INFORMATION DATA SHEET: HYDROPLANK (fmr HYDROMAX) ACOUSTIC TEST: FEBRUARY 2018

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 LnT,w for the sample has been referenced to the acoustic criterion of NCC / BCA and AAAC[5] 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	FIIC[4|5]	Compliance with NCC/BCA
HYDROPLANK WPC Inc. U'lay	**L'nT,w ≤ 62**	**43**✓	**5**	**67**	**Yes**✓
HYDROPLANK WPC Inc. U'lay + 3 mm Regupol 4515 s	**L'nT,w ≤ 62**	**44**✓	**5**	**66**	**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 Acoustics Pty Ltd has undertaken noise impact testson 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.

Preference FLOORS

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

KOIKAS ACOUSTICS

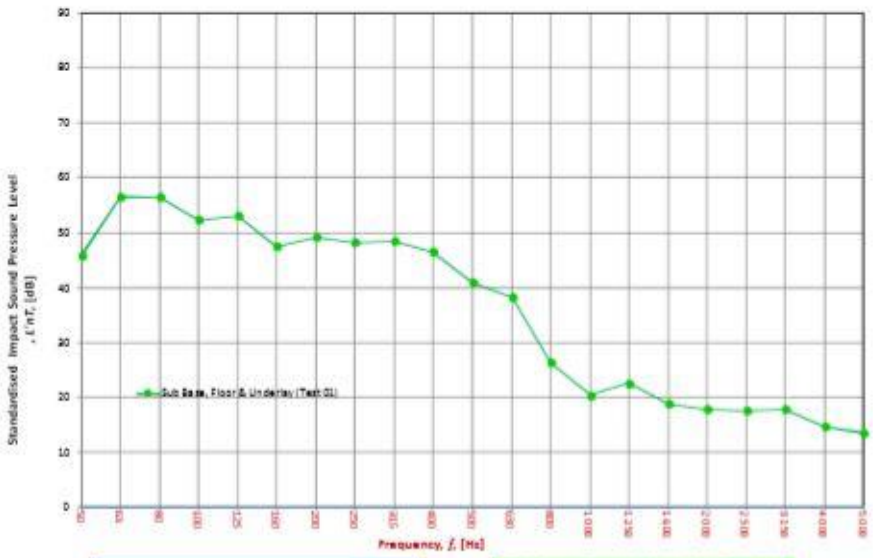
Date of Test :	Friday, 9 February 2018
Project No. :	3369
Testing Company :	Koikas Acoustics
Checked by :	Nick Koikas
Place of Test:	Residential Units in Little Bay NSW
Client	Preference Floors
Client Address	-

	Name	Thickness (mm)	Density (D)
Description of Floor System	8 mm Hydromax WPC (Test 01)	8	--
	-	-	--
	200 mm Concrete Slab + 80-120 mm Suspended Ceiling	200 + 80-120	--
	13 mm Plasterboard Ceiling	13	--

Room Floor Dimensions	Width :	3	m
	Length :	3.5	m
	Area :	10.5	m^2
Sample Dimensions	Width :	-	m
	Length :	-	m
	Area :	-	m^2

	Location	Width	Length	Area	Height	Volume	Room Surfaces		
							Walls	Floor	Ceiling
Receiver Rm	Residential Units in Little Bay NSW	3	3.5	10.5	2.4	25.2	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	45.8
63	N/A	N/A	56.6
80	N/A	N/A	56.5
100	N/A	N/A	52.4
125	N/A	N/A	53.0
160	N/A	N/A	47.3
200	N/A	N/A	49.2
250	N/A	N/A	48.2
315	N/A	N/A	48.4
400	N/A	N/A	46.4
500	N/A	N/A	40.8
630	N/A	N/A	38.2
800	N/A	N/A	26.2
1 000	N/A	N/A	20.3
1 250	N/A	N/A	22.5
1 600	N/A	N/A	18.8
2 000	N/A	N/A	17.9
2 500	N/A	N/A	17.5
3 150	N/A	N/A	17.8
4 000	N/A	N/A	14.7
5 000	N/A	N/A	13.5



L'nT,w	N/A	AS ISO 717.2 - 2004
CI	N/A	AS ISO 717.2 - 2004
CI(50-2500)	N/A	AS ISO 717.2 - 2004
CI(63-2000)	N/A	AS ISO 717.2 - 2004
AAAC ★	N/A	AAAC Guideline
FIIC	N/A	ASTM E1007-14

L'nT,w	N/A	AS ISO 717.2 - 2004
CI	N/A	AS ISO 717.2 - 2004
CI(50-2500)	N/A	AS ISO 717.2 - 2004
CI(63-2000)	N/A	AS ISO 717.2 - 2004
AAAC ★	N/A	AAAC Guideline
FIIC	N/A	ASTM E1007-14

Sub Base, Floor & Underlay (Test 01)		
L'nT,w	48	AS ISO 717.2 - 2004
CI	1	AS ISO 717.2 - 2004
CI(50-2500)	4	AS ISO 717.2 - 2004
CI(63-2000)	4	AS ISO 717.2 - 2004
AAAC ★	5 Star	AAAC Guideline
FIIC	67	ASTM E1007-14

Preference FLOORS

FIELD MEASUREMENTS OF IMPACT SOUND INSULATION OF FLOORS (TEST 12 & TEST 13)

KOIKAS ACOUSTICS PTY LTD

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	-

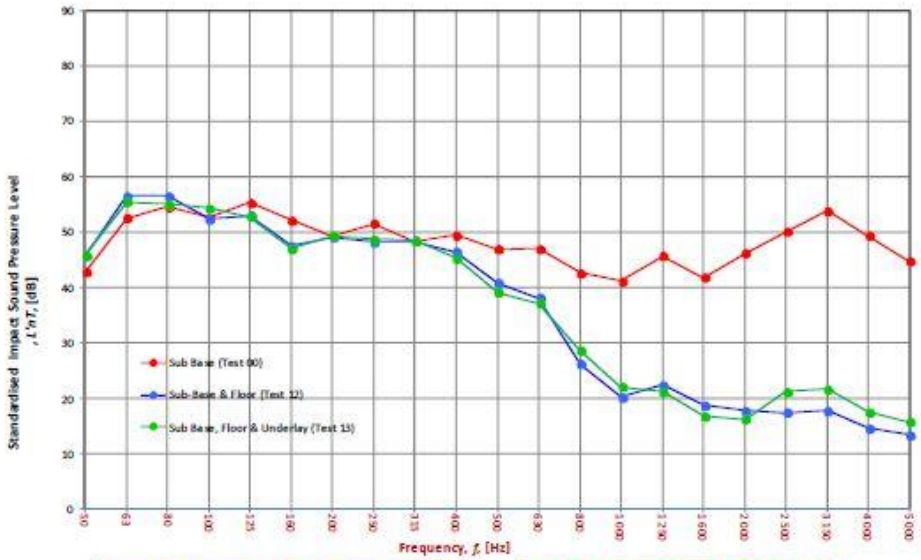
	Name	Thickness (mm)	Density (Sl)
Description of Floor System	8 mm Hydromax Hybrid WPC (included for Test 12 & 13)	8	--
	3 mm Regupol 4515s Underlay (Included for Test 13 only)	3	--
	200 mm Concrete Slab + 80–120 mm Suspended Ceiling	200 + 80–120	--
	13 mm Plasterboard Ceiling	13	--

Room Floor Dimensions	Width :	3	m
	Length :	3.5	m
	Area :	10.5	m^2
Sample Dimensions	Width :	-	m
	Length :	-	m
	Area :	-	m^2

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Residential Units 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	42.8	45.8	45.9
63	52.6	56.6	55.5
80	54.6	56.5	55.0
100	52.6	52.4	54.3
125	55.3	53.0	52.7
160	52.1	47.5	47.0
200	49.3	49.2	49.4
250	51.5	48.2	48.7
315	48.4	48.4	48.5
400	49.5	46.4	45.3
500	47.0	40.8	39.1
630	47.1	38.2	37.2
800	42.7	26.2	28.7
1 000	41.2	20.3	22.0
1 250	45.7	22.5	21.3
1 600	41.8	18.8	16.9
2 000	46.2	17.9	16.3
2 500	50.1	17.5	21.2
3 150	53.9	17.8	21.7
4 000	49.3	14.7	17.6
5 000	44.7	13.5	15.8



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 Guidleline
FIIC	47	ASTM E1007-14

Sub Base & Floor (Test 12)		
L'nT,w	43	AS ISO 717.2 - 2004
Ci	1	AS ISO 717.2 - 2004
Ci(50-2500)	4	AS ISO 717.2 - 2004
Ci(63-2000)	4	AS ISO 717.2 - 2004
AAAC ★	5 Star	AAAC Guidleline
FIIC	67	ASTM E1007-14

Sub Base, Floor & Underlay (Test 13)		
L'nT,w	44	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 Guidleline
FIIC	66	ASTM E1007-14