PREFERENCE FLOORS

INFORMATION DATA SHEET: ULTIMO VINYL PLANK 2.5 & 4.5MM ACOUSTIC TESTS Date: MAY 2021

COMPLIANCE TESTING

All measurements were carried out in accordance with the guidelines and procedures outlined in AS/NZS ISO 140.7:2006. "Field measurements of impact sound insulation of floors" with the rating determined in accordance with AS ISO 717.2-2004. "Rating of sound insulation in buildings and building elements".

MEASURED RESULTS AND CONCLUSIONS

The results of the impact noise tests are summarized in the table below. The calculated acoustic rating of L'nT,w for the sample has been referenced to the acoustic criterion of NCC / BCA and AAAC[5] star rating. The product was installed on a 200 - 220 mm concrete slab, approximately 80 –150 mm deep suspended ceiling cavity and 13 mm plasterboard ceiling. Hereafter referred to as the "existing ceiling/floor system" (ECFS).

The summarized table indicates if the product & system is compliant with NCC/BCA use Multi-residential requirements.

Product Sample	BCA Criterion	Test Result L'nT,w	AAAC[5] Star Rating	FIIC[4'5]	Compliance with NCC/BCA
BARE CONCRETE FLOOR (ECFS only)	L'nT,w ≤ 62	60	2	44	
ULTIMO 2.5mm Hard Set	L'nT,w ≤ 62	57	2	49	
ULTIMO 2.5mm Hard Set to 3 mm Regupol 45I5S	L'nT,w ≤ 62	40 ✓	6	74	Yes ✓
ULTIMO 4.5mm Hard Set	L'nT,w ≤ 62	55 ✓	3	51	Yes ✓
ULTIMO 4.5mm Hard Set to 3 mm Regupol 45I5S	L'nT,w ≤ 62	39 ✓	6	70	Yes ✓

Note: National Construction Code / Building Code of Australia (NCC/BCA).
Field Impact Insulation Class (FICC), higher the number the better its impact insulation performance. Minimum rate is 50.

Koikas Acoustics Pty Ltd has undertaken noise impact tests on 4 May 2021 at multi-residential apartments located at Liverpool Sydney. The acoustic performances of the various ceiling/floor configurations were calculated and compared against the acoustic requirements of the current BCA and AAAC Star Ratings that are commonly used in Australia.

A detailed full test report is available on request.

The field test acoustic ratings provided in this report are indicative and for comparative purposes only. Acoustic ratings will vary depending on testing environment/conditions including, materials/structures of existing ceiling/floor system, room volume, internal layout, and workmanship. Acoustic ratings can and will vary from building to building and room to room. Please consult with an appropriate building professional or acoustic engineer to confirm if the product selected meets the building and or body corporate acoustic impact sound isolation guidelines.

PREFERENCE FLOORS

STANDARD 2.5MM ULTIMO VINYL PLANK HARD SET MAPEI ADHESIVE TO SLAB.

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 01)

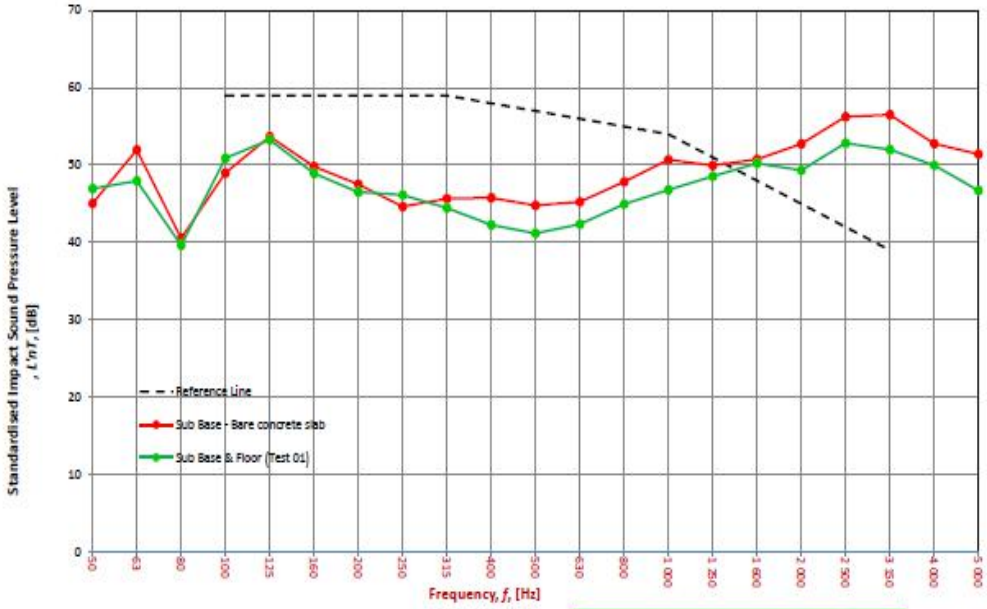
koikas acoustics PTY LTD
CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Tuesday, 4 May 2021			
Project No. :	3369			
Testing Company :	Koikas Acoustics			
Checked by :	Nick Koikas			
Place of Test:	Residential apartment building in Liverpool NSW			
Client	Preference Floors			
Client Address	-			
	Name		Thickness (mm)	Density (Sl)
Description of Floor System	Ultimo 2.5 mm (1524 x 228 x 2.5 mm) - Oak (Aussie) glued (Mapei Hardset) to		2.5	--
	--		--	--
	200~220 mm reinforced concrete slab		200~220	--
	80~150 mm suspended ceiling cavity + 13 mm plasterboard ceiling		80~150 + 13	--
Room Floor Dimensions	Width :	3	m	
	Length :	3.2	m	
	Area :	9.60	m^2	
Sample Dimensions	Width :	1	m	
	Length :	1	m	
	Area :	1	m^2	

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom on the lower floor level	3	3.2	10	3	24

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Concrete	Plasterboard

Frequency f Hz	L'nT (one-third octave) dB Sub Base		Sub Base Floor Underlay
50	45.0		46.9
63	52.0		48.0
80	40.5		39.6
100	49.0		50.9
125	53.7		53.3
160	49.8		48.9
200	47.5		46.5
250	44.6		46.1
315	45.7		44.5
400	45.8		42.3
500	44.8		41.2
630	45.2		42.3
800	47.8		44.9
1 000	50.7		46.8
1 250	49.9		48.5
1 600	50.7		50.2
2 000	52.7		49.3
2 500	56.2		52.8
3 150	56.5		52.0
4 000	52.8		50.0
5 000	51.4		46.7



Sub Base - Bare concrete slab		
L'nT,w	60	AS ISO 717.2 - 2004
Ci	-13	AS ISO 717.2 - 2004
Ci(50-2500)	-12	AS ISO 717.2 - 2004
Ci(63-2000)	-14	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	44	ASTM E1007-14

Sub Base & Floor (Test 01)		
L'nT,w	57	AS ISO 717.2 - 2004
Ci	-12	AS ISO 717.2 - 2004
Ci(50-2500)	-11	AS ISO 717.2 - 2004
Ci(63-2000)	-12	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	49	ASTM E1007-14

PREFERENCE FLOORS

STANDARD 2.5MM ULTIMO VINYL PLANK HARD SET MAPEI ADHESIVE TO 3MM REGUPOL 4515S

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 02)

koikas acoustics PTY LTD
CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Tuesday, 4 May 2021
Project No. :	3369
Testing Company :	Koikas Acoustics
Checked by :	Nick Koikas
Place of Test:	Residential apartment building in Liverpool NSW
Client	Preference Floors
Client Address	-

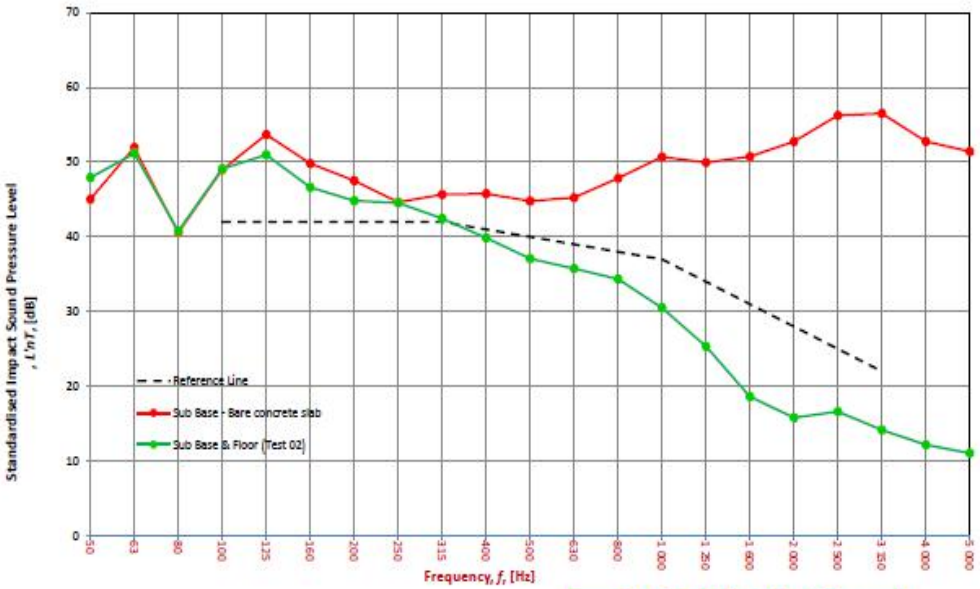
	Name	Thickness (mm)	Density (Sl)
Description of Floor System	Ultimo 2.5 mm (1524 x 228 x 2.5 mm) - Oak (Aussie) glued (Mapei Hardset) to	2.5	--
	Regupol 4515S glued to (Mapei Hardset)	3	--
	200~220 mm reinforced concrete slab	200~220	--
	80~150 mm suspended ceiling cavity + 13 mm plasterboard ceiling	80~150 + 13	--

Room Floor Dimensions	Width :	3	m
	Length :	3.2	m
	Area :	9.60	m^2
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m^2

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom on the lower floor level	3	3.2	10	3	24

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Concrete	Plasterboard

Frequency f Hz	L'nT (one-third octave) dB Sub Base		Sub Base Floor Underlay
50	45.0		47.9
63	52.0		51.2
80	40.5		40.7
100	49.0		49.1
125	53.7		51.0
160	49.8		46.6
200	47.5		44.8
250	44.6		44.5
315	45.7		42.5
400	45.8		39.9
500	44.8		37.1
630	45.2		35.7
800	47.8		34.3
1 000	50.7		30.5
1 250	49.9		25.3
1 600	50.7		18.6
2 000	52.7		15.8
2 500	56.2		16.6
3 150	56.5		14.1
4 000	52.8		12.2
5 000	51.4		11.0



Sub Base - Bare concrete slab		
L'nT,w	60	AS ISO 717.2 - 2004
Ci	-13	AS ISO 717.2 - 2004
Ci(50-2500)	-12	AS ISO 717.2 - 2004
Ci(63-2000)	-14	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	44	ASTM E1007-14

Sub Base & Floor (Test 02)		
L'nT,w	40	AS ISO 717.2 - 2004
Ci	0	AS ISO 717.2 - 2004
Ci(50-2500)	2	AS ISO 717.2 - 2004
Ci(63-2000)	2	AS ISO 717.2 - 2004
AAAC★	6 Star	AAAC Guidleline
FIIC	70	ASTM E1007-14

PREFERENCE FLOORS

STANDARD 4.5MM ULTIMO VINYL PLANK HARD SET MAPEI ADHESIVE TO SLAB.

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 03)

koikas acoustics PTY LTD
CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Tuesday, 4 May 2021
Project No. :	3369
Testing Company :	Koikas Acoustics
Checked by :	Nick Koikas
Place of Test:	Residential apartment building in Liverpool NSW
Client	Preference Floors
Client Address	-

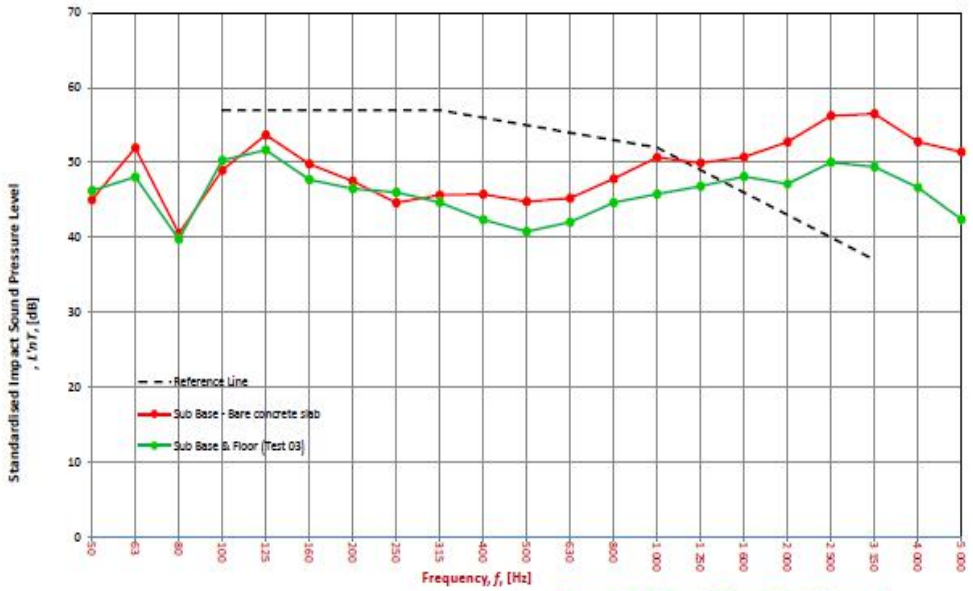
	Name	Thickness (mm)	Density (SI)
Description of Floor System	Ultimo 4.5 mm (1524 x 228 x 4.5 mm) - Oak (Aussie) glued (Mapei Hardset) to	4.5	--
	--	--	--
	200~220 mm reinforced concrete slab	200~220	--
	80~150 mm suspended ceiling cavity + 13 mm plasterboard ceiling	80~150 + 13	--

Room Floor Dimensions	Width :	3	m
	Length :	3.2	m
	Area :	9.60	m^2
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m^2

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom on the lower floor level	3	3.2	10	3	24

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Concrete	Plasterboard

Frequency f Hz	L'nT (one-third octave) dB Sub Base		Sub Base Floor Underlay
50	45.0		46.2
63	52.0		48.1
80	40.5		39.7
100	49.0		50.3
125	53.7		51.7
160	49.8		47.7
200	47.5		46.5
250	44.6		46.0
315	45.7		44.7
400	45.8		42.4
500	44.8		40.8
630	45.2		42.0
800	47.8		44.6
1 000	50.7		45.8
1 250	49.9		46.8
1 600	50.7		48.1
2 000	52.7		47.1
2 500	56.2		50.0
3 150	56.5		49.4
4 000	52.8		46.7
5 000	51.4		42.4



Sub Base - Bare concrete slab		
L'nT,w	60	AS ISO 717.2 - 2004
Ci	-13	AS ISO 717.2 - 2004
Ci(50-2500)	-12	AS ISO 717.2 - 2004
Ci(63-2000)	-14	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	44	ASTM E1007-14

Sub Base & Floor (Test 03)		
L'nT,w	55	AS ISO 717.2 - 2004
Ci	-11	AS ISO 717.2 - 2004
Ci(50-2500)	-10	AS ISO 717.2 - 2004
Ci(63-2000)	-11	AS ISO 717.2 - 2004
AAAC★	3 Star	AAAC Guidleline
FIIC	51	ASTM E1007-14

Disclaimer: Homemirus Pty Ltd trading as Preference Floors has used its reasonable endeavours to ensure the accuracy and reliability of the information contained herein and, to the extent permitted by law, will not be liable for any inaccuracies, omissions, or errors in this information nor for any actions taken in reliance on this information. Products must be installed in accordance with relevant installation recommendations and industry best practices.

STANDARD 4.5MM ULTIMO VINYL PLANK HARD SET MAPEI ADHESIVE TO 3MM REGUPOL 4515S

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 04)

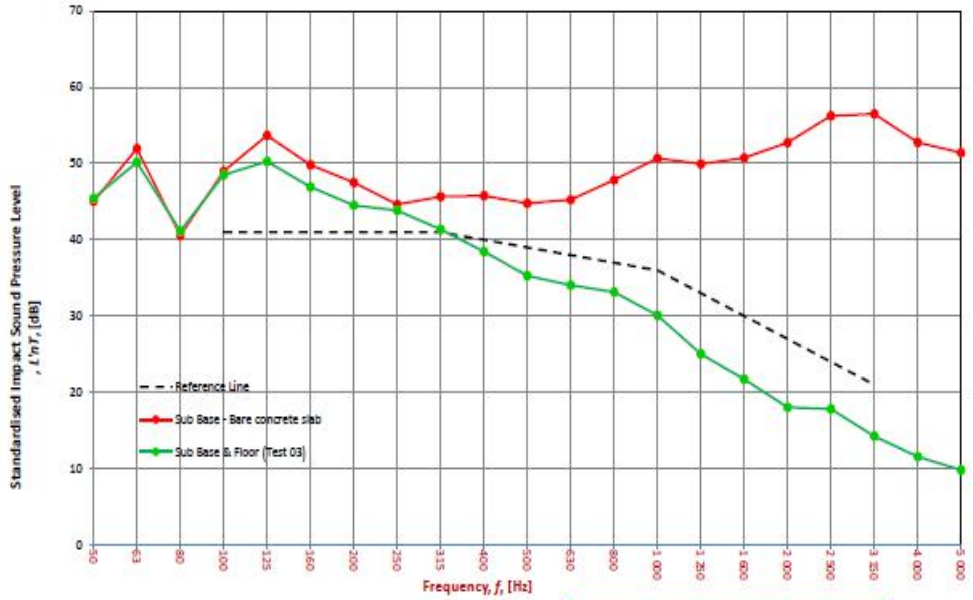
koikas acoustics PTY LTD
CONSULTANTS IN NOISE & VIBRATION

Date of Test :	Tuesday, 4 May 2021			
Project No. :	3369			
Testing Company :	Koikas Acoustics			
Checked by :	Nick Koikas			
Place of Test:	Residential apartment building in Liverpool NSW			
Client	Preference Floors			
Client Address	-			
	Name		Thickness (mm)	Density (Sl)
Description of Floor System	Ultimo 4.5 mm (1524 x 228 x 4.5 mm) - Oak (Aussie) glued (Mapei Hardset) to		4.5	--
	Regupol 4515S glued to (Mapei Hardset)		3	--
	200~220 mm reinforced concrete slab		200~220	--
	80~150 mm suspended ceiling cavity + 13 mm plasterboard ceiling		80~150 + 13	--
Room Floor Dimensions	Width :	3	m	
	Length :	3.2	m	
	Area :	9.60	m^2	
Sample Dimensions	Width :	1	m	
	Length :	1	m	
	Area :	1	m^2	

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom on the lower floor level	3	3.2	10	3	24

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Concrete	Plasterboard

Frequency f Hz	L'nT (one-third octave) dB Sub Base		Sub Base Floor Underlay
50	45.0		45.4
63	52.0		50.2
80	40.5		41.1
100	49.0		48.5
125	53.7		50.3
160	49.8		46.9
200	47.5		44.5
250	44.6		43.8
315	45.7		41.4
400	45.8		38.5
500	44.8		35.3
630	45.2		34.0
800	47.8		33.1
1 000	50.7		30.1
1 250	49.9		25.0
1 600	50.7		21.7
2 000	52.7		18.0
2 500	56.2		17.8
3 150	56.5		14.2
4 000	52.8		11.5
5 000	51.4		9.8



Sub Base - Bare concrete slab		
L'nT,w	60	AS ISO 717.2 - 2004
Ci	-13	AS ISO 717.2 - 2004
Ci(50-2500)	-12	AS ISO 717.2 - 2004
Ci(63-2000)	-14	AS ISO 717.2 - 2004
AAAC★	2 Star	AAAC Guidleline
FIIC	44	ASTM E1007-14

Sub Base, Floor & Underlay (Test 04)		
L'nT,w	39	AS ISO 717.2 - 2004
Ci	1	AS ISO 717.2 - 2004
Ci(50-2500)	3	AS ISO 717.2 - 2004
Ci(63-2000)	2	AS ISO 717.2 - 2004
AAAC★	6 Star	AAAC Guidleline
FIIC	70	ASTM E1007-14