Royal AquaCore Aussie Species Acoustic Testing - 13mm Range

The following testing was commissioned by Royal Floor's to indicate acoustic performance of the AquaCore Flooring installed with a combination of EVERQUIET® underlays. Contrix Pty Ltd undertook the testing on 7th February 2025, in compliance with:

- AS/NZS ISO 140.7:2006, titled "Field measurements of impact sound insulation of floors, and
- ISO 717.2-2004, titled "Rating of sound insulation in buildings and of building elements"

The testing was conducted in a residential apartment in Hurstville NSW, on a reinforced concrete slab and suspended ceiling cavity. These test reports exist to provide an indication of acoustic performance only, and Royal Floor's cannot guarantee any acoustic outcome due to the variance and individual nature of every building and flooring installation.

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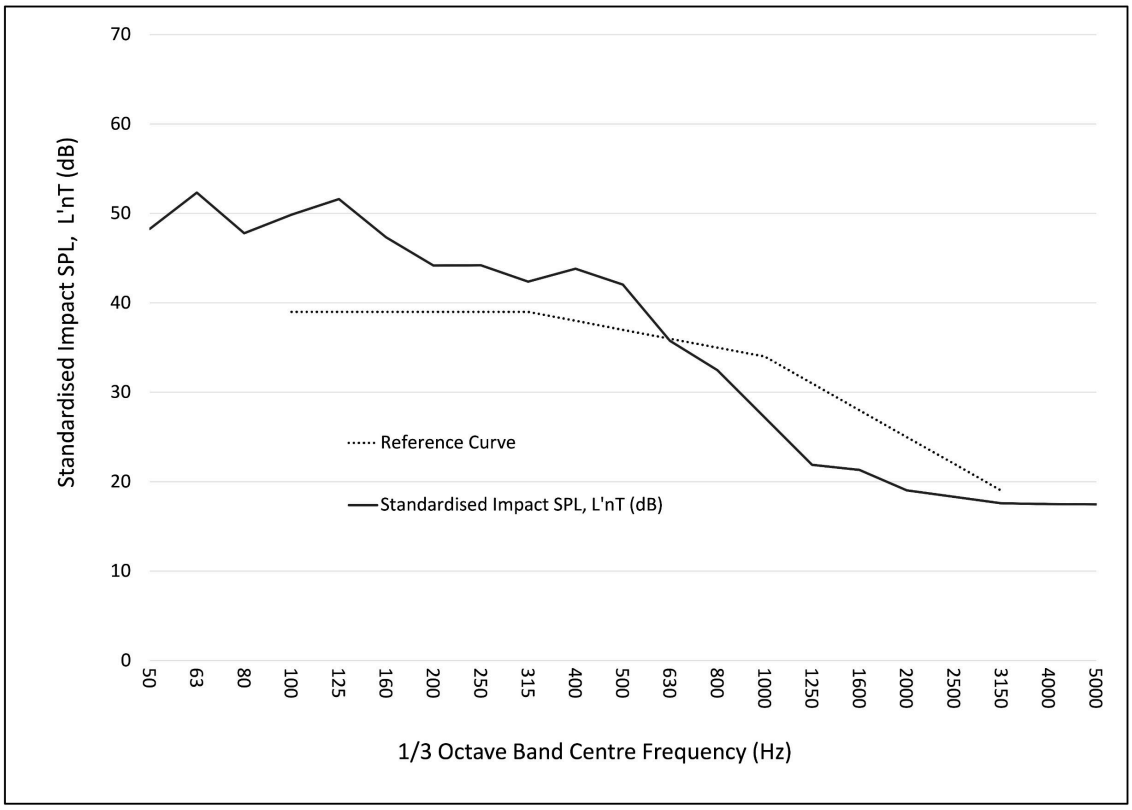
- Royal AquaCore Aussie Species + 5mm EVERQUIET® Rubber-Foam EQ515
- Royal AquaCore Aussie Species + 10mm EVERQUIET ® Rubber EQ1012
- Royal AquaCore Aussie Species + 5mm EVERQUIET ® Rubber EQW512
- Royal AquaCore Aussie Species + 10mm EVERQUIET ® Rubber EQW1012

Royal AquaCore Aussie Species + 2mm EVERQUIET ® Acoustic IXPE Foam

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 09
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 2mm EVERQUIET Acoustic IXPE Foam
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
Receiver Room: Living area on the lower floor level directly below
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	48.2	52.3	47.8	49.9	51.6	47.3	44.2	44.2	42.4	43.8	42.0	35.8	32.5	27.2	21.9	21.3	19.0	18.3	17.6	17.5	17.5

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	41	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	65	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

Testing Date :	Friday, 7 February 2025	**Contrix Pty Ltd**
Reference No.:	3874	ABN: 95 632 593 625
Testing Organisation:	Contrix Pty Ltd	E-mail: info@contrix.com.au
Tested By:	Michael Fan Chiang	Tel: +61 425 240 555
	BE(Mech)., MAAS	www.contrix.com.au/acoustics

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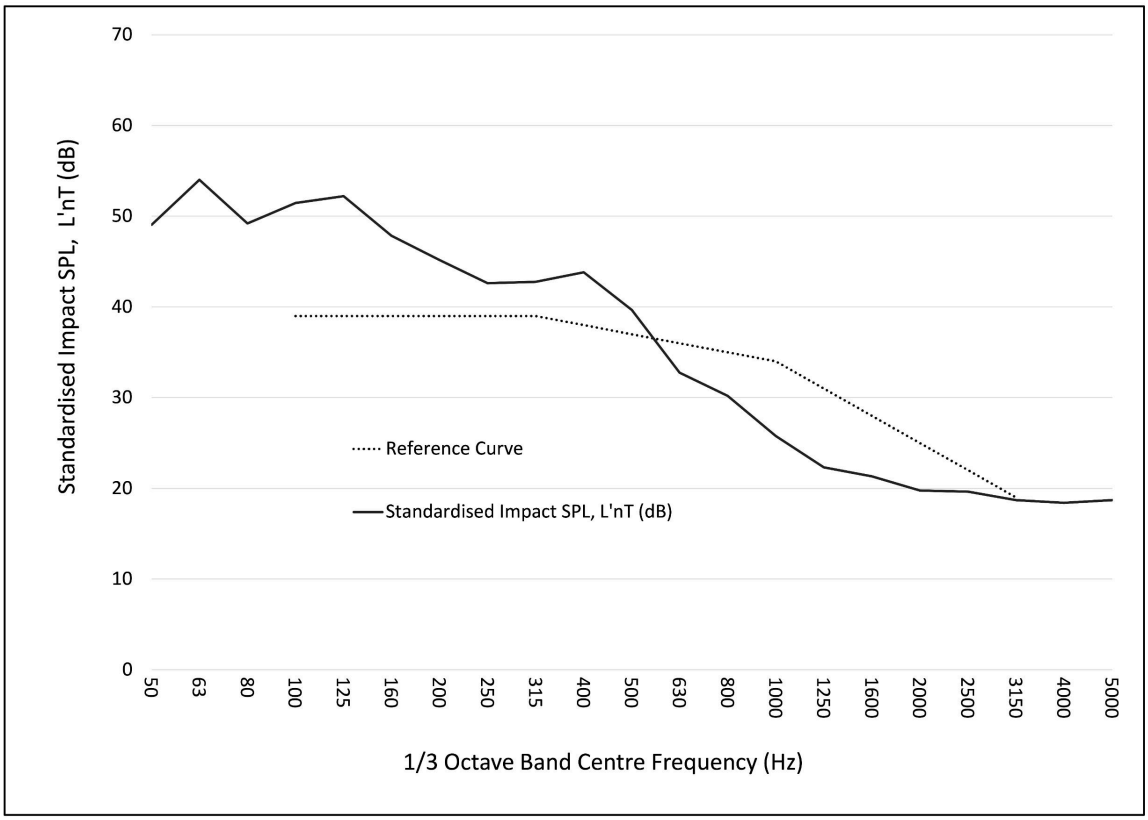
Royal AquaCore Aussie Species + 3mm EVERQUIET ® Rubber EQ312

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 10
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 3mm Rubber EQ312
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
Receiver Room: Living area on the lower floor level directly below
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	49.0	54.0	49.2	51.5	52.2	47.8	45.2	42.6	42.8	43.8	39.6	32.8	30.2	25.8	22.3	21.3	19.8	19.6	18.7	18.4	18.7

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	41	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	64	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

Testing Date :	Friday, 7 February 2025	**Contrix Pty Ltd**
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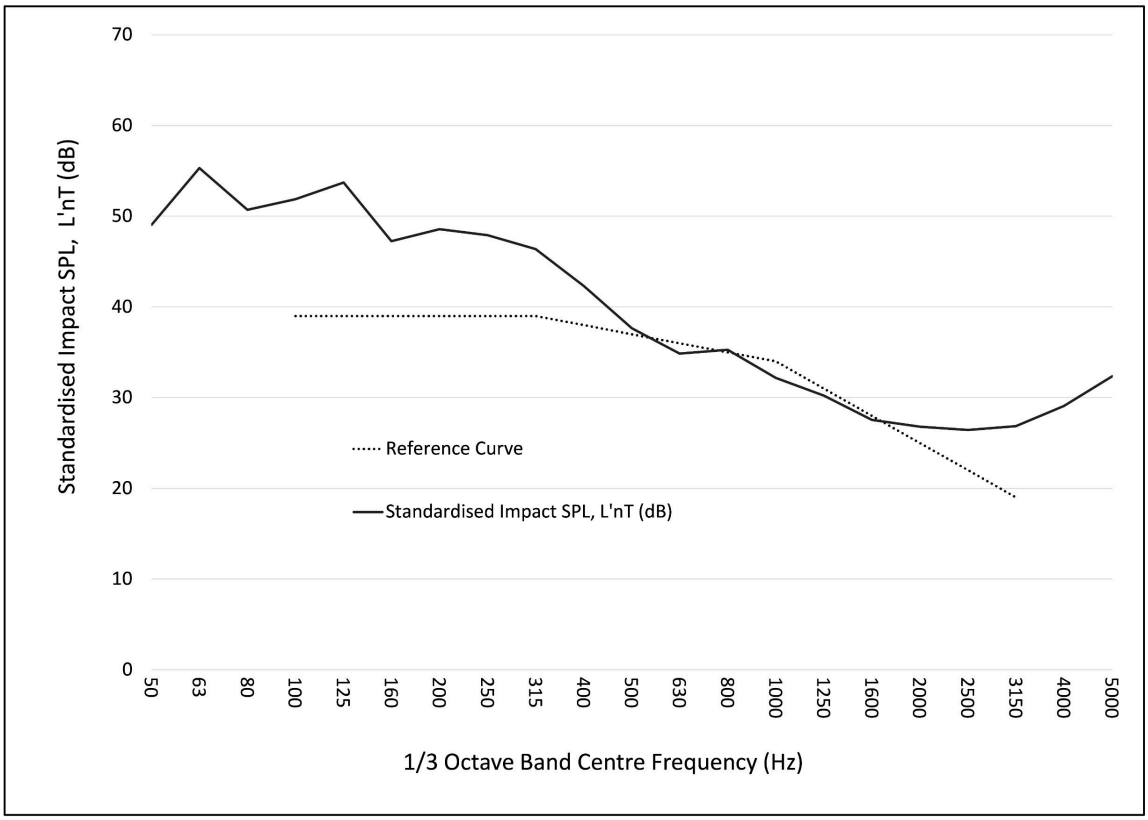
Royal AquaCore Aussie Species + 5mm EVERQUIET ® Rubber EQ512

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 11
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 5mm Rubber EQ512
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
Receiver Room: Living area on the lower floor level directly below
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	49.0	55.3	50.7	51.9	53.7	47.2	48.6	47.9	46.4	42.3	37.6	34.9	35.3	32.2	30.2	27.5	26.8	26.5	26.9	29.1	32.4

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	**43**	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	**63**	ASTME1007-14
AAAC **Star Rating**	**5**	AAAC Guideline

Testing Date :	Friday, 7 February 2025	**Contrix Pty Ltd**
Reference No.:	3874	ABN: 95 632 593 625
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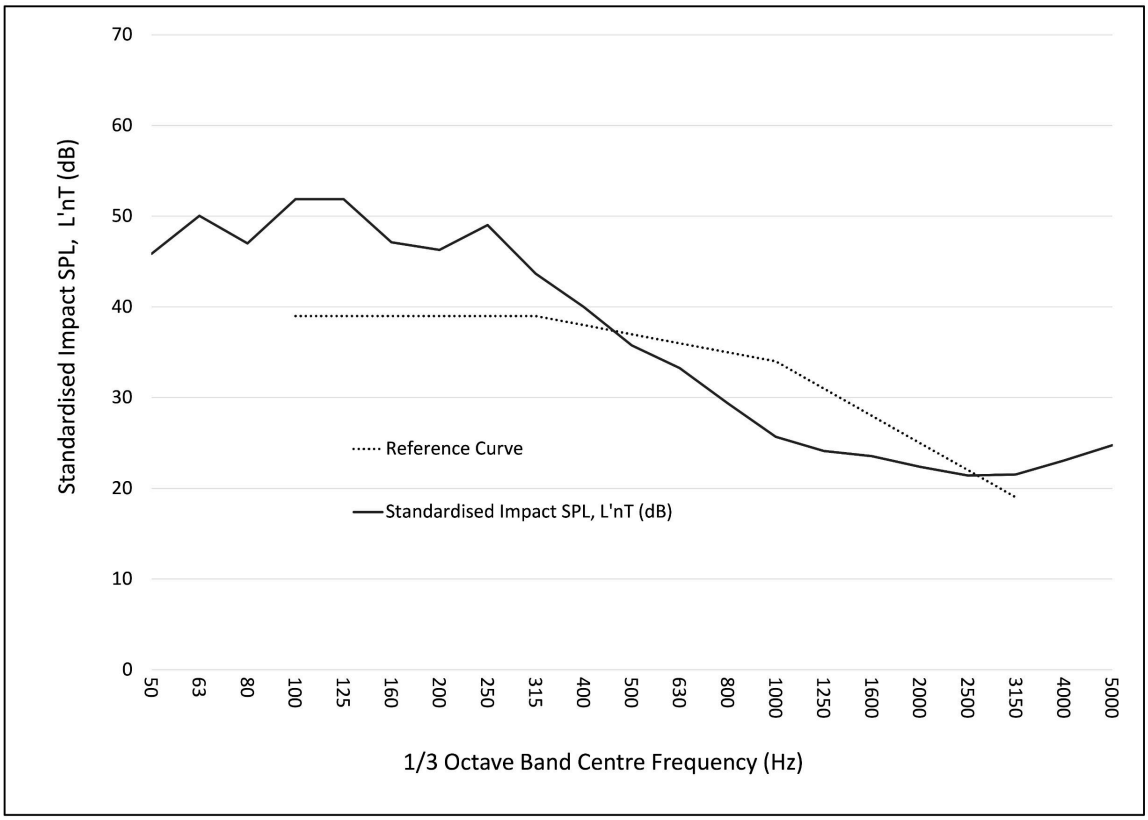
Royal AquaCore Aussie Species + 5mm EVERQUIET ® Rubber-Foam EQ515

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 12
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 5mm Rubber Foam EQ515
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
Receiver Room: Living area on the lower floor level directly below
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	45.8	50.0	47.0	51.9	51.9	47.1	46.3	49.0	43.7	40.0	35.7	33.3	29.4	25.7	24.1	23.5	22.4	21.4	21.5	23.1	24.7

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	41	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	65	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

Testing Date :	Friday, 7 February 2025	**Contrix Pty Ltd**
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Testing Organisation:	Contrix Pty Ltd	E-mail: info@contrix.com.au
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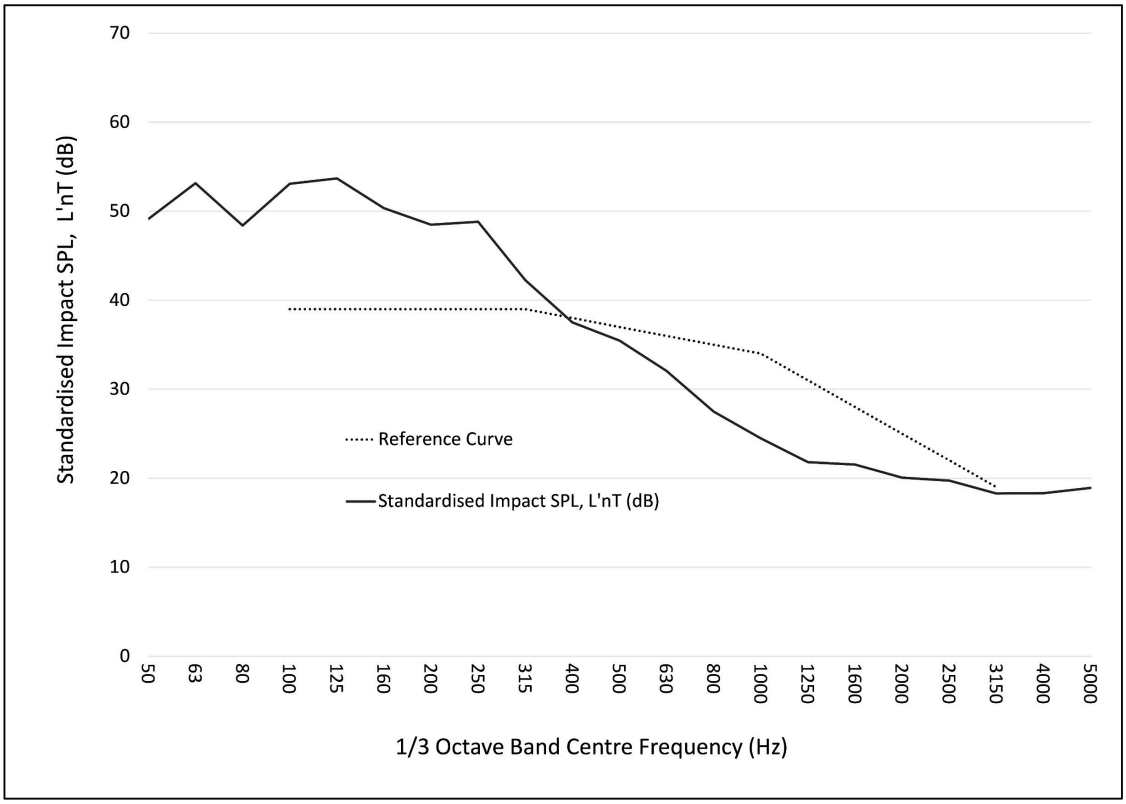
Royal AquaCore Aussie Species + 10mm EVERQUIET ® Rubber EQ1012

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 13
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 10mm Rubber EQ1012
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
Receiver Room: Living area on the lower floor level directly below
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	49.1	53.1	48.4	53.1	53.7	50.3	48.5	48.8	42.3	37.5	35.4	32.1	27.5	24.5	21.8	21.5	20.1	19.7	18.3	18.3	18.9

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	43	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	63	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

Testing Date :	Friday, 7 February 2025	Contrix Pty Ltd
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Royal AquaCore Aussie Species + 5mm EVERQUIET ® Rubber EQW512

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date: Friday, 7 February 2025
Test No.: 14
Client/Owner: VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location: Residential apartment in Hurstville NSW
Floor Finish: 13mm HydroPro Flooring
Acoustic Underlay: 5mm Wavy Rubber EQW512
Sub-base & ceiling below: Reinforced concrete slab
Suspended ceiling cavity with plasterboard ceiling
Source Room: Living area on the upper floor level
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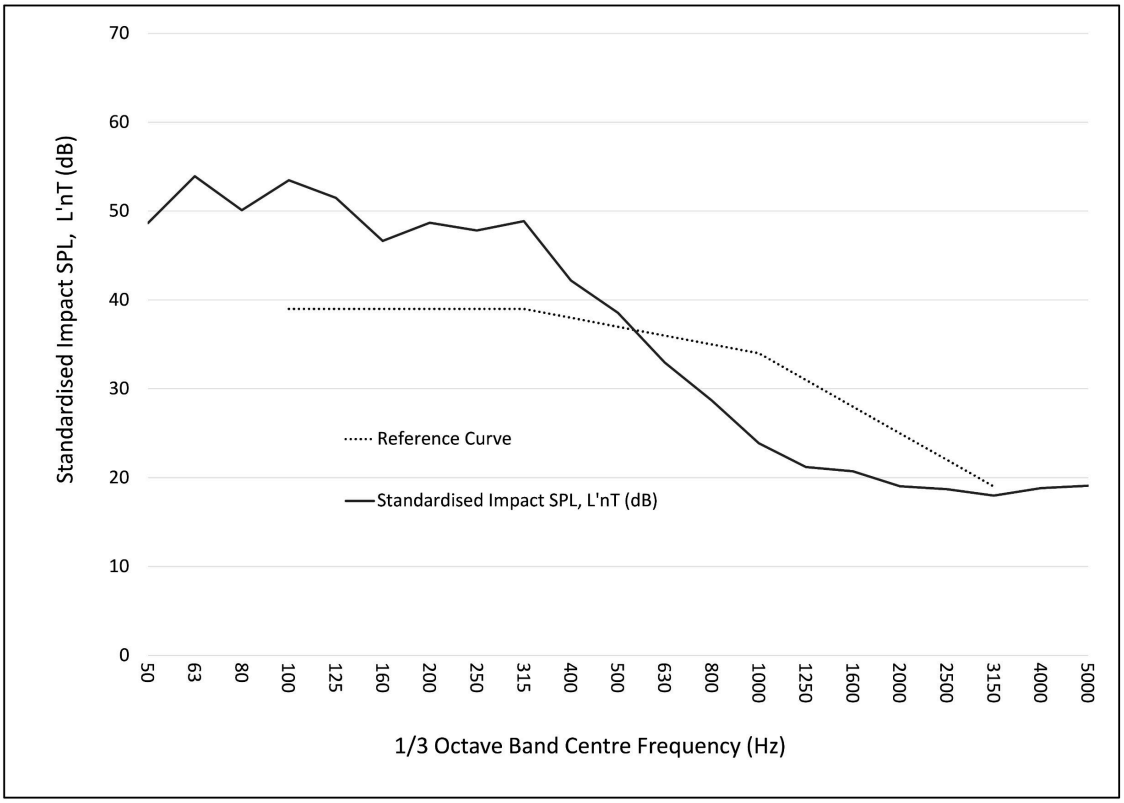
Approx. receiver room vol: 60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	48.6	53.9	50.1	53.5	51.5	46.6	48.7	47.8	48.9	42.2	38.5	33.0	28.7	23.9	21.2	20.7	19.0	18.7	18.0	18.8	19.1

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	43	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	63	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

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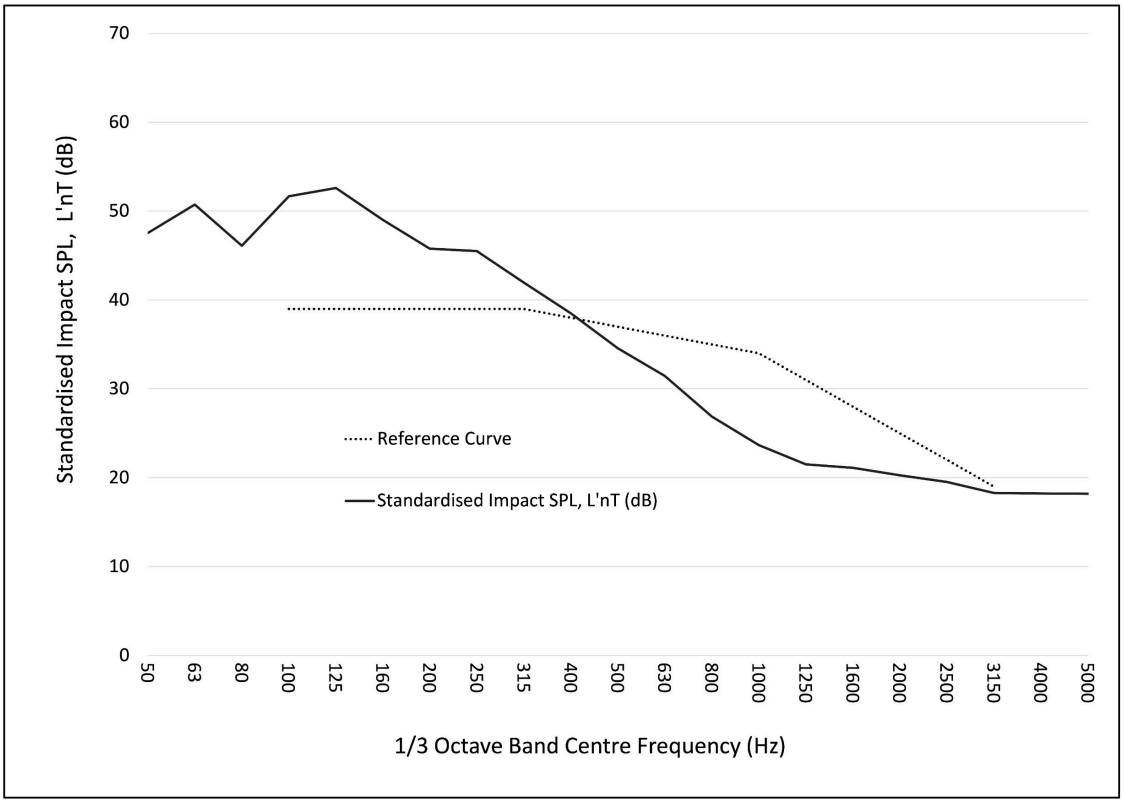
Royal AquaCore Aussie Species + 10mm EVERQUIET ® Rubber EQW1012

Technical Data Sheet - Standardised Impact Sound Pressure Level
Impact Sound Insulation Testing of Floorboards
VBL Import Pty Ltd T.A. EVERFLOOR

Testing Date:	Friday, 7 February 2025
Test No.:	15
Client/Owner:	VBL Import Pty Ltd T.A. EVERFLOOR
Testing Location:	Residential apartment in Hurstville NSW
Floor Finish:	13mm HydroPro Flooring
Acoustic Underlay:	10mm Wavy Rubber EQW1012
Sub-base & ceiling below:	Reinforced concrete slab Suspended ceiling cavity with plasterboard ceiling
Source Room:	Living area on the upper floor level
Receiver Room:	Living area on the lower floor level directly below
Approx. receiver room vol:	60.28



1/3 Octave Band Centre Frequency (Hz)	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
L'nT [dB]	47.5	50.7	46.1	51.7	52.6	49.0	45.8	45.5	42.0	38.5	34.5	31.5	26.9	23.7	21.5	21.1	20.3	19.5	18.3	18.2	18.2

Acoustical Rating		Reference/Guildine
Measured Weighted Standardised Sound Level Difference, **L'nTw**	41	AS ISO 717.2 - 2004
Field Impact Isolation Class, **FIIC**	64	ASTME1007-14
AAAC **Star Rating**	5	AAAC Guideline

Testing Date :	Friday, 7 February 2025	**Contrix Pty Ltd**
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Royal AquaCore Aussie Species with FLOOR+ MS Adhesive (6mm V-Notch)

System Tested	L'_{nTw} [3]	FIIC [4, 5]	AAAC [6]
Bare Concrete Floor (ECFS only) - for comparison purposes only	54	50	3
Royal AquaCore Aussie Species Direct Stick with FLOOR+ MS (6mm V-Notch)	46	64	4

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS

koikas acoustics PTY LTD — CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Thursday, 11 December 2025
Project No. :	3523
Testing Company :	Koikas Acoustics
Checked by :	James Tsevrementzis
Place of Test:	Residential Unit in Forest Lodge (Living/Dining)
Client	Everfloor
Client Address	-

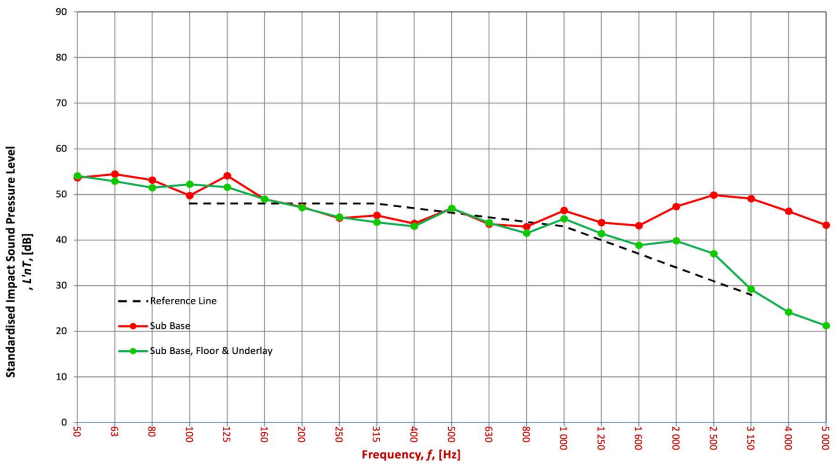
	Name	Thickness (mm	Density (Sl)
Description of Floor System	Hydropro Timber	13	--
	FLOOR+ MS Adhesive (V-Notch)	6	--
	Concrete Sub Base	--	--
	Suspended Plasterboard Ceiling	--	--

Room Floor Dimensions	Width :	4.4	m
	Length :	8.2	m
	Area :	36.08	m^2
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m^2

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Unit below (Living/Dining	4.4	8.2	36.08	2.7	97.42

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Carpet	Plasterboard

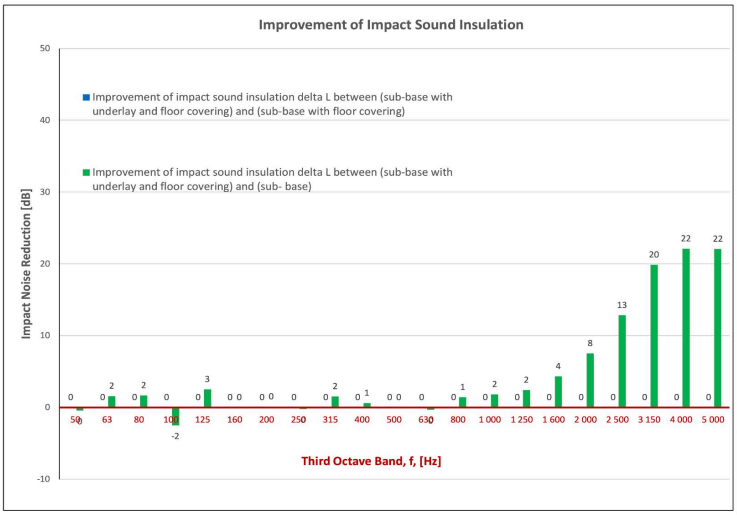
Frequency f Hz	L'nT (one-third octave) dB		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	53.7	NA	54.1
63	54.5	NA	52.9
80	53.1	NA	51.5
100	49.7	NA	52.2
125	54.1	NA	51.6
160	49.0	NA	49.0
200	47.2	NA	47.1
250	44.8	NA	45.0
315	45.4	NA	43.9
400	43.6	NA	43.0
500	46.9	NA	46.9
630	43.5	NA	43.8
800	42.9	NA	41.5
1 000	46.5	NA	44.7
1 250	43.8	NA	41.4
1 600	43.2	NA	38.8
2 000	47.4	NA	39.8
2 500	49.9	NA	37.0
3 150	49.1	NA	29.2
4 000	46.3	NA	24.2
5 000	43.3	NA	21.2



Sub Base		
L'nT,w	54	AS ISO 717.2 - 2004
Ci	-9	AS ISO 717.2 - 2004
Ci(50-2500)	-7	AS ISO 717.2 - 2004
Ci(63-2000)	-8	AS ISO 717.2 - 2004
AAAC★	3 Star	AAAC Guideline
FIIC	50	ASTM E1007-14

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

Sub Base, Floor & Underlay		
L'nT,w	46	AS ISO 717.2 - 2004
Ci	-3	AS ISO 717.2 - 2004
Ci(50-2500)	0	AS ISO 717.2 - 2004
Ci(63-2000)	-1	AS ISO 717.2 - 2004
AAAC★	4 Star	AAAC Guideline
FIIC	64	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 Audible	Normally Inaudible

Please visit royalfloors.com.au for the most up-to-date version of Warranty, Installation, and care and maintenance guidelines. All technical data and testing are based on random sampling and are for indicative purposes only. Version: August 2025