



Karndean
COMMERCIAL

Loose lay acoustic performance



Commercial flooring

karndeancommercial.com

At Karndean we see flooring differently...

We travel the world in our quest to bring you exceptional floors that inspire and delight. From the ancient forests of Europe to the remote Australian outback and beyond, we seek out expressive and intriguing forms in the natural world to influence our unique floor designs.

By combining these original features with cutting-edge design, we create simply beautiful floors that bring your vision to life.

The benefits of Karndean floors



Realistic designs



Durable



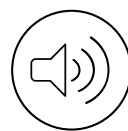
Kid friendly



K-Guard+



Resists indentation



Quiet compared to other hard floors



Low maintenance



Lifetime warranty



Pet friendly



Environmentally friendly



Comfortable underfoot



Waterproof

Why choose a Loose lay floor?



Karndean LooseLay Longboard and LooseLay Originals ranges offer quick installation and individually replaceable planks and tiles, our loose lay format is perfect for floors that need minimal disruption and maximal design flexibility. Reducing sound transfer to rooms below, making it the perfect option for upstairs rooms or apartments. Featuring our innovative K-Wave® friction grip backing, holding the product in place using weight and friction, and combined with our tried and tested K-Guard+® finish providing a hygienic, durable surface protection that is quick and easy to clean with a pH-neutral cleaner.



Individually replaceable: Should you need to replace a piece, simply lift the damaged plank or tile and replace with a new one.



K-Wave® friction grip backing: Our friction grip backing creates a strong bond to the subfloor.



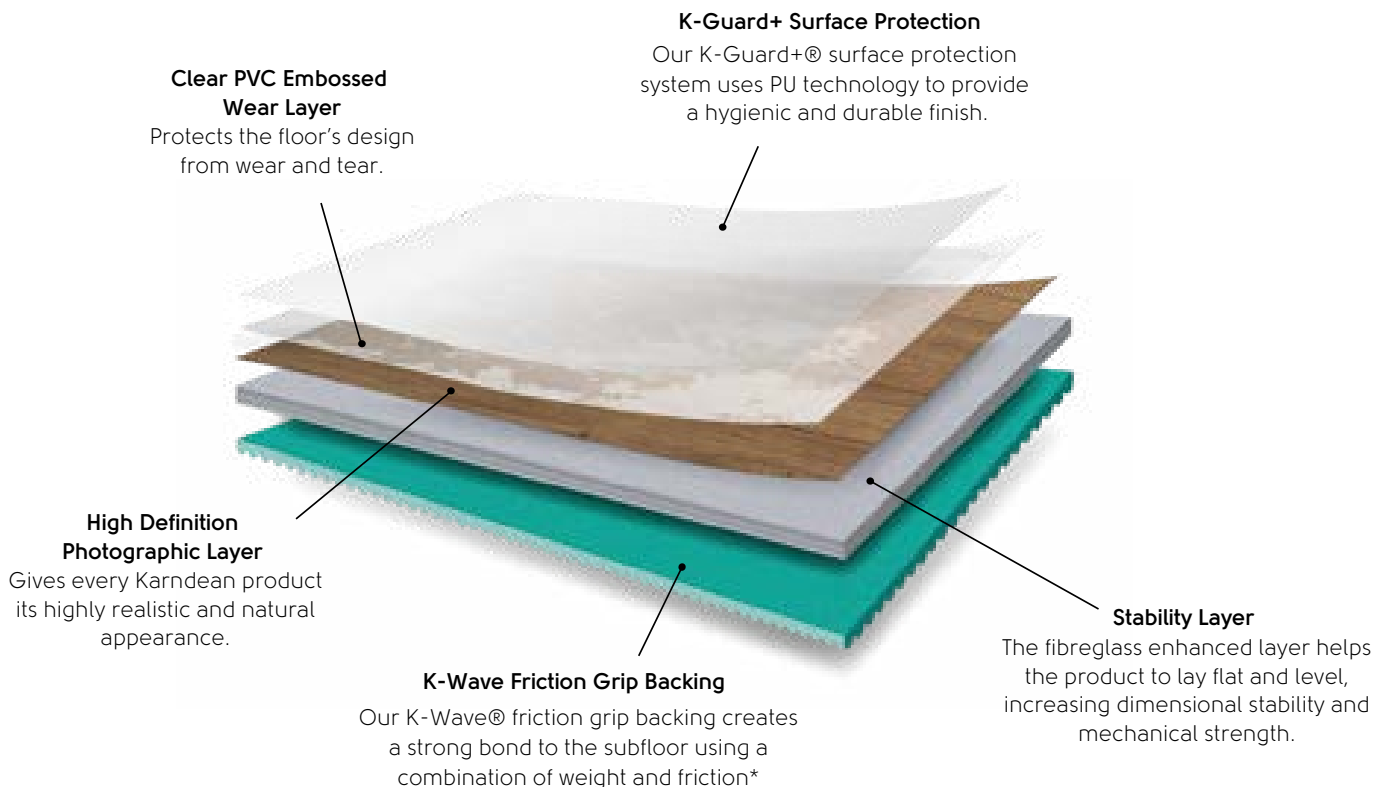
Reduces noise transfer: Our loose lay ranges are perfect for projects where you want to reduce noise levels in the room below.



Laying possibilities: It's not just the floor you choose, but the direction you lay it that makes a lasting impression. From diagonal to herringbone, define your space with an intriguing laying pattern.



Quick and easy to install: Our loose lay ranges can be fitted over most existing hard floors.



Measuring acoustic performance

Karndean Loose lay



Good acoustic design delivers sound control and reduces background noise pollution that stems from both internal and external noise intrusion.

In multi-residential construction and design, building materials must adhere to and comply with strict acoustic standards to ensure occupancy comfort and well-being.

Standards like the National Construction Code (NCC) play a key role in creating sustainable environments that set and ensure minimum requirements for safety, health, and amenity in the specification of new and existing buildings.

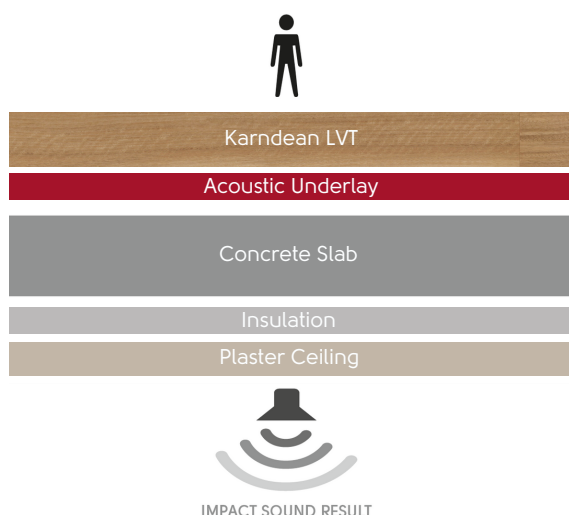
In accordance with the NCC impact sound insulation rating that is aligned with international building codes and includes the removal of C_i , Karndean Loose lay is suitable for multi-rise development and design.

How is acoustic performance measured?

The National Construction Code (NCC) requires that all flooring products are tested to standard ISO 717 - 2 – Rating of sound insulation in buildings and of building elements, which measures the normalised weighted impact sound for floors, within Class 2 to 9 Buildings such as multi-residential applications.

The impact sound is the result of something impacting the floor and resulting in sound transmission through the floor into the rooms below. In accordance with ISO 717-2, the NCC sets a benchmark level of 62dB or less for vinyl floor coverings in commercial applications.

Expressed in Decibels (dB) Impact sound result $(L_{nT,w})$ = Concrete slab thickness – Karndean LVT – (Plasterboard ceiling thickness)



Impact sound must be 62dB or less for multi-residential applications in accordance with standard ISO 717 - 2.

When measuring impact sound, ceiling construction and the concrete slab below the floor covering factor in to the acoustic result.

Karndean flooring reduces residential impact noises including footsteps, dishwashers and furniture movement.

Karndean flooring is ideal for commercial applications that are most commonly located on the lower level of multi-level buildings. In retail, office or hospitality settings, it helps reduce ambient impact sound.

Acoustic Rating Results

Karndean Loose lay



Karndean predictive table of results

Ceiling construction		Construction			
Thickness/Layers	Cavity Insulation Present?	120mm Concrete	150mm Concrete	180mm Concrete	200mm Concrete
		Ln,w (AAAC rating)	Ln,w (AAAC rating)	Ln,w (AAAC rating)	Ln,w (AAAC rating)
No plasterboard ceiling (bare slab)	N/A	67 dB (★★)	64 dB (★★)	62 dB (★★)	61 dB (★★)
1 x 10mm plasterboard (100 mm cavity, suspended light steel grid with 450mm spacing. Insulation is pink ceiling bats R2.5)	NO	57 dB (★★★)	55 dB (★★★)	53 dB (★★★)	52 dB (★★★★)
	YES	48 dB (★★★★)	45 dB (★★★★)	44 dB (★★★★)	43 dB (★★★★)
1 x 13mm plasterboard (200 mm cavity, suspended light steel grid with 450mm spacing. Insulation is pink ceiling bats R2.5)	NO	52 dB (★★★★)	50 dB (★★★★)	48 dB (★★★★)	47 dB (★★★★)
	YES	46 dB (★★★★)	44 dB (★★★★)	42 dB (★★★★)	41 dB (★★★★)
2 x 13mm plasterboard (200 mm cavity, suspended light steel grid with 450mm spacing. Insulation is pink ceiling bats R2.5)	NO	49 dB (★★★★)	47 dB (★★★★)	45 dB (★★★★)	44 dB (★★★★)
	YES	46 dB (★★★★)	43 dB (★★★★)	41 dB (★★★★)	40 dB (★★★★)

- The result for 150mm bare concrete slab (no ceiling) is based on laboratory test to ISO 10140.3.
- The extrapolated table of forecast Ln,w and AAAC Star Rating information for other configurations is based on Karndean estimates.
- Verification via onsite testing remains the responsibility of the owner.
- National Construction Code (NCC) 62db

Decibel result (Ln,w)	40dB	45dB	50dB	55dB	65dB	70dB
AAAC Star Rating	★★★★★	★★★★★	★★★★	★★★	★★	★
	40dB	50dB	62dB	70dB		
	Library setting	Conversation at home	NCC benchmark for acoustic suitability in multi-residential applications	A running vacuum cleaner		

The Acoustic Star Rating System

The AAAC rating system ranks the acoustical quality of apartment buildings and promotes better standards of acoustic quality in multi-residential dwellings.

The intent of the rating system is to quantify and provide guidance to specifiers and developers in the design process so that all important acoustical attributes are properly addressed.

The rating system complements the established statutory and advisory codes such as the National Construction Code, AS/NZS Standards or local authority building ordinances.

Technical data and support

Karndean Loose lay



Please follow the below links to our technical datasheets, installation guidelines, BIMstore files, website, ordering samples and Digital Specification Library.

Technical datasheets

[CLICK HERE](#)

BIMstore Files

[CLICK HERE](#)

Installation Guidelines

[CLICK HERE](#)

Visit our website

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LooseLay Longboard

Lifetime Residential Warranty	Wear Layer (ISO 24340) 0.5mm	R10 Slip Rating	PVC Friction Pad Backing	14dB Impact Sound Insulation		
	Thickness (ISO 24346) 4.5mm	15 years Commercial warranty				
Format 	Size	Bevelled Edge	Quantity per box	M² per box	M² per pallet	Weight per box (kg)
Plank	1500.0 x 250.0	Micro	8 planks	3.000	156.000	24

LooseLay Originals

Lifetime Residential Warranty	Wear Layer (ISO 24340) 0.5mm	R10/R9 (Plank/Tile) Slip Rating	PVC Friction Pad Backing	14dB Impact Sound Insulation		
	Thickness (ISO 24346) 4.5mm	15 years Commercial warranty				
Format 	Size	Bevelled Edge	Quantity per box	M² per box	M² per pallet	Weight per box (kg)
Plank	1050.0 x 250.0	Micro	12 planks	3.150	151.200	23
Tile	610.0 x 500.0		10 tiles	3.050	158.600	24



Imagery and Design Reproduction

Photography and print cannot always produce a perfect representation of our products. This includes colour, pattern variation and installation elements used. For this reason we strongly recommend obtaining a product sample and where possible viewing a larger sample in-store. We also recommend visiting our website for information on installation, after care and product selection: www.karndean.com/advice. We love developing new ideas and improving on our existing designs which means that sometimes products are withdrawn at short notice. We hate to disappoint and will work with you to find an alternative design. Please contact Customer Service for more information.

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*Calls may be recorded for training and quality purposes.



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