

Contrix Pty Ltd

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IMPACT NOISE TESTING OF HARD FLOOR COVERING HURFORD WHOLESALE

Contrix Pty Ltd was requested to perform impact noise tests on the selected hard floor covering systems within the residential apartments in Wollli Creek NSW.

The aim of conducting the impact noise tests was to determine the acoustic rating of the selected hard floor covering systems listed below 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 in the open living areas of the residential units in Wollli Creek on Friday, 14th March 2025. The receiver space is located directly below the noise source room and has the same floor layout.

Based on our test results and calculations, the selected floor covering systems tested within the residential apartment in Wollli Creek NSW achieves the acoustical ratings in the range of:

- Measured Weighted Standardised Sound Level Different, L'_{nTw} 41 ~ 45
- Field Impact Insulation Class, FIIC 62~66
- AAAC Star Rating 5

IMPACT NOISE INSULATION FIELD TEST REPORT SUMMARY

Testing Date:	Friday 14 th March 2025
Prepared For:	Hurford Wholesale
Testing Location:	Residential Apartment in Breakfast Point NSW
Flooring System Tested:	List in the table (Test 01 to Test 14)
Separating partition system:	Reinforced concrete slab of approximately 180 to 200mm Suspended ceiling cavity of approximately 80 to 120mm 10mm or 13mm thick plasterboard ceiling
Source Room:	Living area of on the upper floor level
Receiver Room:	Living area of on the lower floor level (directly below)

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:			
<ul style="list-style-type: none"> ▪ 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:		Report Date:	3 rd April 2025
	Michael Fan Chiang BE (Mech.), MAAS Consultant		

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 typically varies by up to 3 L'nTw rating points, influenced by 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 and certifying authorities permit a tolerance of 3 L'nTw rating points. Furthermore, deviations of up to 5 L'nTw rating points have been recorded in rare cases.
6. The test results detailed in this report are intended solely for use as design guidelines and should not be interpreted as formal certification of the tested products.
7. The use of any glue or adhesive can negatively impact the acoustic rating. Based on previous testing data, a degradation of up to 5 L'nTw has been recorded.
8. 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

Hurford Wholesale

Testing Date: Friday, 14 March 2025

Test No.: 06

Client/Owner: Hurford Wholesale

Testing Location: Residential unit in Wolli Creek NSW

Floor Finish: 4.5mm Hurfords Heritage Luxury Vinyl Plank - 228mm x 1524mm

Acoustic Underlay: Nil

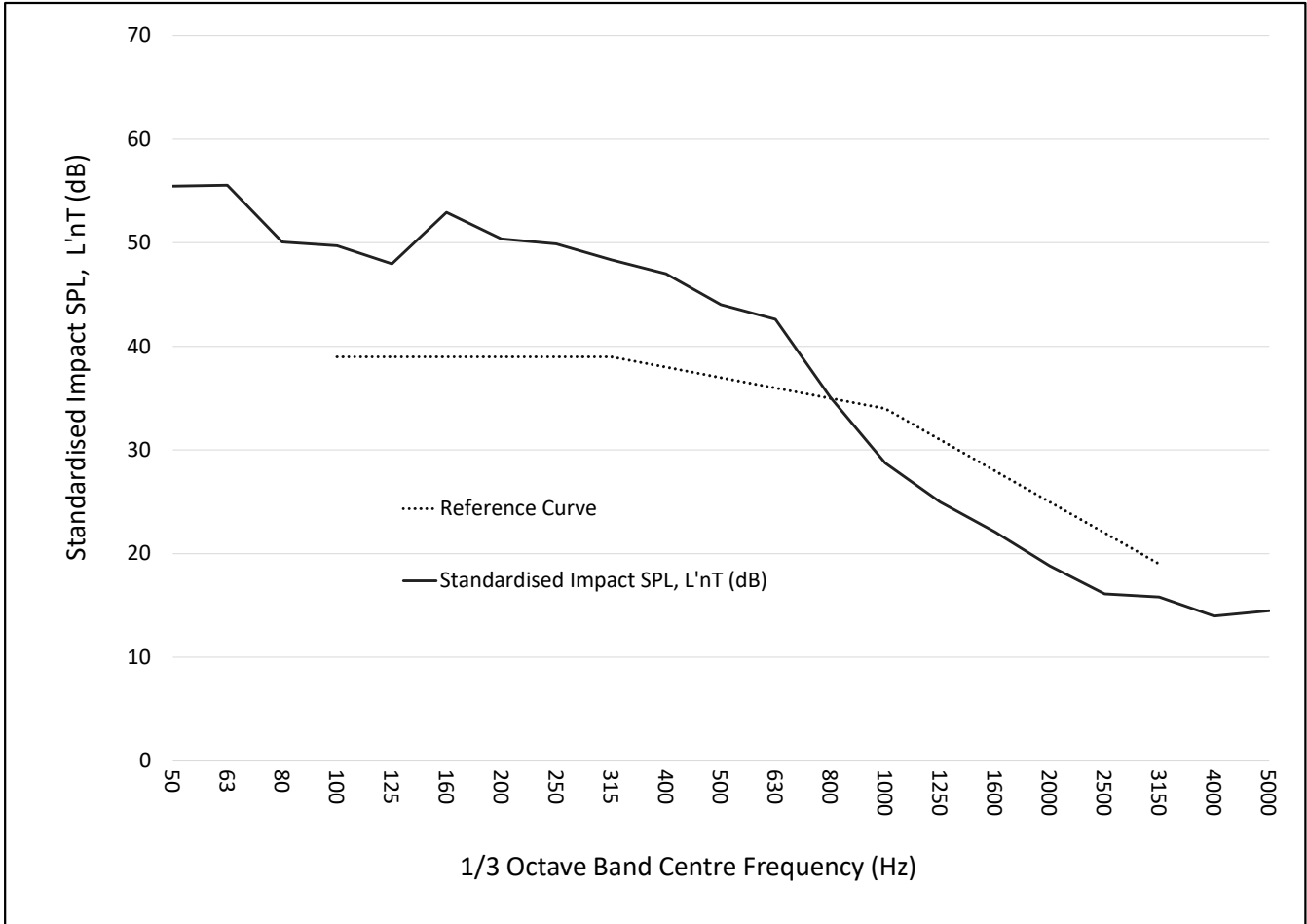
Sub-base & ceiling below: Reinforced concrete slab

Suspended ceiling cavity with plasterboard ceiling

Source Room: Living area on the upper floor level

Receiver Room: Living area on the floor level directly below

Approx. receiver room vol: 61.94



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]	55.5	55.6	50.1	49.7	47.9	52.9	50.4	49.9	48.4	47.0	44.0	42.6	35.1	28.7	25.0	22.1	18.8	16.1	15.8	14.0	14.5

Acoustical Rating

Reference/Guideline

Measured Weighted Standardised Sound Level Difference, L'nTw

44

AS ISO 717.2 - 2004

Field Impact Isolation Class, FIC

63

ASTME1007-14

AAAC Star Rating

5

AAAC Guideline

Testing Date : Friday, 14 March 2025

Reference No.: 3890

Testing Organisation: Contrix Pty Ltd

Tested By: Michael Fan Chiang

BE(Mech), MAAS

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- This testing report is site-specific and only applies to the subject premise for the tested product as specified in this document.
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