

Technical Data and Information Sheet

Vibramat 5mm 100 % Recycled Rubber Acoustic Underlay

1 Product Description

Vibramat™ 5mm is a dense acoustic underlay manufactured from 100 % recycled rubber granules sourced from end-of-life tyres and production waste. The granules are granulated, sieved, and blended with a water-resistant polyurethane (PU) binder, then mould-pressed under controlled pressure to achieve uniform density and mechanical strength.

The material is sliced to the required thickness and trimmed to specification.

2 Visual Appearance

The surface consists of fine rubber granules bonded together to form a flat, resilient sheet.

Colour: Predominantly black with coloured flecks from recycled content.

Texture: Firm and slightly coarse.

Standard Sheet Size: 1.1m × 1.1m

Nominal Thickness: 5mm

Note: Minor colour variations may occur between batches due to recycled content. These do not affect performance.

3 Technical Specification

Property	Typical Value	Test Reference / Notes
Material Composition	100 % recycled rubber with PU binder	–
Density	700 kg/m ³ (± 5 %)	ASTM D792 equivalent
Thickness	5mm (± 0.3 mm)	Calibrated gauge
Sheet Dimensions	1.1 m × 1.1 m (± 2 mm)	–
Colour	Black with multi-colour speckles	Visual
Water Resistance	Water-resistant PU binder	–
Recyclability	100 % recyclable	–

4 Acoustic Performance

Impact sound performance data for **Vibramat™ 5mm** is derived from **in-situ (field) impact sound measurements** conducted on completed floor systems incorporating Vibramat 5 mm installed over concrete slabs at multiple project sites. Testing was carried out on tiled and engineered-timber floor finishes representative of typical multi-residential construction.

The measured results demonstrated consistent reductions in impact sound transmission across the tested installations.

Typical performance outcomes include:

- **16–17 dB reduction in LnT,w** compared with the corresponding untreated concrete slab
- **20–21 point improvement in FIIC values**, depending on floor finish and site conditions

Based on the tested installations, these results are generally consistent with strata by-law requirements (commonly **LnT,w < 55** or **FIIC ≥ 50**) and align with the NCC/BCA acoustic performance criteria for Class 2 multi-residential buildings (**LnT,w + CI < 62** or **FIIC ≥ 50**), when assessed as part of an appropriate floor–ceiling system.

Individual in-situ acoustic test reports are available on request. Refer disclaimer regarding the applicability of field test results to other site conditions.

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5 Fire Testing Performance

Fire testing was conducted by the **Australian Wool Testing Authority Ltd (AWTA Product Testing)** in accordance with **AS/ISO 9239.1-2003 – Reaction to Fire Tests for Floorings: Determination of Burning Behaviour Using a Radiant Heat Source**.

Samples were conditioned in accordance with **BS EN 13238:2010** prior to testing.

Flooring System	Test Reference / Number	Critical Heat Flux (CHF) Mean (kW/m ²)	Smoke Value Mean (%·min)
Ceramic Tile over Vibramat™ 5mm	AWTA Report No. 18-003272	≥ 11 (kW/m ²) Length / Width	24
Engineered Timber over Vibramat™ 5mm	AWTA Report No. 18-004925	5.3(kW/m ²)	39

Summary:

- The tile system achieved a CHF ≥ 11 kW/m², meeting the BCA /NCC Group 1 classification requirement for resilient and hard floor finishes in typical residential applications. The **tiled flooring system incorporating Vibramat 5mm** comfortably exceed the NCC requirements, meaning **the system may be used as a floor lining without restriction in Class 2 to 9 buildings**.
- The timber system recorded a CHF of 3.9–5.3 kW/m², typical of engineered timber assemblies incorporating acoustic underlays. The **timber flooring system incorporating Vibramat 5mm** achieved results that meet these NCC requirements, confirming **compliance for use as a floor lining in Class 2 to 9 buildings**.

Testing and reporting performed by an ISO/IEC 17025-accredited laboratory (AWTA Product Testing)

6 Packaging and Handling

Supplied flat-packed on pallets to maintain sheet integrity during storage and transport.

Pallet configuration: 200 sheets (≈ 242 m² coverage).

Approximate weight: 850 kg per pallet.

Pallets are securely strapped for transport and can be stacked in accordance with local warehouse and safety regulations.

7 Typical Applications

Vibramat 5mm is designed for use as an impact-sound-reducing underlay beneath: Timber and engineered floors Vinyl plank and hybrid flooring Tiled finishes (using compatible adhesives) Vibramat can be used in living areas, bedrooms, bathrooms laundries and balconies including rooftop balconies.

It provides effective resilience and noise suppression in both residential and commercial projects where a medium-profile acoustic layer is required without significantly increasing floor height.

8 Warranty

When installed in accordance with Acoustic Supplies' written instructions on a firm, level substrate, Vibramat 5mm is warranted for 10 years against material defects and failure under normal service conditions. Exclusions apply for improper installation, or site preparation damage caused by water or chemical attack, or misuse outside intended application.

9 Contact Information

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10 Disclaimer

Actual acoustic performance may vary between projects due to slab construction, floor finishes, installation methods, ceiling systems, flanking transmission paths, workmanship, and building design. Compliance with NCC/BCA and strata requirements is determined by the complete floor-ceiling system, not the acoustic underlay alone.