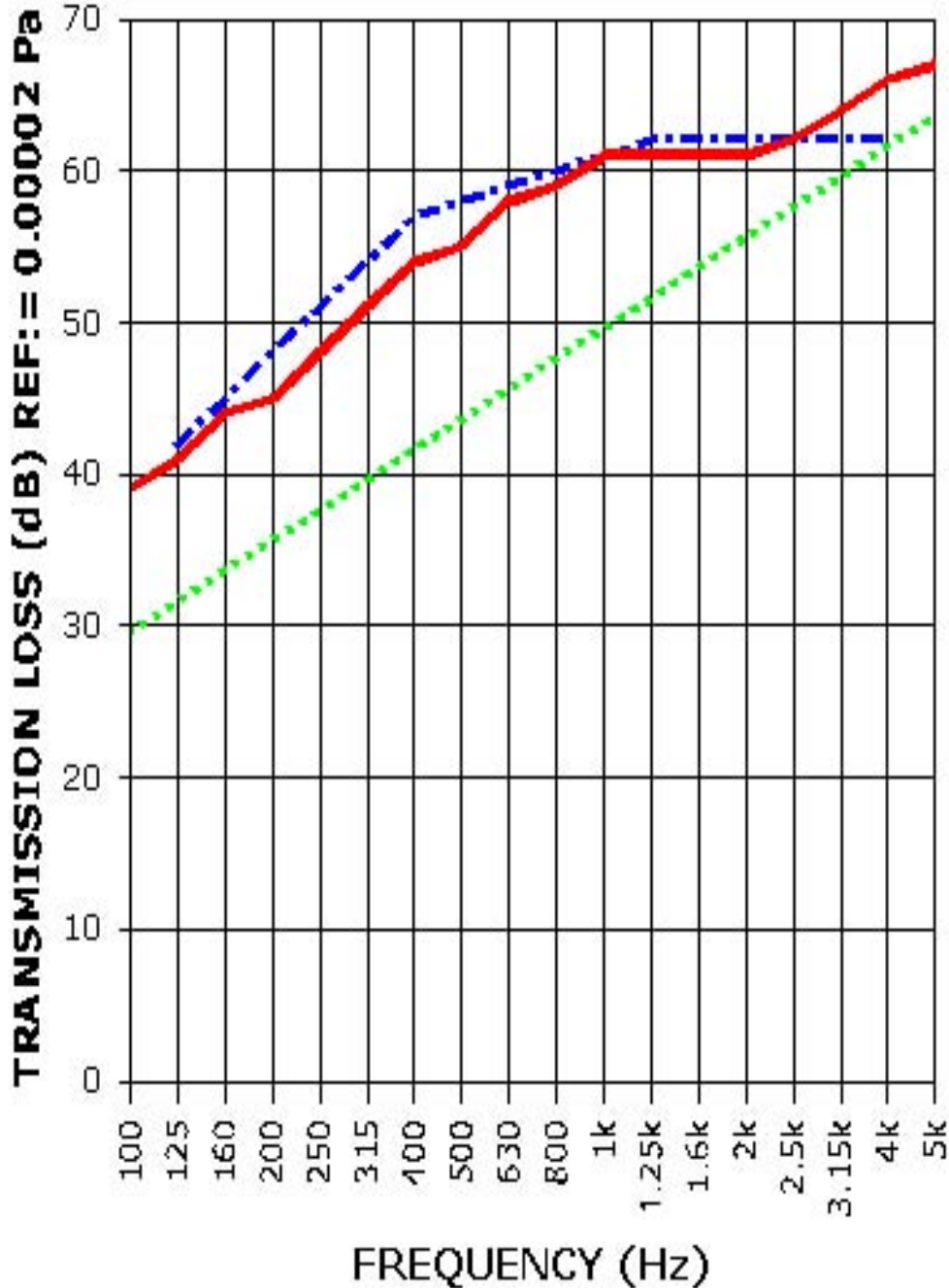
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TEST REPORT

**SOUND TRANSMISSION REPORT
RAL - TL05-167**



STC = 58

- TRANSMISSION LOSS
- - - SOUND TRANSMISSION LOSS CONTOUR
- MASS LAW

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RSIC-AMI Noise Control Mullion PAC INTERNATIONAL, INC.

Tel: 866-774-2100 Fax: 866-649-2710

