

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 of 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 AAAC⁵ star rating. The standard product was installed on a 200 mm concrete slab, approximately 80–120 mm deep suspended ceiling cavity and 13 mm plasterboard ceiling.

The result confirms compliance NCC/BCA use Multi-residential requirements.

Product Sample	BCA Criterion	Test Result L'nT,w	AAAC ⁵ Star Rating	FICC ⁴¹⁵	Compliance with NCC/BCA
ASPIRE RCB Inc. U'lay	L'nT,w ≤ 62	43 ✓	5	68	Yes ✓
ASPIRE RCB Inc. U'lay + 3 mm Regupol 4515s	L'nT,w ≤ 62	43 ✓	5	68	Yes ✓

Note: Regupol in 2021 now known as Sonus-Mutli. Same product just changed their branding description.

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 Acosutics Pty Ltd has undertaken noise impact tests on 9 February 2018 at multi-residential units located at Little Bay Sydney. The results reveal that all the testing samples are compliant with the updated NCC/BCA 2016 impact noise insulation criterion with ceiling / floor systems.

A detailed 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.

Disclaimer: Homemirus Pty Ltd trading as Preference Floors has used its reasonable endeavors 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.

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



Date of Test : Friday, 9 February 2018
 Project No. : 3369
 Testing Company: Koikas Acoustics
 Checked by: Nick Koikas
 Place of Test: Residential Units in Little Bay NSW
 Client: Preference Floors
 Client Address: -

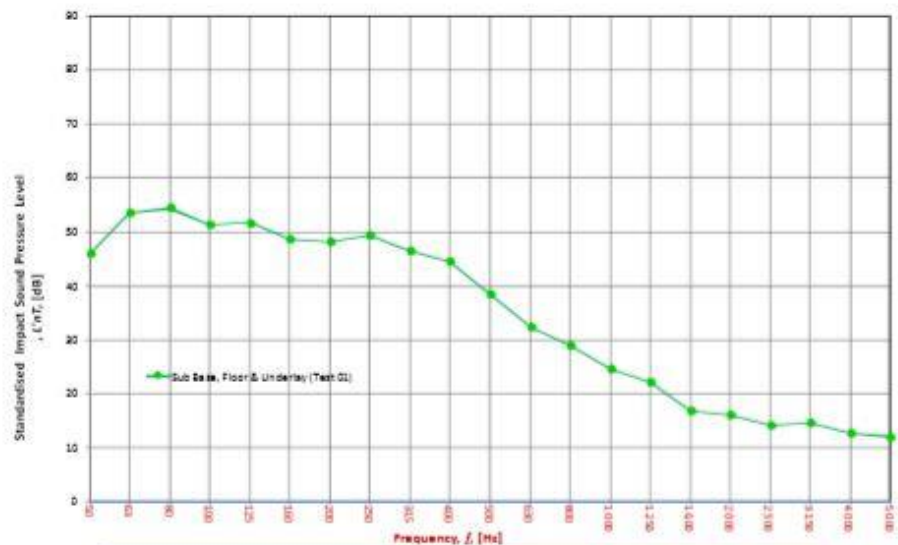
Description of Floor System	Thickness (mm)	Density (kg/m ³)
6.5 mm Aspire Hybrid (Test 01)	6.5	--
200 mm Concrete Slab + 80-120 mm Suspended Ceiling	200 + 80-120	--
13 mm Plasterboard Ceiling	13	--

Room Floor Dimensions	Width (m)	Length (m)	Area (m ²)
Room Floor	3	3.5	10.5
Sample Dimensions	Width (m)	Length (m)	Area (m ²)
Sample	-	-	-

Receiver Rm	Location	Width	Length	Area	Height	Volume
Receiver Rm	Residential Unit in Little Bay, NSW	3	3.5	10.5	2.4	25.2

Room Surfaces		
Walls	Floor	Ceiling
Plasterboard	Carpet	Plasterboard

Frequency f [Hz]	L _{nT} (one-third octave) [dB]		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	N/A	N/A	45.1
63	N/A	N/A	33.5
80	N/A	N/A	34.4
100	N/A	N/A	51.4
125	N/A	N/A	51.7
160	N/A	N/A	48.7
200	N/A	N/A	48.2
250	N/A	N/A	49.3
315	N/A	N/A	46.4
400	N/A	N/A	44.3
500	N/A	N/A	38.4
630	N/A	N/A	32.4
800	N/A	N/A	28.9
1 000	N/A	N/A	24.5
1 250	N/A	N/A	22.1
1 600	N/A	N/A	16.7
2 000	N/A	N/A	16.1
2 500	N/A	N/A	14.1
3 150	N/A	N/A	14.6
4 000	N/A	N/A	12.6
5 000	N/A	N/A	12.0



L _{nT,w}	N/A	AS ISO 717.2 - 2004
C _i	N/A	AS ISO 717.2 - 2004
C _i (50-2500)	N/A	AS ISO 717.2 - 2004
C _i (63-2000)	N/A	AS ISO 717.2 - 2004
AAAC★	N/A	AAAC Guideline
FIG	N/A	AS/NZS 51007-14

L _{nT,w}	N/A	AS ISO 717.2 - 2004
C _i	N/A	AS ISO 717.2 - 2004
C _i (50-2500)	N/A	AS ISO 717.2 - 2004
C _i (63-2000)	N/A	AS ISO 717.2 - 2004
AAAC★	N/A	AAAC Guideline
FIG	N/A	AS/NZS 51007-14

L _{nT,w}	43	AS ISO 717.2 - 2004
C _i	0	AS ISO 717.2 - 2004
C _i (50-2500)	3	AS ISO 717.2 - 2004
C _i (63-2000)	2	AS ISO 717.2 - 2004
AAAC★	5 Star	AAAC Guideline
FIG	46	AS/NZS 51007-14

Disclaimer: Homemirus Pty Ltd trading as Preference Floors has used its reasonable endeavors 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.

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 09 & TEST 10)



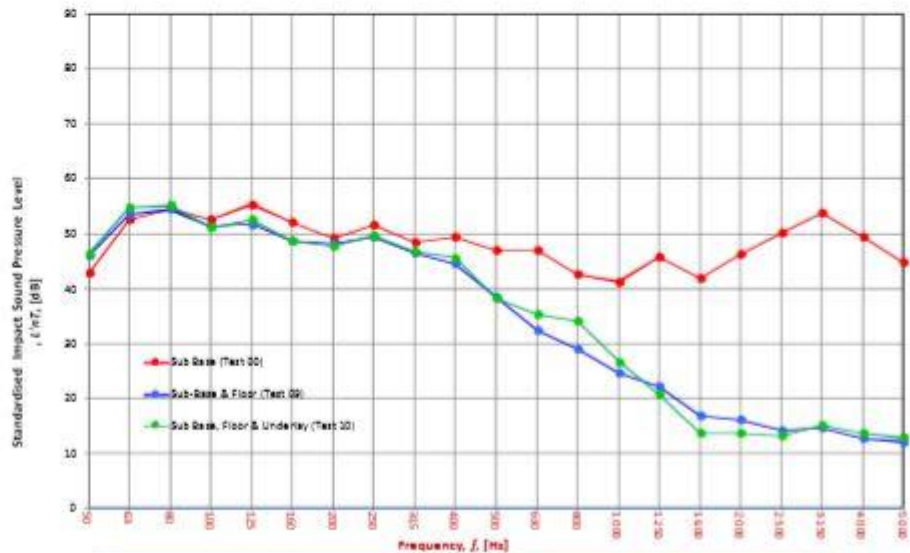
Date of Test: Friday, 9 February 2018
 Project No.: 3369
 Testing Company: Koikas Acoustics
 Checked by: Nick Koikas
 Place of Test: Residential Units in Little Bay NSW
 Client: Preference Floors
 Client Address: -

Description of Floor System	Name	Thickness (mm)	Density (kg/m ³)
Description of Floor System	6.5 mm Aspire Hybrid Vinyl (included for Test 09 & 10)	6.5	--
	3 mm Regupol 4515s Underlay (Included for Test 10 only)	3	--
	200 mm Concrete Slab + 80-120 mm Suspended Ceiling	200 + 80-120	--
	13 mm Plasterboard Ceiling	13	--

Room Dimensions	Width (m)	Length (m)	Area (m ²)
Room	3	3.5	10.5
Floor	-	-	-
Dimensions	-	-	-

Receiver Rm	Location	Width	Length	Area	Height	Volume	Room Surfaces
Receiver Rm	Residential Unit in Little Bay NSW	3	3.5	10.5	2.4	25.2	Walls: Plasterboard Floor: Carpet Ceiling: Plasterboard

Frequency f [Hz]	L _{nT} (one-third octave) [dB]		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	42.8	46.1	46.4
63	52.6	53.5	54.9
80	54.6	54.4	55.2
100	52.6	51.4	51.2
125	55.3	51.7	52.5
160	52.1	48.7	48.7
200	49.3	48.2	47.7
250	51.5	49.3	49.7
315	48.4	46.4	46.6
400	49.5	44.5	45.6
500	47.0	38.4	38.2
630	47.1	32.4	35.3
800	42.7	28.9	34.1
1 000	41.2	24.5	26.6
1 250	45.7	22.1	20.7
1 600	41.8	16.7	13.6
2 000	46.2	16.1	13.6
2 500	50.1	14.1	13.1
3 150	53.9	14.6	15.0
4 000	49.3	12.6	13.7
5 000	44.7	12.0	12.8



Sub Base (Test 00)		
L _{nT,w}	55	AS ISO 717.2 - 2004
CI	-9	AS ISO 717.2 - 2004
CI(50-2500)	-7	AS ISO 717.2 - 2004
CI(63-2000)	-8	AS ISO 717.2 - 2004
AAAC★	3 Star	AAAC Guideline
FRC	47	ASTM E1007-14

Sub Base & Floor (Test 09)		
L _{nT,w}	48	AS ISO 717.2 - 2004
CI	0	AS ISO 717.2 - 2004
CI(50-2500)	3	AS ISO 717.2 - 2004
CI(63-2000)	2	AS ISO 717.2 - 2004
AAAC★	5 Star	AAAC Guideline
FRC	60	ASTM E1007-14

Sub Base, Floor & Underlay (Test 10)		
L _{nT,w}	43	AS ISO 717.2 - 2004
CI	0	AS ISO 717.2 - 2004
CI(50-2500)	3	AS ISO 717.2 - 2004
CI(63-2000)	3	AS ISO 717.2 - 2004
AAAC★	5 Star	AAAC Guideline
FRC	66	ASTM E1007-14

Disclaimer: Homemirus Pty Ltd trading as Preference Floors has used its reasonable endeavors 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.