



UNDERLAYS

When considering the noise associated with flooring systems we should consider both the reflected noise, and the multi-storey noise.

Reflected noise

Reflected noise is that noise experience by the person walking on the flooring system. The amount and type of this noise depends on the type of surface and underlay used.

When used under wood, laminate or bamboo flooring systems, Quiet Step Combi-Lay actively reduces the amount of foot fall noise by about 30%. This results in a quieter, more solid sounding floor for the end user.

There is no standardised test requirement for this type of noise, however, a simple "tap" test will demonstrate the clear difference between Quiet Step Combi-Lay and other acoustic underlays.

Multi-storey noise

Multi-storey noise testing generally involves the site testing of a flooring system in situ.

It involves a measurement of noise transfer from an upper floor, to a lower floor (receiving room).

A standardised "tapping" machine is installed in the upper room, and sensitive listening equipment is used on the receiving room to measure the effective noise reduction.

As you would expect, each site will perform differently, in relation to concrete density and thickness, ceiling treatments, and other structural considerations.

As such, the results provided are a measure of the structural characteristics of the building, as much as the measure of flooring and underlay performance.

Building Code of Aust 2004 (BCA) established some standardised requirements for multi-storey noise. These BCA guidelines were established after much consultation, and offer the only authoritative guideline for such noise in Australia.

The BCA states that multi-storey noise should not exceed $L'_{nw}=C1$ of 62. As such the result of 47 easily complies with this requirement, whilst providing very low reflected noise.

Unfortunately, the standard Strata Title Act only states that "peaceful enjoyment" of adjoining lots must be provided.

Such an arbitrary and vague guideline has led many Body Corporates to register special guidelines for their own building. Please refer to these guidelines carefully when enacted.

It is quite clear that floating floor systems work very well because of the inherent isolation afforded by this method of installation.

It is also clear that other factors like use of rugs and runners, soft sole shoes and the type of use of an upper floor space will also have a profound effect on the amount of noise received downstairs.

conclusion:

- Quiet Step combi-lay provides the best possible combination of reflected and multi-storey noise, even when compared to underlays more than 3 times the price.
- Quiet Step combi-lay is designed for use with Quick Step and other floating products. it provides a continuous damp proof, along with ideal slip and compression characteristics.



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Quiet achiever

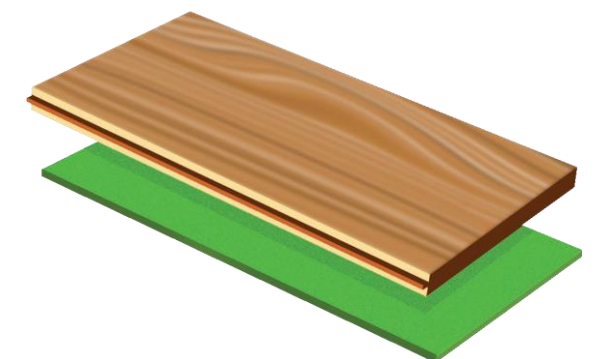
the underlay that will make your floating floor 30% Quieter to walk on

Quiet Step Combi-Lay is the first floating floor underlay in Australia to take reflected foot noise reduction seriously.

Compared to normal underlay, it delivers 30% noise reduction in reflected noise, while performing all the tasks you would expect from a premium underlay.

Even professional contractors are impressed. This is what commercial flooring contractor Phil Cattenazzi has to say about Quiet Step Combi-Lay:

"We use and recommend Quiet Step Combi-Lay to provide improved impact isolation and greatly reduced reflected foot noise in many applications, from high rise developments to single dwelling projects".



Premium
FLOORS AUSTRALIA

coMbi-lay standaRd



Combi-Lay Standard is a good quality, medium density polyolefin underlay for all floating floor applications. It incorporates a continuous clear damp-proof with 100mm overlap and integrated "peel and stick". The inclusion of a continuous damp proof is a requirement under most floating floor installations. With Combi-Lay, the need for additional damp proof layers is almost always avoided*, making installations quicker and more cost effective.

Combi-Lay Standard combines the right balance of compression, slip and damp proof characteristics into one affordable package. The 50 square metre rolls are easy to handle, while the no fuss lay flat polymers make installation simple.

coMbi-lay standaRd benefits

- easy to handle - 2mm thick x 1m wide
- continuous damp proofing in one application*
- integrated peel and stick strip
- lay flat polymers for easy installation
- will not hold water, and will not mildew
- compatible with standard trims
- low cost

specification

Thickness supplied	2mm
Water vapour transmission rate	4.62g/m ² .24hr
Water absorption	0.07mg/cm ²
Compr. strength at 25% compression	30kPa
VOC Emission / ASTM D5116	0.06mg/sqm/hr

Quiet step® coMbi-lay



Quiet Step® Combi-Lay is a superior underlay, where reduced reflected foot noise and sound reduction in multi-story buildings are required. It is made of high density polyolefin copolymer resin which effectively reduces the hollow and often "clunky" foot noise associated with floating floors. Quiet Step® Combi-Lay addresses this key negative of floating floor installations, while performing all the tasks of a superior quality underlay including a continuous damp proof*.

Quiet Step® Combi-Lay is the first floating floor underlay in Australia to take reflected foot noise seriously. Independent University tests show a 30% or more reduction in reflected foot noise for the user, while the underlay has achieved an excellent L'nw + C1 = 47 rating in multi-story applications.

The integrated damp proof removes the need for additional damp proof layers in most instances*, while the products strength and lay flat characteristics make it a pleasure to install.

Also available in 4mm

Quiet step® coMbi-lay benefits

- 30% reduction in reflected foot noise compared to normal underlays
- easy to handle
- continuous damp proofing in one application*
- integrated peel and stick strip
- lay flat polymers for easy installation
- Super tough tear resistance to tools and boots
- will not hold water, and will not mildew
- compatible with standard trims
- L'nw + c1 = 47. this is a site specific test result and complies with Bca multi-storey requirements. test report available upon request

specification

Reflected foot noise		30%
Field impact isolation class	ISO 717/2	64
Thickness supplied:	ISO 1923	4 mm
Water vapour trans. rate:	ASTM E96	1.7 g/m ² .24hr
Water absorption 28 days:	JIS 6767	0.03mg/cm ²
Compr. creep (thickness loss) 23C at 20 kPa load	8hrs	0.1%
	408hrs	0.6%
	10,000hrs	2.0%
Compr. strength (25%)	ISO 844	70kPa
VOC Emission	ASTM D5116	0.06mg/sqm/hr

* Both Combi-Lay Standard and Quiet Step® Combi-Lay are available without the damp proof for those applications where 200um plastic is to be used or where a damp proof is not deemed necessary. Always seek manufacturer's guidelines. Premium Floors recommends continuous damp proof for all floating floor installations over concrete and wood floors directly above ground. Continuous damp proofing requires taping of roll end joints. Heated floors and knowingly or logically wet floors require separate 200um plastic barrier with 300mm overlap and turn up at walls.