

Acoustic Products

MiPlank Acoustic

Silentflor

Damtec Resilient

Lab & Onsite Testing

Acoustic Products

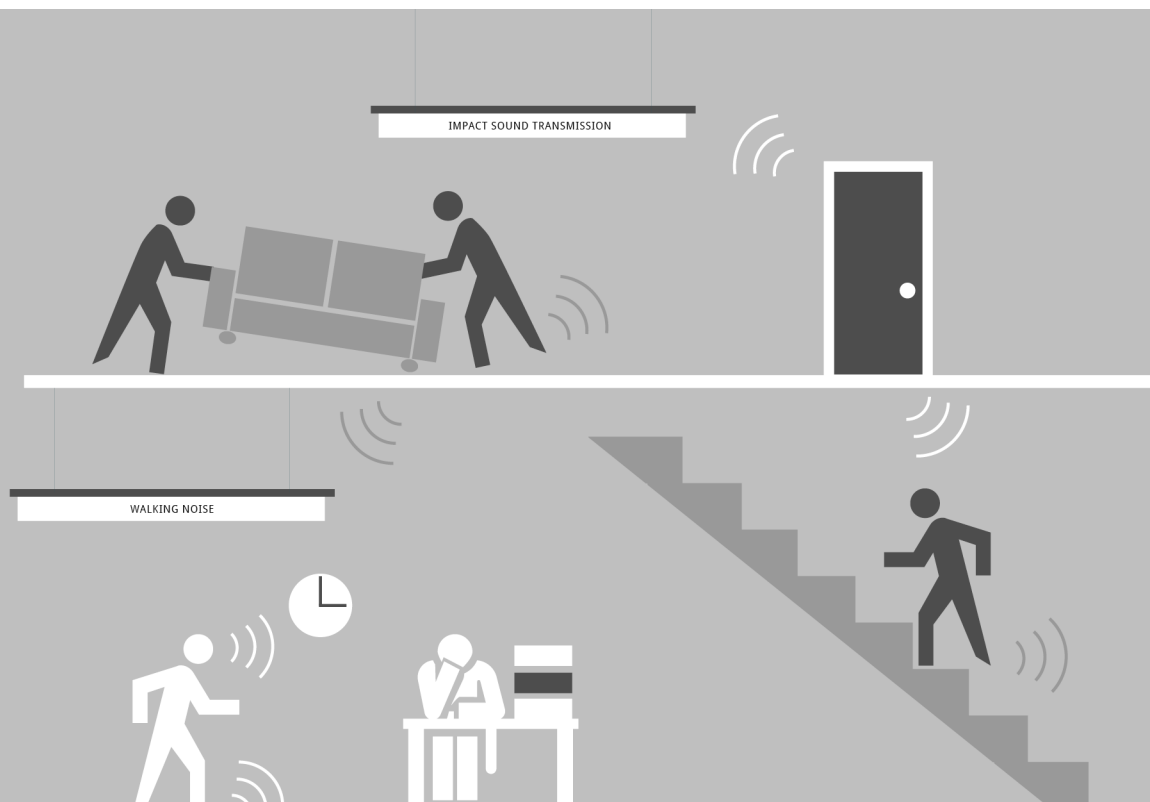
Noise can have a detrimental effect in healthcare, education, work and domestic spaces which can significantly affect an individual's well-being and also hinder recuperation, learning, working and comfort.

IMPACT SOUND TRANSMISSION

Impact sound is energy produced by the impact or collision of objects onto a separating surface such as a floor or wall. This energy is transmitted through the structure of the building into neighboring rooms, examples include impact of heavy footsteps, slamming of doors or dragging of furniture.

AIRBORNE NOISE

Unlike Impact Sound, airborne sound is where the sound of a person's footstep when walking or a person's voice in a room is reverberated back into the room through the air.



MiPlank Acoustic

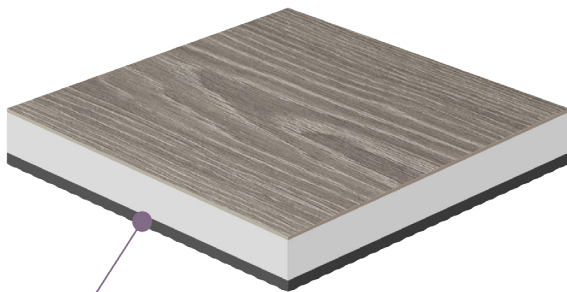


LOOKING FOR FLOORING FOR A MULTI-RESIDENTIAL OR COMMERCIAL SPACE?

The specially-formulated MiPlank Acoustic luxury vinyl flooring combines the high-quality and design of traditional MiPlank, with an acoustic backing that reduces impact sound by at least 19dB.

THE MIPLANK ACOUSTIC COLLECTION IS THE PERFECT OPTION FOR WHEN IMPACT SOUND REDUCTION IS AN IMPORTANT FACTOR.

Available in 8 of the MiPlank shades, achieve the same look with improved acoustic benefits. Perfect for when you need peace and quiet.



8 designs now available
with acoustic backing



Silentflor



EXCELLENCE AS STANDARD

The Silentflor range has been awarded NF UPEC A+ U4 for the Impact Sound Test as it achieves a 19dB impact sound reduction level. NF UPEC A+ French certification aims to provide building owners and specifiers with a safe and simple way of choosing a floor based on its quality and how it handles heavy traffic installations.

The advantages of a flooring solution having NF UPEC A+ certification are:

Quality and suitability are guaranteed.

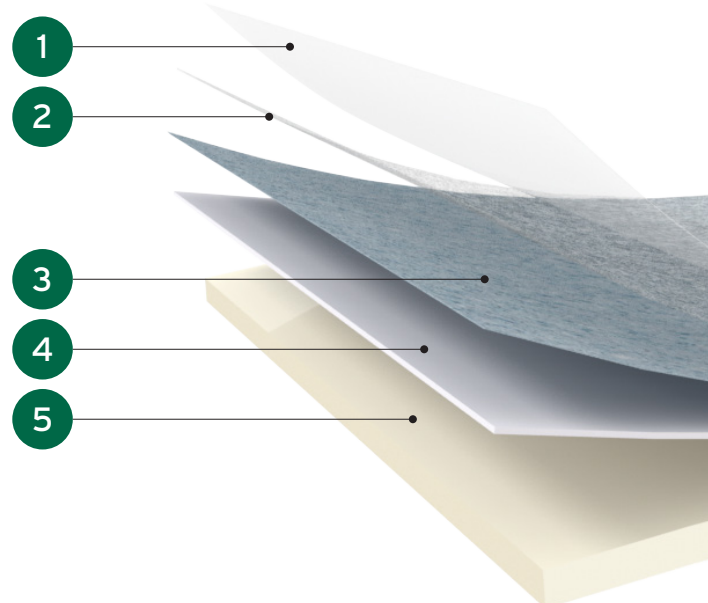
Production that is continuously monitored to ensure consistent quality by a certified manufacturer.

Independent third-party validation of the manufacturers compliance with the certified characteristics, and a quality assurance system.

PRODUCT LAYERS

Gauge 3.7mm | Wear layer 0.65mm

1. Polyurethane coating, to minimise maintenance time and costs.
2. Wear layer, that protects the flooring decoration.
3. Decorative layer.
4. Stabilisation layer, that improves dimensional stability and minimises the effect of surrounding physical properties e.g. temperature fluctuations.
5. Acoustic layer for warmth and cushioning underfoot, achieves an impact sound reduction of at least 19dB. system.

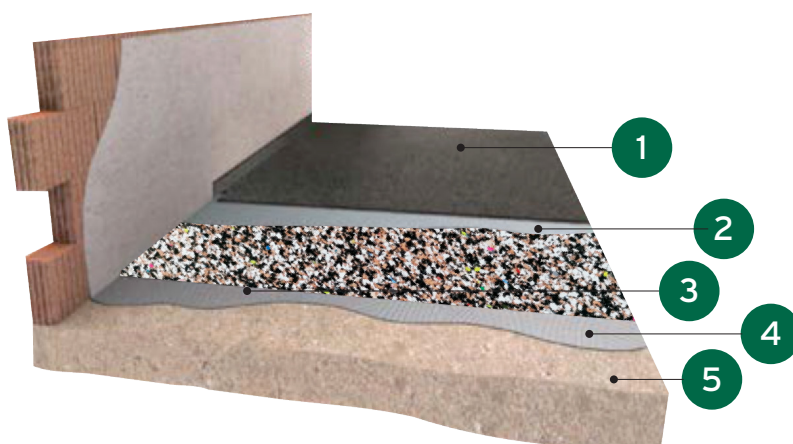


Damtec Resilient



"DUAL BOND" OF POLYFLOR VINYL SHEET AND PLANK FLOORING APPLICATIONS with Damtec Resilient Acoustic Underlay

Damtec Resilient is a unique and exclusive, 1st grade acoustic underlay manufactured from natural raw materials, cork and rubber - obtained from the medical industry, making it an excellent acoustic underlay to be used under resilient floors like vinyl sheeting as well as vinyl planks and providing a high level of impact sound improvement, which is becoming more common in recent times.



DAMTEC RESILIENT ACOUSTIC UNDERLAY

High-quality granules of recycled, medical grade rubber and cork with PU elastomer bonding agent

1. Nominated Polyflor vinyl sheet or plank flooring.
2. POLYFLOR STAR 120 adhesive.
3. Damtec Resilient.
4. POLYFLOR STAR 120 adhesive.
5. Subflor (e.g. concrete).

Lab Testing

The lab result to the standard test, ISO 10140-3 and AS ISO 717, gives end users data to compare products. A product with a 19 dB reduction will perform better than a product with 14dB reduction - regardless of the building construction. The lab test creates a level playing field to compare products performances.

LAB TESTING : ISO 10140 + ISO 717.2	140mm concrete slab. No UNDERFLOOR CEILING OR INSULATION
	ΔL_{nw}
MiPlank Acoustic	19
Silentflor	19
Forest fx Acoustic	19
Simplay/Laneway	9
MiPlank	9
LVT with Damtec Resilient	17/18
Sheet Vinyl with Damtec Resilient	18/19

Onsite Testing

An onsite test showing a products performance is only relevant in THAT building and results in a different building will be different as no two buildings are built the same.

Results are indicative of performance.

Actual results will differ.

ONSITE TESTING : AS ISO 717.2	Bare Slab	Silentflor	MiPlank Acoustic	AAAC Star Rating
Lntw values as per NCC 2022 F7VI	dB	(Δ Lntw)	(Δ Lntw)	
200mm Slab, 10mm plasterboard ceiling with 400mm cavity	58	35 (23)	37 (21)	6 star
400mm slab, no ceiling	57	37 (20)	36 (21)	6 star
220mm slab, grid tile ceiling 400mm cavity	57	39 (18)	42 (15)	6/5 star
160mm slab, grid tile ceiling 400mm cavity	57	39 (18)	39 (21)	6 star
120mm slab, 10mm suspended plasterboard ceiling and thermal insulation	67		46 (21)	4 star

- Bold numbers are the **Lntw** result
- The numbers in brackets are the sound reduction due to the flooring

Acoustic Performance

STATEMENT OF ACOUSTIC PERFORMANCE

The Polyflor MiPlank Acoustic impact sound test was performed to ISO 10140-3 Acoustics – Laboratory measurement of sound insulation of building elements – Part 3: Measurement of impact sound insulation. This means it was performed in a certified lab to the standard conditions of a 140mm thick bare concrete slab with no internal ceiling. The result, as per AS ISO 717, is the MiPlank Acoustic floor covering reduces the impact sound by 19 decibels (dB) compared to the result on the bare slab. This reduction is a ΔL_{nw} result.

The two main questions Polyflor gets asked are “Does your floor comply with the Building Code or meet the local Strata requirements?” and “How many stars (AAAC rating) does your floor have?” The answer to both these questions is the same: It’s not the floor covering that achieves a rating or complies, it’s the entire floor system of the building it is being installed in ie a L_{ntw} result.

Both Building Code / Strata compliance AND AAAC Star ratings are determined by testing the proposed floor covering on site ie in the building, and the entire floor structure contributes to the final result. Contributing factors include, but is not limited to the following:

- Concrete thickness and density
- Structural steel size and quantity
- How the floor is tied into the walls (can the sound go around the slab?)
- The presence and composition of an internal ceiling in the lower floor.
- An air gap between the internal ceiling and the underside of the slab
- Acoustic insulation inside that air gap.

A building with minimal design standards will struggle to get low acoustic results regardless of how good the floor covering is. ONLY onsite testing will determine acoustic performance of the building in practice.

The lab result to the standard test, ISO 10140-3 and AS ISO 717, gives end users data to compare products. A product with a 19 dB reduction will perform better than a product with 14dB reduction - regardless of the building construction. The lab test creates a level playing field to compare products performances.

An onsite test showing a products performance is only relevant in THAT building and results in a different building will be different as no two buildings are built the same. Strata bodies should have the bare slab tested in one apartment so that the buildings performance is known. This way, the lab result reduction can be applied to the onsite result for product comparison and indicative performance of star ratings and NCC compliance.