

Acoustic Test Certificate

Friday March 01st, 2019

Supplier: Australian Select Timber (61-63 Discovery Road, Dandenong, VIC, 3175, Australia)

Sample Description: Nouvelle Hybrid Rigid Flooring Board

Test Method: AS/ISO 140:7-2006

Acoustic Test Data:

1/3 Octave Band Centre Frequency (Hz)	Impact Sound Pressure Level L'_{nT} (dB)		
	Base Floor	Nouvelle Hybrid Rigid Flooring	$\Delta L'_{nT}$ Test Sample
100	50.3	49.8	0.5
125	53.9	53.4	0.5
160	55.5	54.3	1.2
200	56.8	55.5	1.3
250	56.8	55.3	1.5
315	56.6	53.7	2.9
400	58.2	54.1	4.1
500	58.2	53.0	5.2
630	59.1	52.5	6.6
800	59.9	50.2	9.7
1000	61.0	47.8	13.2
1250	62.8	44.0	18.8
1600	63.9	38.3	25.6
2000	65.5	33.3	32.2
2500	66.4	31.4	35.0
3150	72.0	29.3	42.7
4000	73.9	30.0	43.9
5000	68.1	23.8	44.3
	$L'_{nT,w} = 73$	$L'_{nT,w} = 50$	$\Delta L_{w} = 23$

The impact sound insulation performance of a system is denoted by a single value descriptor, the weighted impact sound insulation $L_{n,w}$ (for laboratory tested rating) or $L'_{nT,w}$ (for field tested rating). The single value descriptor allows for easy comparisons between different systems. The lower the number, the better the impact sound insulation performance.

The rating of the system is determined by comparing the measured noise levels in the receiving room against a set of reference values between one-third-octave band centre frequency ranges of 100Hz to 3150Hz, as specified in AS/NZS ISO 717.2-2004.

The base floor construction of 200mm concrete slab with 35mm furring channels and a single layer of 10mm standard plasterboard ceiling, achieved a weighted impact sound insulation rating of $L'_{nT,w}$ of 73.

The floor system consisting of the 5mm thick Nouvelle Hybrid Rigid floor covering on top of the base floor achieved a weighted impact sound insulation rating of $L'_{nT,w}$ of 50, improving the base floor performance of $\Delta L'_{nT,w}$ by 23 dB.

The test sample of 5mm thick Nouvelle Hybrid Rigid Flooring was placed on top of the bare slab as shown in the Figure below.



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