CONTRIX PTY LTD
PROPERTY MAINTENANCE & BUILDING CONSULTANCY
ABN: 95 632 593 625
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Tel:+61 425 240 555
Add: 2/4 Grey Street, Carlton NSW 2218

IMPACT NOISE TESTING OF HARD FLOOR COVERING

9.5 mm Duro SPC Flooring

HTT FLOORING PTY LTD

Contrix Pty Ltd was requested to conduct an impact noise test of the 9.5 mm Duro SPC Flooring within the residential apartment in Merrylands NSW.

The aim of undertaking the impact noise test was to quantify the acoustic performance of the 9.5 mm Duro SPC flooring and results are to be used for design purpose only.

All measurements and assessment procedures were carried out in accordance with *AS/NZS ISO 140.7:2006 "Field measurements of impact sound insulation of floors"* and *AS ISO 717.2-2004 "Rating of sound insulation in buildings and of building elements".* A report summary and detailed technical data sheets are also provided in this report.

Based on our test results and calculations, the 9.5 mm Duro SPC Flooring tested within the residential apartment in Merrylands achieves the acoustical rating of:

- Measured Weighted Standardised Sound Level Different, L'_{nTw} 43
- Field Impact Insulation Class, FIIC 60
- AAAC Star Rating 5

A report summary and detailed technical data sheet are provided on page 2 and 3 of this report respectively.

Disclaimers:

1. The information provided in this report relates to sound insulation of floor covering only.
2. Contrix Pty Ltd does not provide product or installation services of hard floor covering, therefore, not responsible or liable for supply and installation of any products.
3. The acoustic ratings included in this report are indicative. The test results can vary significantly from building to building, therefore, this document is not an acoustical certification of the tested product, however, provides a guidance for design purpose.

IMPACT NOISE INSULATION FIELD TEST REPORT SUMMARY

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ABN: 95 632 593 625
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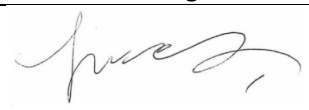
Add: 2/4 Grey Street, Carlton NSW 2218

Date of Test:	Saturday, 29th January 2022
Testing Location:	Residential apartment in Merrylands NSW
Flooring System Tested:	**9.5 mm Duro PC**
Existing Sub-base & Ceiling below:	Reinforced concrete slab of 200 ~220 mm Suspended plasterboard ceiling with 100 mm to 150 mm ceiling cavity
Source Room:	Living/dining area on level 2
Receiver Room:	Living/dining area on level 1

Measured/Calculated Acoustic Performance		
Measured Weighted Standardised Sound Level Difference, **L'_{nTw}**		43
Field Impact Insulation Class, **FIIC**		60
AAAC **Star Rating**		5
Sound Source:	Tapping Machine TM004 S/N 59005	
Measuring Device:	NTi-XL2 spectrum analyser S/N A2A-11580-E0	

Measurements 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".

Prepared By:	 Michael Fan Chiang BE (Mech)., MAAS Consultant	**Report Date:**	31st January 2022

Standardised impact sound pressure level according to ISO 140-7
Field measurements of impact sound insulation of floors

RE: 9.5 mm Duro SPC

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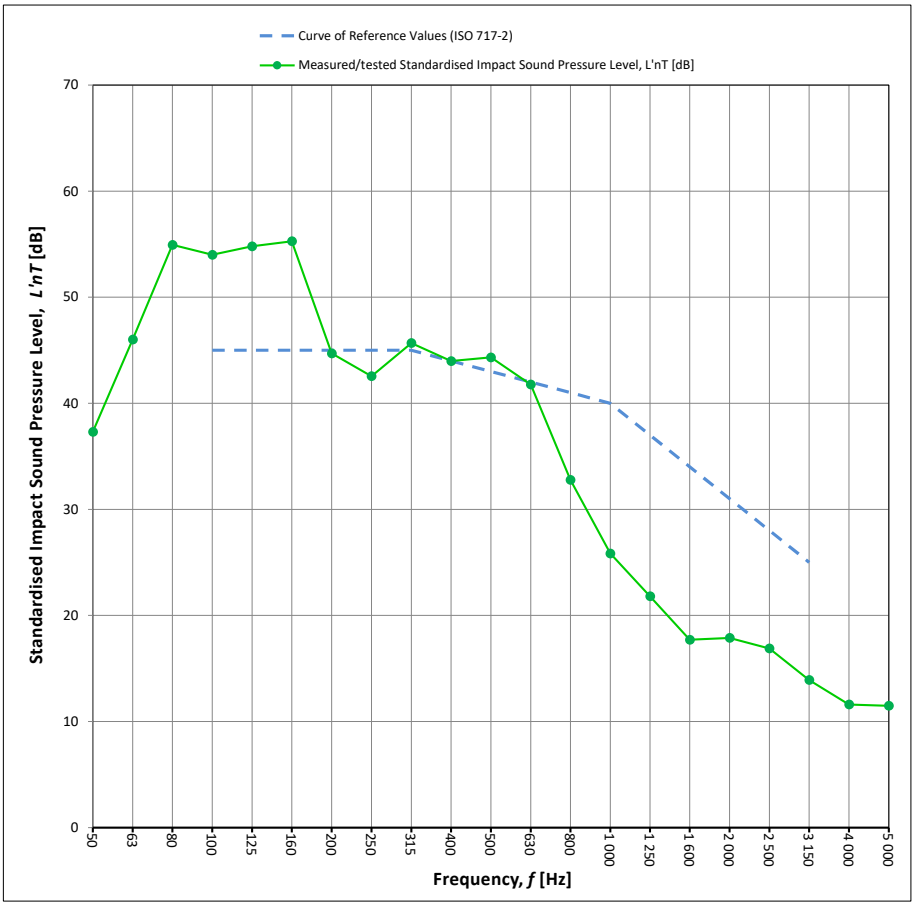
Add: 2/4 Grey Street, Carlton NSW

Testing Date: Saturday, 29 January 2022
Test No.: N/A
Owner/Pccupier Name: HTT Flooring Pty Ltd
Testing Location: Residential apartment in Merrylands NSW
Floor Finish: 9.5 mm Duro SPC
Acoustic Underlay: --
Sub-base & ceiling below: 200~220 reinforced concrete slab (estimated)
100~150 mm suspended ceiling cavity + 13 mm plasterboard (estimated)
Source Room: Living/dining area on Level 2
Receiver Room: Living/dining area on Level 1
Receiving room vol: 82
Receiver Room Surfaces:
Wall - Plasterboard
Floor Finish - Concrete
Ceiling - Plasterboard

Frequency, f [Hz]	L'nT (one-third octave)
Hz	dB
50	37.3
63	46.0
80	54.9
100	54.0
125	54.8
160	55.3
200	44.7
250	42.6
315	45.7
400	44.0
500	44.3
630	41.8
800	32.8
1 000	25.8
1 250	21.8
1 600	17.7
2 000	17.9
2 500	16.9
3 150	13.9
4 000	11.6
5 000	11.5



Acoustical Rating

Measured Weighted Standardised Sound Level Difference, **L'nTw**	**43**	AS ISO 717.2 - 2004
Field Impact Insulation Class, **FIIC**	**60**	ASTME1007-14
AAAC **Star Rating**	**5 Star**	AAAC Guideline

Evaluation based on field measurement results obtained by an engineering method

Report Date : Saturday, 29 January 2022
Ref No. : 3617
Testing Organisation: Contrix Pty Ltd
Tested By: Michael Fan Chiang
BE(Mech)., MAAS

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