Avalon International Aluminum, LLC
2021-11-29

RAL™-TL21-348

TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequency bands. A graphic presentation of the data and additional information appear on the following pages. The precision of the transmission loss test data is within the limits set by the ASTM Standard E90-09 (2016). See Appendix A for identification of corrections applied to the reported data.

FREQ.	TL	ΔTL	DEF.	FREQ.	TL	ΔTL	DEF.
100	37	0.70	0	800	53	0.19	2
125	43	0.61	0	1000	55	0.21	1
160	36	0.66	4	1250	55	0.19	2
200	40	0.53	3	1600	56	0.16	1
250	45	0.33	1	2000	59	0.15	0
315	45	0.32	4	2500	62	0.13	0
400	46	0.18	6	3150	63	0.16	0
500	49	0.17	4	4000	65	0.18	0
630	52	0.23	2	5000	66	0.19	0

STC=53

ABBREVIATION INDEX

FREQ. = 1/3 OCTAVE BAND CENTER FREQUENCY, Hz
TL = TRANSMISSION LOSS, dB
ΔTL = 95% CONFIDENCE INTERVAL FOR TL MEASUREMENTS, dB
DEF. = DEFICIENCIES, dB BELOW SHIFTED STC CONTOUR (SUM OF DEF = 30)
STC = SOUND TRANSMISSION CLASS

Tested by _____
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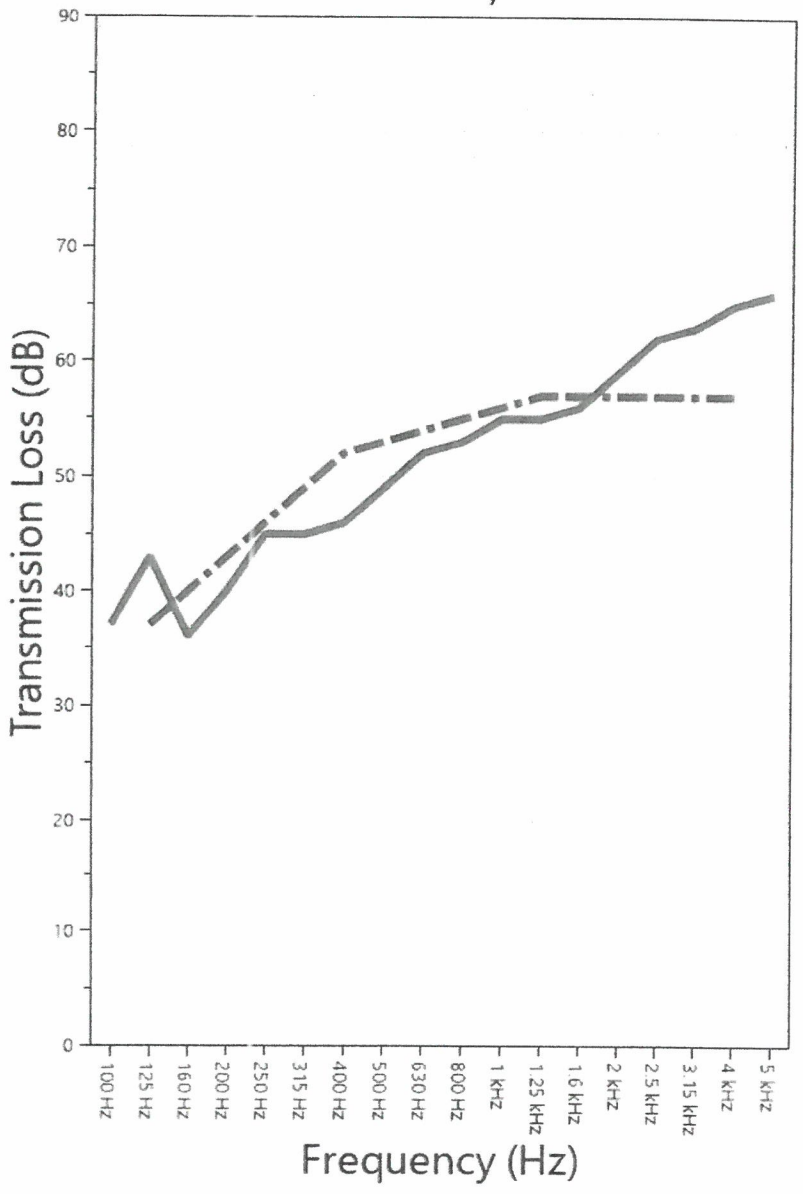
Date: 2021.12.14 13:54:12 -06'00'

SOUND TRANSMISSION REPORT

Tacitus Window System



STC=53
OITC=46

TRANSMISSION LOSS
SOUND TRANSMISSION CLASS CONTOUR

APPENDIX A: Extended Frequency Range Data

Specimen: Tacitus Window System (See Full Report)

The following non-accredited data were obtained in accordance with ASTM E90-09 (2016), but extend beyond the defined frequency range of 100Hz to 5,000Hz. These unofficial results are representative of the RAL test environment only and intended for research & comparison purposes. Sampling precision observed during this procedure is reported below. Corrections are detailed in Appendix B.

1/3 Octave Band Center Frequency (Hz)	**Sound Transmission Loss** (dB)	**Applicable Corrections**	**ΔTL (Eq. A2.5)** (dB)	**Repeatability** (dB)
31.5	18	*F*	0.85	1.24
40	16		1.31	1.44
50	20		1.12	0.98
63	26		1.01	2.33
80	34	*F*	0.56	1.46
100	37		0.70	0.77
125	43	*F*	0.61	1.28
160	36		0.66	1.18
200	40		0.53	0.74
250	45		0.33	0.53
315	45		0.32	0.46
400	46		0.18	0.41
500	49		0.17	0.41
630	52		0.23	0.32
800	53		0.19	0.30
1000	55		0.21	0.29
1250	55		0.19	0.15
1600	56		0.16	0.18
2000	59		0.15	0.12
2500	62		0.13	0.28
3150	63		0.16	0.23
4000	65		0.18	0.18
5000	66		0.19	0.26
6300	67	*A F*	0.18	0.28
8000	63	*A F*	0.21	0.67
10000	55	*AA F*	0.27	0.93
12500	43		0.42	1.93