

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 had achieved an AAAC 5 Star rating. This result tested complies with BCA multi story requirements.

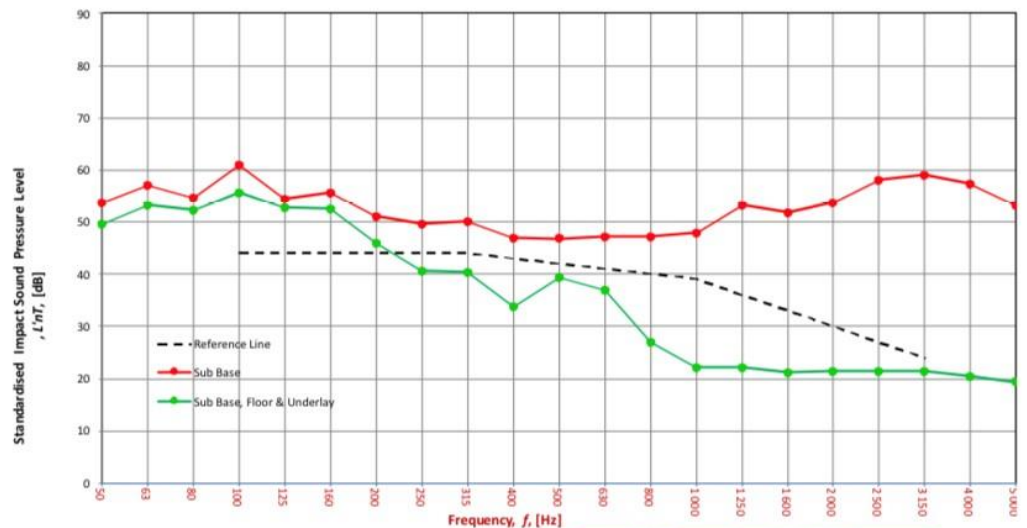
Description of floor system	Name	Thickness (mm)	Density (SI)
	Viva Classic Hybrid Plank (with integrated IXPE underlay)	--	--
	200 mm reinforced concrete slab	200	--
	80-120 mm suspended ceiling cavity + 13 mm plasterboard ceiling	80-120 + 13	--

Room Dimensions	Width	Length	Area
	3.5 m	3.2 m	11.2 m ²

Sample Dimensions	Width	Length	Area
	1 m	1 m	1 m ²

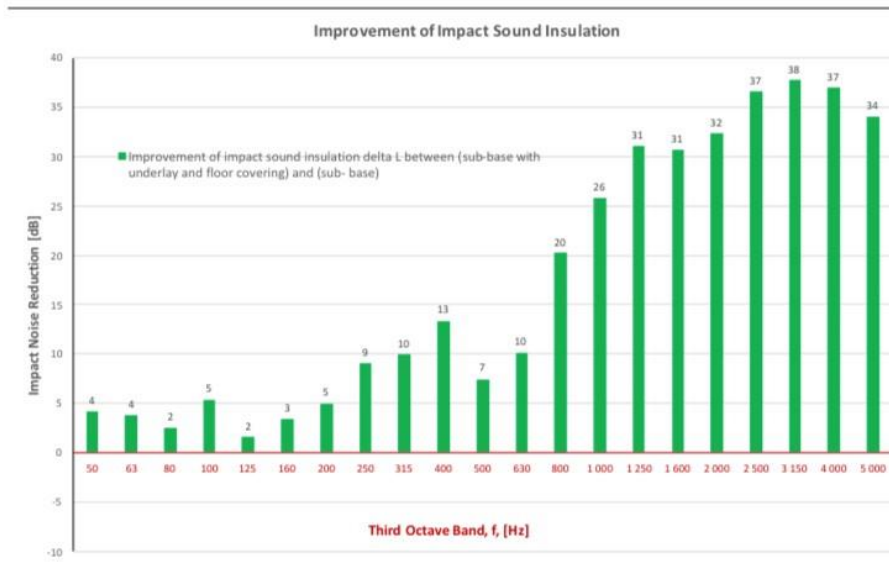
Receiver Rm	Location	Width	Length	Area	Height	Volume	Room Surfaces
	Level 1 bedroom	3.5	3.2	11.2	2.6	29.12	Walls: Plasterboard, Floor: Concrete, Ceiling: Plasterboard

Frequency f [Hz]	L'nT (one-third octave) dB		
	Sub Base		Sub Base Floor Underlay
50	53.6		49.5
63	57.0		53.3
80	54.6		52.2
100	61.0		55.7
125	54.3		52.8
160	55.6		52.3
200	50.9		46.0
250	49.7		40.7
315	50.1		40.2
400	46.9		33.6
500	46.8		39.4
630	47.1		37.0
800	47.1		26.9
1000	47.9		22.2
1250	53.1		22.1
1600	51.6		21.0
2000	53.7		21.4
2500	58.0		21.4
3150	59.0		21.3
4000	57.4		20.5
5000	53.2		19.3



Sub Base		
L'nT,w	62	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 ★	2 Star	AAAC Guideline
FIC	41	ASTM E1007-14

Sub Base, Floor & Underlay		
L'nT,w	42	AS ISO 717.2 - 2004
Ci	2	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
FIC	64	ASTM E1007-14



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 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact

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