INFORMATION DATA SHEET: 3mm FOAM UNDERLAY ACOUSTIC TESTS Date:28th MAY 2021

OMPLIANCE TESTING

All measurements were carried out in accordance with the guidelines and procedures outlined in AS/NZS ISO 140.7:2006.

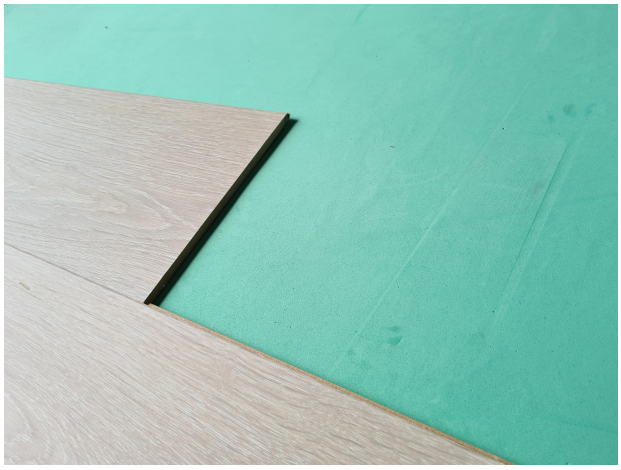
“Field measurements of impact sound insulation of floors” with the rating determined in accordance with AS ISO 717.2-2004.

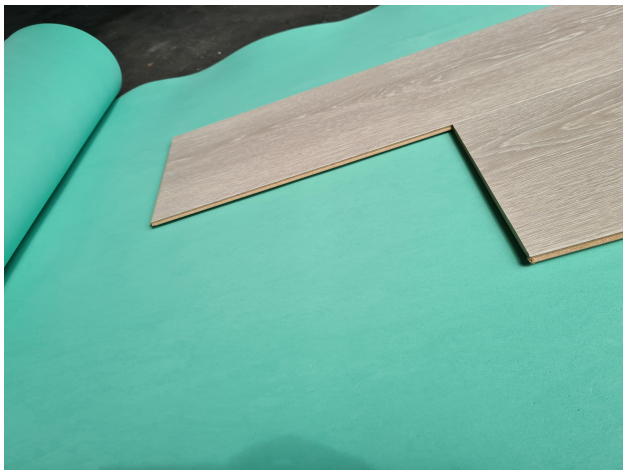
“Rating of sound insulation in buildings and of building elements”.

System Tested				L'_{nTw}	FIIC	AAAC Star Rating
Test 00:	ECFS (Existing ceiling/floor system)			61[1]	41[1]	2 Star[1]
Test 01:	12 mm Laminated Timber Flooring	+ 3 mm foam underlay	+ ECFS	43[1]	65[1]	5 Star[1]

This test is done for 12mm laminate flooring with 3mm foam underlay.

Each roll of 3mm foam underlay is 10sqm, o r 20sqm.





The test was done by Koikas Acosutics Pty Ltd on 28 May 2021 at units located at Wentworth Point Sydney. The results reveal that all the testing samples are compliant with the updated NCC/BCA 2016 impact noise insulation criterion with ceiling / floor systems.

A detailed test report is available on request.

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS

koikas acoustics PTY LTD
CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Thursday, 27 May 2021
Project No. :	4786
Testing Company :	Koikas Acoustics
Checked by :	Nick Koikas
Place of Test:	Wentworth Point
Client	Qualimax Flooring
Client Address	-

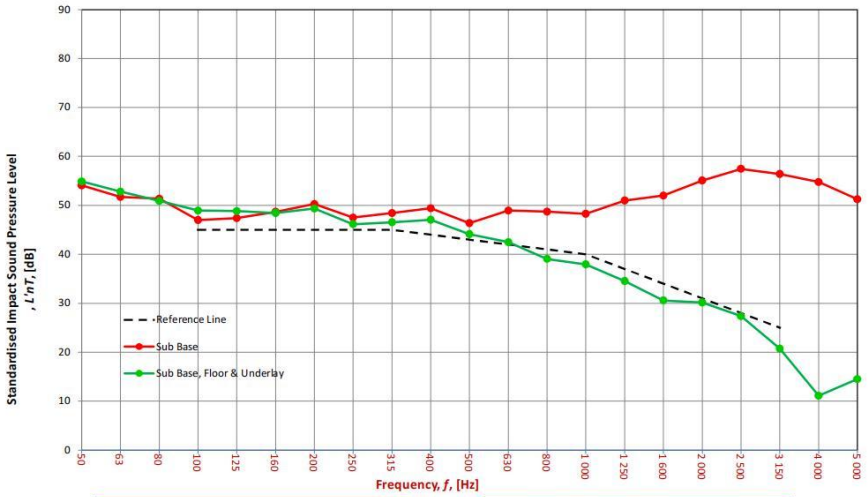
	Name	Thickness (mm	Density (Sl)
Description of Floor System	Laminated Flooring	12	--
	Green Foam Underlay	3	--
	Concrete	--	--
	Cavity + Plasterboard	--	--

Room Floor Dimensions	Width :	3.2	m
	Length :	5.7	m
	Area :	18.24	m^2
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m^2

	Location	Width	Length	Area	Height	Volume
Receiver Rm	KLD	3.2	5.7	18.24	2.7	49.25

Room Surfaces		
Walls	Floor	Ceiling
Render	Carpet	Render

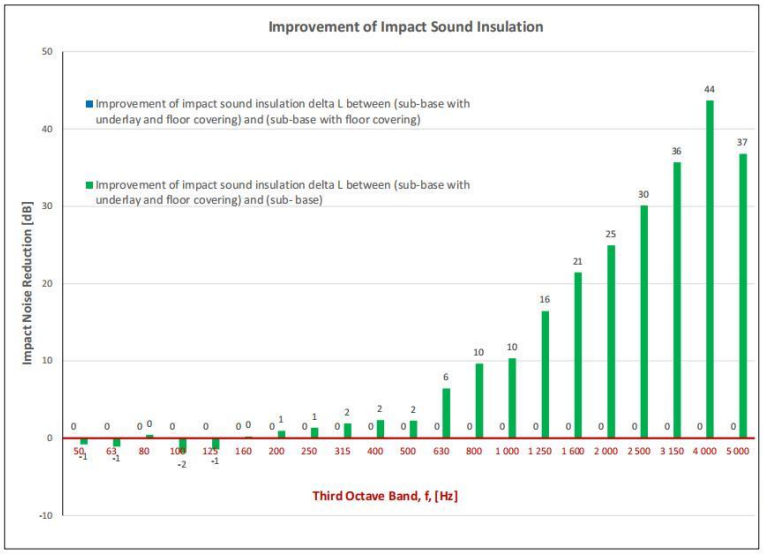
Frequency f Hz	L'nT (one-third octave) dB		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	54.1	N/A	54.9
63	51.7	N/A	52.8
80	51.4	N/A	50.9
100	47.0	N/A	48.9
125	47.4	N/A	48.8
160	48.7	N/A	48.5
200	50.3	N/A	49.4
250	47.5	N/A	46.1
315	48.4	N/A	46.5
400	49.4	N/A	47.1
500	46.4	N/A	44.1
630	48.9	N/A	42.5
800	48.7	N/A	39.1
1 000	48.3	N/A	38.0
1 250	51.0	N/A	34.5
1 600	52.0	N/A	30.6
2 000	55.1	N/A	30.2
2 500	57.5	N/A	27.4
3 150	56.4	N/A	20.7
4 000	54.8	N/A	11.1
5 000	51.3	N/A	14.5



Sub Base		
L'nT,w	61	AS ISO 717.2 - 2004
Ci	-13	AS ISO 717.2 - 2004
Ci(50-2500)	-12	AS ISO 717.2 - 2004
Ci(63-2000)	-14	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	41	ASTM E1007-14

Sub Base & Floor		
L'nT,w	N/A	AS ISO 717.2 - 2004
Ci	N/A	AS ISO 717.2 - 2004
Ci(50-2500)	N/A	AS ISO 717.2 - 2004
Ci(63-2000)	N/A	AS ISO 717.2 - 2004
AAAC★	N/A	AAAC Guidleline
FIIC	N/A	ASTM E1007-14

Sub Base, Floor & Underlay		
L'nT,w	43	AS ISO 717.2 - 2004
Ci	-1	AS ISO 717.2 - 2004
Ci(50-2500)	3	AS ISO 717.2 - 2004
Ci(63-2000)	1	AS ISO 717.2 - 2004
AAAC★	5 Star	AAAC Guidleline
FIIC	65	ASTM E1007-14



Definitions of Noise Metrics

FIIC:
Field Impact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m^2 as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:
The Weighted Standardised Impact Sound Pressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

Ci:
Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors Ci is positive because of the low resonant frequencies. Considers frequency range between 100 -and 2500 Hz.

Ci(50-2500):
Same as above, but for the frequency range 50 -2500 Hz.

Ci(125-2000):
Same as above, but for the frequency range 125 -2000 Hz.

AAAC Star R.	2	3	4	5	6
L'nT,w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible