

## Contrix Pty Ltd

ABN: 95 632 593 625

E-mail: [info@contrix.com.au](mailto:info@contrix.com.au)

Mob: +61 425 240 555

Add: 12 Ormonde Parade, Hurstville

# IMPACT NOISE TESTING OF HARD FLOOR COVERING WONDERWOOD 8mm HYBRID FLOORING

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

The aim of conducting this impact noise test was to determine the acoustic rating of the selected hard floor covering (Wonderwood 8mm Hybrid Flooring) 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".

Based on our test results and calculations, Wonderwood 8mm Hybrid Flooring tested within the residential apartment in Breakfast Point achieves the acoustical ratings of:

- Measured Weighted Standardised Sound Level Different,  $L'_{nTw}$  42
- Field Impact Insulation Class, FIIC 65
- AAAC Star Rating 5

A summary page of testing results can be found on page 2, followed by a detailed technical data sheet in the subsequent page.

# IMPACT NOISE INSULATION FIELD TEST REPORT SUMMARY

## WONDERWOOD 8mm HYBRID FLOORING


<b>Testing Date:</b>	Saturday 24 <sup>th</sup> February 2024
<b>Prepared For:</b>	Wonderwood Floors
<b>Testing Location:</b>	Residential Apartment in Breakfast Point NSW
<b>Flooring System Tested:</b>	Wonderwood 8mm Hybrid Flooring
<b>Separating partition system:</b>	Reinforced concrete slab Suspended ceiling cavity Plasterboard ceiling
<b>Source Room:</b>	Living area of on level 5
<b>Receiver Room:</b>	Living area of on level 4 (directly below)

Test Results					
Floor covering	Underlay	Acoustic Performance			
		L' <sub>nTw</sub>	FIIC	AAAC Star Rating	Δ L' <sub>nTw</sub>
Wonderwood 8mm Hybrid Flooring	Built-in	42	65	5	16

<b>Sound Source:</b>	Tapping Machine TM004 S/N 59005
<b>Measuring Device:</b>	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.

<b>Tested By:</b>	 <b>Michael Fan Chiang</b> BE (Mech)., MAAS Consultant	<b>Report Date:</b>	27 <sup>th</sup> February 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**  
**Wonderwood 8mm Hybrid Flooring**

**Testing Date:** Saturday, 24 February 2024

**Test No.:** N/A

**Client/Owner:** Wonderwood Floors

**Testing Location:** Residential Apartment in Breakfast Point NSW

**Floor Finish:** Wonderwood 8mm Hybrid Flooring

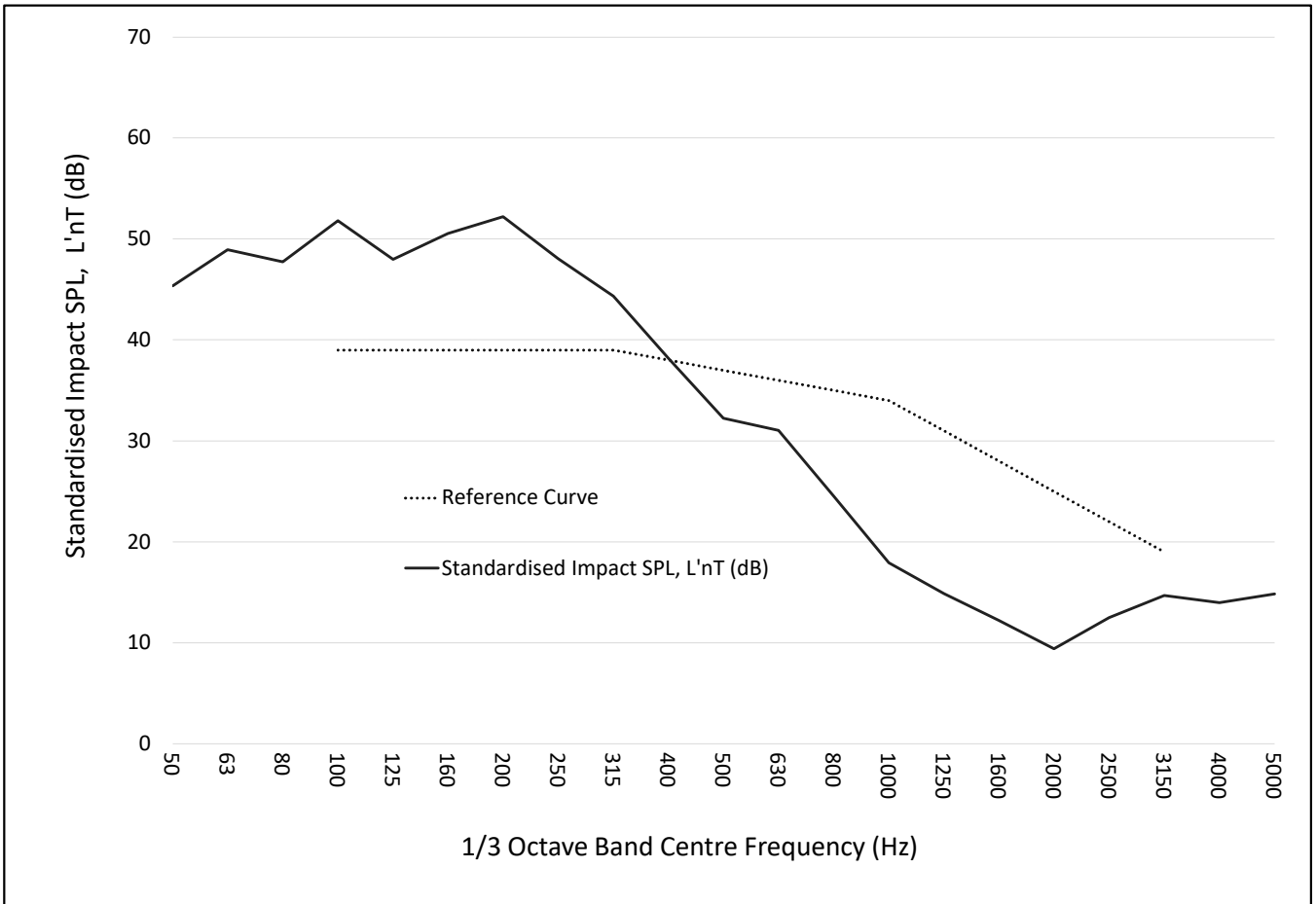
**Acoustic Underlay:** Built-in

**Sub-base & ceiling below:** Reinforced concrete slab  
 Suspended ceiling cavity with plasterboard ceiling

**Source Room:** Living area on level 5

**Receiver Room:** Living area on level 4

**Approx. receiver room vol:** 51.01



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]	45.4	48.9	47.7	51.8	48.0	50.5	52.2	48.0	44.3	38.1	32.2	31.0	24.5	17.9	14.9	12.2	9.4	12.5	14.7	14.0	14.8

Acoustical Rating	Reference/Guideline
Measured Weighted Standardised Sound Level Difference, <b>L'nTw</b> <b>42</b>	AS ISO 717.2 - 2004
Field Impact Isolation Class, <b>FIC</b> <b>65</b>	ASTME1007-14
<b>AAAC Star Rating</b> <b>5</b>	AAAC Guideline

<b>Testing Date :</b>	Saturday, 24 February 2024	<b>Contrix Pty Ltd</b>
<b>Reference No.:</b>	3804	ABN: 95 632 593 625
<b>Testing Organisation:</b>	Contrix Pty Ltd	E-mail: info@contrix.com.au
<b>Tested By:</b>	Michael Fan Chiang BE(Mech), MAAS	Tel: +61 425 240 555
		<a href="http://www.contrix.com.au/acoustics">www.contrix.com.au/acoustics</a>

- Disclaimers:**
- The information provided in this report relates to sound insulation of floor coverings & underlays only.
  - Contrix Pty Ltd does not provide products or installation services of hard floor coverings/underlay, therefore, not responsible or liable for any product defects.
  - This testing report is site-specific and only applies to the subject premise for the tested product as specified in this document.
  - It is imperative to strictly adhere to the installation guidelines provided by the supplier or installation instructions. Contrix Pty Ltd bears no liability in the event of non-compliance with these instructions.
  - 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 L'nTw rating points.