

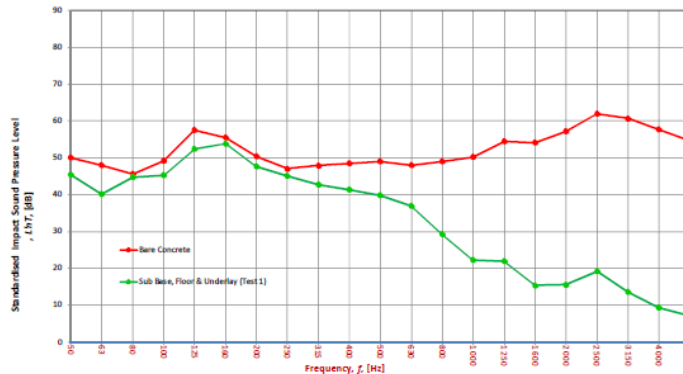


Viva Hybrid Plank comes with an integrated 1.5mm crossed-linked polyolefin underlay. Independent test results show that Viva Hybrid Plank performs extremely well acoustically and has achieved an AAAC 5 Star rating. This result tested complies with BCA multi story requirements.

Name		Thickness (mm)	Density (S)
Description of Floor System		200-200 mm Reinforced Concrete Slab	2540
		90-100 mm Suspended Ceiling Cavity with 13 mm Plasterboard Ceiling	90-100 + 13
Room Dimensions	Width : 3 m Length : 3.3 m Area : 9.9 m <sup>2</sup>		
Sample Dimensions	Width : 1 m Length : 1 m Area : 1 m <sup>2</sup>		

Receiver Rm	Location	Width	Length	Area	Height	Volume	Walls	Room Surfaces	Ceiling
	Level 1 Bedroom	3	3.3	9.9	2.7	26.73	Masonry	Floor Concrete	Plasterboard

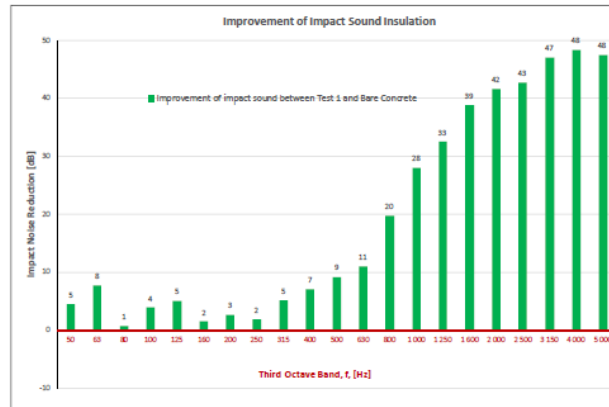
Frequency f Hz	L'nT (one-third octave) Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	50.0	N/A	45.5
63	47.9	N/A	40.2
80	45.6	N/A	44.8
100	49.2	N/A	45.3
125	57.5	N/A	52.4
160	55.5	N/A	53.9
200	50.4	N/A	47.6
250	47.1	N/A	45.2
315	47.9	N/A	42.7
400	48.5	N/A	41.4
500	49.0	N/A	39.8
630	47.9	N/A	36.9
800	49.0	N/A	29.2
1000	50.3	N/A	22.3
1250	54.5	N/A	21.9
1600	54.2	N/A	15.4
2000	57.2	N/A	15.6
2500	62.0	N/A	19.3
3150	60.7	N/A	13.6
4000	57.7	N/A	9.3
5000	54.7	N/A	7.1



Bare Concrete	
L'nT,w	65
CI	-14
CI(50-2500)	-13
CI(63-2000)	-16
AAAC	2 Star
FIC	39

Sub Base & Floor (Bare Flooring & Concrete)	
L'nT,w	N/A
CI	N/A
CI(50-2500)	N/A
CI(63-2000)	N/A
AAAC	5 Star
FIC	N/A

Sub Base, Floor & Underlay (Test 1)	
L'nT,w	41
CI	2
CI(50-2500)	2
CI(63-2000)	2
AAAC	5 Star
FIC	66



**Definitions of Noise Metrics**

**FIC:** Field Impact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10m<sup>2</sup> as described in ASTM E989. The higher the single-number rating, the better its impact insulation

**L'nT,w:** The Weighted Standardised Impact Sound Pressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

**CI:** Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors CI is positive because of the low resonant frequencies. Considers frequency range between 100 -and 2500 Hz.

**CI(50-2500):** Same as above, but for the frequency range 50 -2500 Hz.

**CI(125-2000):** Same as above, but for the frequency range 125 -2000 Hz.

AAAC Star R.	2	3	4	5	6
L'nT,w	65	55	50	45	40
FIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible