



AEST ENGINEERING & SCIENCE

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Test Report

AEST ENGINEERING & SCIENCE Laboratories Measurement of Airborne Sound Transmission Loss of building Partition ASTM E 90

Date Of test commenced 20/July /2016

Date of written Report 3/August /2016

Test number AE2332221

Client ECO Panel

Designation ECO Panel 75 mm and 100 mm

Dimension 3000 mm Wide 3000 mm High

Weight 75 mm 54 Kg per Sqm 100 mm 63 Kg Per Sqm

100 mm thickness Panel

FREQ (Hz)	T.L (dB)	UNC (dB) 95% CL	DEF (dB)	FREQ (Hz)	T.L (dB)	UNC (dB)	DEF (dB)
100	24	1.11		800	57	0.22	
125	37	0.58	2	1K	57	0.14	1
160	39	0.52	3	1.25k	58	0.19	1
200	39	0.43	6	1.6K	59	0.14	
250	43	0.44	5	2K	60	0.09	
315	48	0.36	3	2.5K	61	0.1	
400	50	0.34	4	3.15K	62	0.06	
500	53	0.24	2	4K	60	0.06	
630	55	0.26	1	5K	60	0.09	

Sound Transmission Class = 46 dB

75 mm Thickness Panel

FREQ (Hz)	T.L (dB)	UNC (dB) 95% CL	DEF (dB)	FREQ (Hz)	T.L (dB)	UNC (dB)	DEF (dB)
100	19	0.79		800	43	0.19	
125	30	0.78	2	1K	48	0.13	1
160	36	0.59	3	1.25k	50	0.12	1
200	37	0.49	6	1.6K	52	0.1	
250	38	0.42	5	2K	54	0.08	
315	38	0.33	3	2.5K	54	0.08	
400	39	0.31	4	3.15K	54	0.07	
500	41	0.22	2	4K	55	0.06	
630	42	0.2	1	5K	55	0.06	

Sound Transmission Class 40 dB

Freq : Frequency Hertz T.L : Transmission Loss C.L : Uncertainty In dB For A 95 % Confidence Limit

DEF : Deficiencies , dB < STC Contour STC : Sound Transmission Class

Test Details

AEST Engineering

An improvement test was done at our laboratory for 75mm thickness ECO Panel and 100 mm thickness ECO Panel, this test includes sound insulation, result came as following

Test Details	75 MM thickness	100 MM thickness	Degree
Sound Transmission	40 dB	46 dB	Low Sound Transmission

ECO Panel

Test clarification

- ECO panel Have Recorded a low sound transmission .
- ECO panel Values Exceed Australian Standards Requirements
- ECO panel Pass ASTM E 90 .