

Contrix Pty Ltd

ABN: 95 632 593 625

E-mail: info@contrix.com.au

Mob: +61 425 240 555

Add: 12 Ormonde Parade, Hurstville

IMPACT NOISE TESTING OF HARD FLOOR COVERING PREFERENCE FLOORS – “Aspire Hybrid 8mm”

Contrix Pty Ltd was requested to perform an impact noise assessment on the chosen hard floor covering within the residential apartment in Zetland NSW.

The aim of conducting this impact noise test was to determine the acoustic rating of the selected hard floor covering (Aspire Hybrid 8mm) with and without the acoustic underlay (Regupol Sonus Multi 3), and the results are to be used for design guidance only.

All measurements and assessment procedures were conducted in compliance with the standards:

- 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".

Tests were conducted within bedrooms of residential apartment on Level 9 (sound source room) and Level 8 (receiver room) directly below on Saturday 2nd March 2024. A summary page of testing results can be found on page 2, followed by detailed technical data sheet in the subsequent pages.

Based on our test results and calculations, Aspire Hybrid 8mm flooring tested with and without an acoustic underlay (Regupol Sonus Multi 3) within the residential apartment in Zetland achieves the acoustical ratings of:

- Measured Weighted Standardised Sound Level Different, **L'nTw 42~44**
- Field Impact Insulation Class, **FIIIC 64**
- AAAC Star Rating **5**

IMPACT NOISE INSULATION FIELD TEST REPORT SUMMARY


Testing Date:	Saturday 2 nd March 2024
Prepared For:	Homemirus Pty Ltd T/A Preference Floors
Testing Location:	Residential Apartment in Zeltand NSW
Flooring System Tested:	Aspire Hybrid 8mm
Separating partition system:	200~200 mm reinforced concrete slab Suspended ceiling cavity of 80~100mm 10 or 13mm plasterboard ceiling
Source Room:	Bedroom on level 9
Receiver Room:	Bedroom on level 8 (directly below)

Test Results					
Floor covering	Additional Underlay	Acoustic Performance			
		L' _{nTw}	FIC	AAAC Star Rating	Δ L' _{nTw}
Test 01: Aspire Hybrid 8mm	None	42	64	5	16
Test 01: Aspire Hybrid 8mm	Regupol Sonus Multi 3	43	64	5	15

Sound Source:	Tapping Machine TM004 S/N 59005
Measuring Device:	NTi-XL2 precision spectrum analyser S/N A2A-11580-E0

Measurements were conducted in accordance with:

- Australian Standard AS ISO 717.2-2004, Acoustics - Rating of sound insulation in buildings and of building elements;
- ASTM E1007-14 - Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structure”, and
- International Standard ISO 16283-02:2015, Acoustics – Field measurement of sound insulation in buildings and of building elements.

Tested By:	 Michael Fan Chiang BE (Mech)., MAAS Consultant	Report Date:	26 th March 2024
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Disclaimers:

1. The information provided in this report relates to sound insulation of floor covering only.
2. Contrix Pty Ltd does not supply and install any flooring products, therefore, not responsible or liable for any product defects.
3. It is imperative to strictly adhere to the installation guidelines provided by the supplier or installation instructions (if any). Contrix Pty Ltd bears no liability in the event of non-compliance with these instructions.
4. This testing report is site-specific and only applies to the subject premise and product(s) tested as specified in this document.
5. The acoustic rating may vary up to 3 rating points depending on the placement of the tapping machine, testing locations within the unit and the junction details between the floorboards/skirting/scotia and walls. Many Strata Management or certifying authorities have allowed a tolerance of 3 acoustic rating points.
6. It is highly recommended to engage a qualified acoustic consultant (Contact Contrix Pty Ltd on +61 425 240 555 or other qualified consultants) to conduct in-situ testing (field testing) prior to flooring installation.

Technical Data Sheet - Standardised Impact Sound Pressure Level

Impact Sound Insulation Testing of Floorboards

Preference Floors - Aspire Hybrid 8mm

Testing Date: Saturday, 2 March 2024

Test No.: 01

Client/Owner: Preference Floors

Testing Location: Residential Apartment in Zetland NSW

Floor Finish: Aspire Hybrid 8mm

Additional Underlay: None

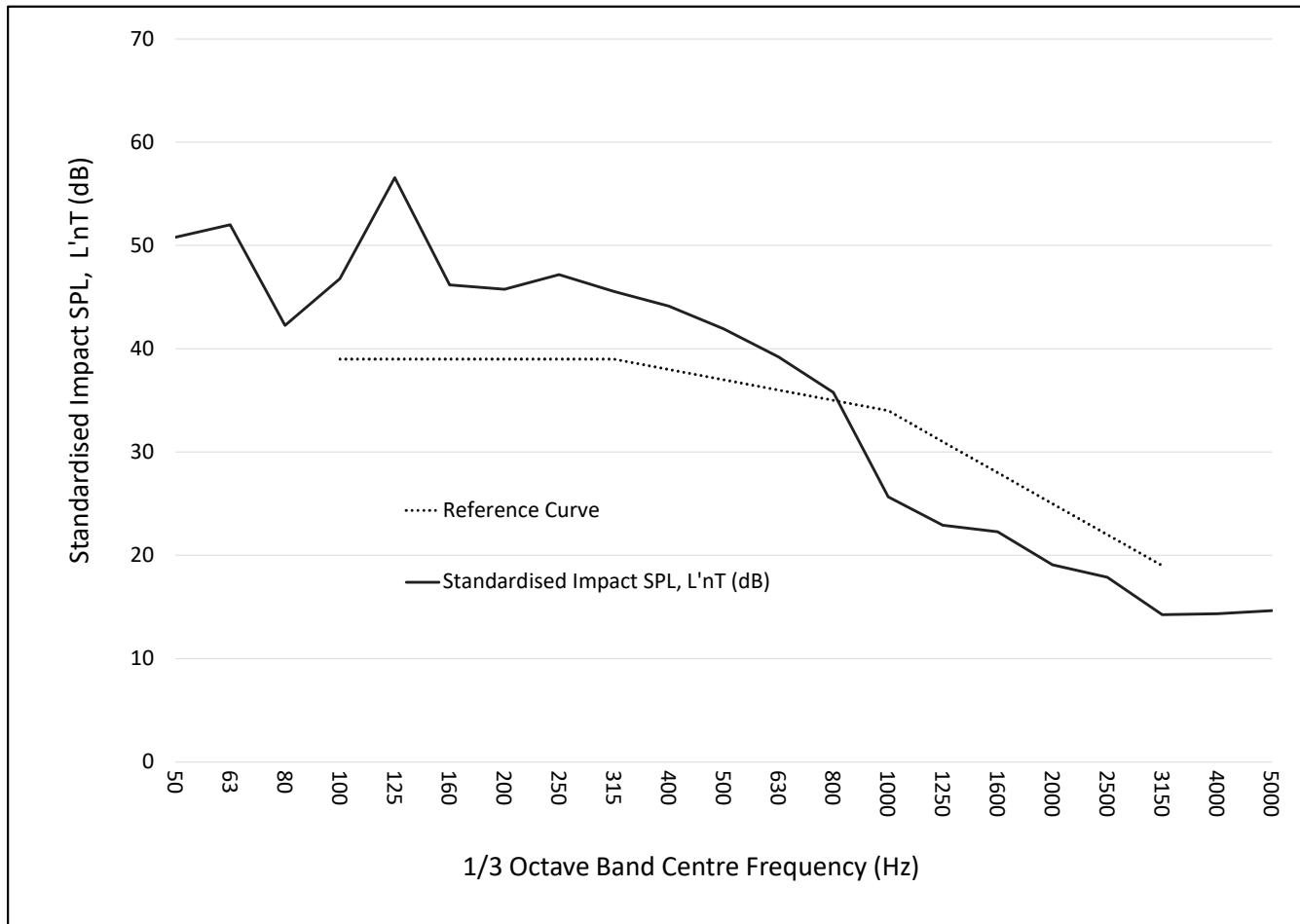
Sub-base & ceiling below: 200~220mm reinforced concrete slab (estimated)

Suspended ceiling cavity of 80~100mm and 10 or 13mm plasterboard ceiling (estimated)

Source Room: Bedroom on level 9

Receiver Room: Bedroom on level 8 directly below

Approx. receiver room vol: 25.03



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]	50.8	52.0	42.3	46.8	56.6	46.2	45.8	47.2	45.5	44.1	41.9	39.2	35.8	25.6	22.9	22.3	19.1	17.9	14.2	14.3	14.6

Acoustical Rating

Measured Weighted Standardised Sound Level Difference, L'nTw

42

Field Impact Isolation Class, FIC

64

AAAC Star Rating

5

Reference/Guideline

AS ISO 717.2 - 2004

ASTME1007-14

AAAC Guideline

Testing Date : Saturday, 2 March 2024

Reference No.: 3805

Testing Organisation: Contrix Pty Ltd

Tested By: Michael Fan Chiang
BE(Mech), MAAS

Contrix Pty Ltd

ABN: 95 632 593 625

E-mail: info@contrix.com.au

Tel: +61 425 240 555

www.contrix.com.au/acoustics

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- The acoustic rating may vary up to 3 rating points depending on the placement of the tapping machine, testing locations within the unit and the junction details between the floorboards/skirting/scotia and
- It is highly recommended to engage a qualified acoustic consultant (Contact Contrix Pty Ltd on +61 425 240 555 or other qualified consultants) to conduct in-situ testing (field testing) prior to flooring installation.

Technical Data Sheet - Standardised Impact Sound Pressure Level

Impact Sound Insulation Testing of Floorboards

Preference Floors - Aspire Hybrid 8mm

Testing Date: Saturday, 2 March 2024

Test No.: 02

Client/Owner: Preference Floors

Testing Location: Residential Apartment in Zetland NSW

Floor Finish: Aspire Hybrid 8mm

Additional Underlay: Regupol Sonus Multi 3

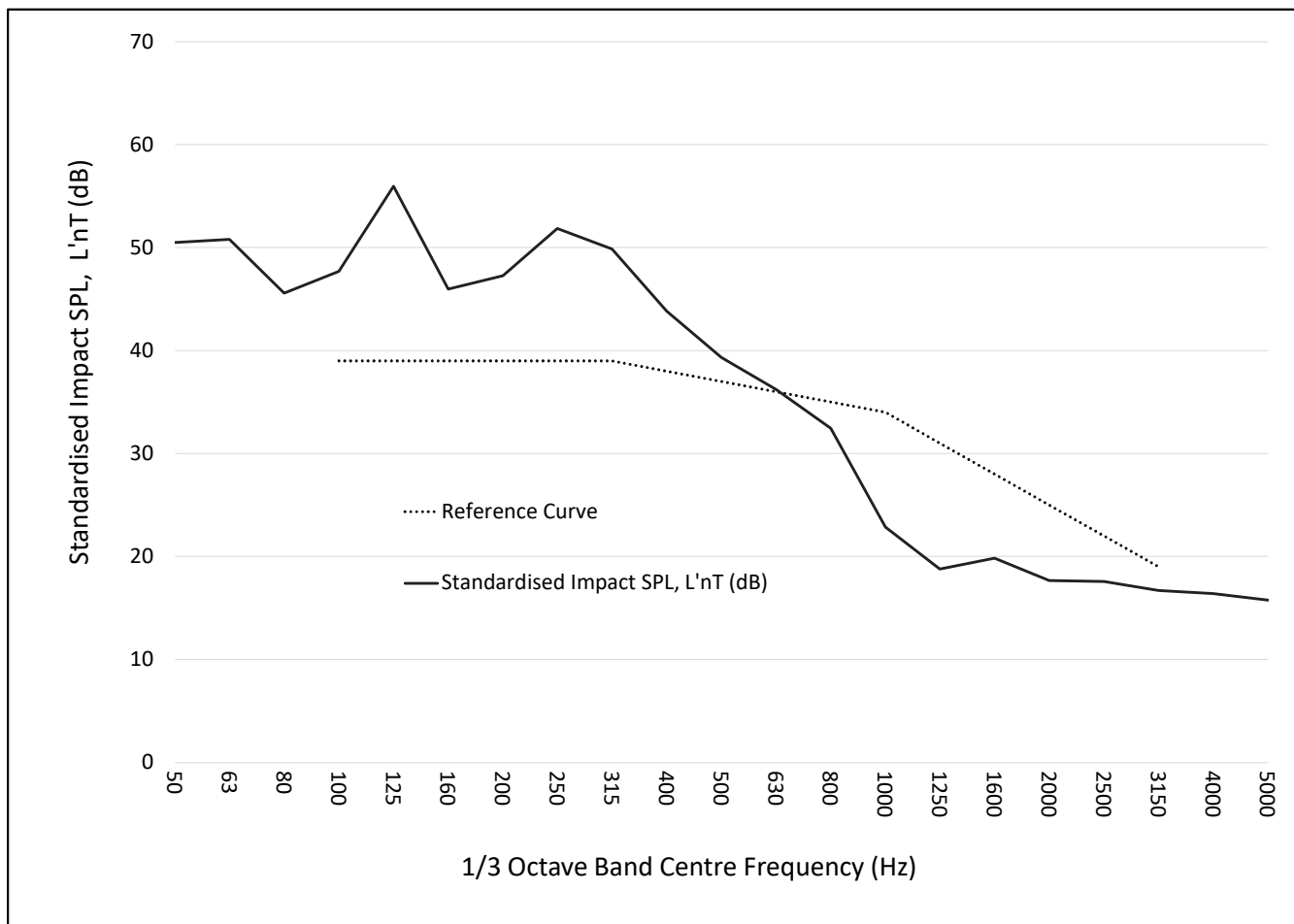
Sub-base & ceiling below: 200~220mm reinforced concrete slab (estimated)

Suspended ceiling cavity of 80~100mm and 10 or 13mm plasterboard ceiling (estimated)

Source Room: Bedroom on level 9

Receiver Room: Bedroom on level 8 directly below

Approx. receiver room vol: 25.03



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]	50.5	50.8	45.6	47.7	56.0	46.0	47.3	51.9	49.8	43.8	39.3	36.2	32.5	22.8	18.8	19.8	17.6	17.6	16.7	16.4	15.8

Acoustical Rating

Measured Weighted Standardised Sound Level Difference, L'nTw

43

Field Impact Isolation Class, **FIC**

64

AAAC **Star Rating**

5

Reference/Guideline

AS ISO 717.2 - 2004

ASTME1007-14

AAAC Guideline

Testing Date : Saturday, 2 March 2024

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