



PRODUCT DATA SHEET

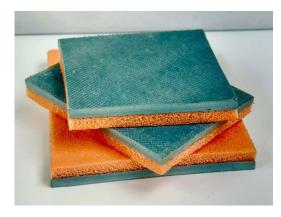
SOUNDMASS® 106 UNDERLAY



General Product Information

SOUNDMASS® 106 is a high-performance acoustic underlay engineered to reduce both airborne and impact noise in residential and commercial flooring systems.

It features a light blue $10 \, kg/m^2$ acoustic barrier fused to a 6mm distinctive orange thermal insulating layer. This construction not only delivers excellent sound attenuation but also offers compression and impact resistance preserving acoustic performance even under heavy loads.



The resilient structure resists permanent indentation and enhances comfort by retaining warmth underfoot.

Certified for low odour and ultra-low VOC (Volatile Organic Compounds) emissions, SOUNDMASS® 106 is ideal for sensitive indoor environments such as homes, schools, and healthcare facilities. With over 50% recycled content and a fully fused, single-layer construction, it offers consistent performance and robust environmental credentials.

Designed and manufactured in the UK by Niko Coatings Limited, the country's largest primary producer of heavy-layer acoustic materials.

Typical Applications

- Under carpet, wood, or laminate flooring
- As part of systems achieving Building Regulations Part E
- Combined with acoustic ceiling systems



Key Features & Customer Benefits

Feature	What It Means for You the Customer		
Engineered for Acoustic Performance	Designed to reduce impact and airborne noise with a fully fused construction ensuring durability and consistent performance.		
Dynamic Load Resistance	Keeps its shape under furniture and foot traffic, preventing permanent indentations over time.		
Dynamic Stiffness	Reduces the sound of footsteps and impact noise, creating a quieter room environment.		
Puncture Resistance	Tough and durable – resists tearing or damage during installation or everyday use.		
Elasticity & Recovery	Springs back after compression to maintain its thickness and performance for years.		
Healthier Indoor Air	Ultra-low VOC emissions and low odour make it safe for sensitive environments.		
Eco-Conscious Choice	Made with over 50% recycled content and fully recyclable at end of life.		

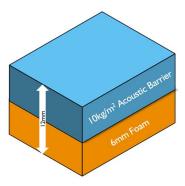






Product Dimensions

Sheet Size	I200mm (W) x I200mm (L) Manufacturing tolerance ± Imm	
Weight	14.4kg per sheet 10kg/m^2 Soundmass® 106 UNDERLAY Manufacturing tolerance $\pm 10\%$	
Sheet Thickness	I 2.0mm Manufacturing tolerance ±10%	
Sheets Per Pallet	50	





Sustainability & Safety

SOUNDMASS[®] 106 Underlay is engineered for high performance with a strong focus on environmental responsibility and indoor air quality. Independently tested to international standards.

- PVC and chloride-free
- Low odour and ultra-low VOCs ideal for sensitive environments
- Made with over 50% recycled content to reduce carbon impact
- 100% recyclable
- Eco-friendly free from SVHCs, including lead, halogens, and unrefined aromatic oils
- Low fire toxicity burns cleanly without releasing harmful toxins
- Closed-cell foam structure resistant to water and moisture



Installation

Carpet Floor Finish - Installing SOUNDMASS® Underlay Under Carpet

SOUNDMASS® Underlay can be used beneath a carpet finish.

- When replacing a traditional underlay, you'll need to install SOUNDMASS® Underlay perimeter strips around the room to accommodate carpet gripper rods.
- Lay the underlay up to the edge of these perimeter strips.
- Install in a brick bond pattern for optimal performance.
- Bond the underlay to the subfloor using Elastorapid VS90 Adhesive, applied with a 3mm notched trowel.
- Spread the adhesive evenly across the
- Use SOUNDMASS® Underlay High Tac Tape to secure all joints before installing the carpet.









Wood or Laminate Floor Finish - Installing SOUNDMASS® Underlay Under Wood or Laminate Flooring

SOUNDMASS® Underlay can be installed beneath wood or laminate floor finishes.

- Ensure the subfloor is level, smooth, and clean before installation.
- Apply Elastorapid VS90 Adhesive with a 3mm notched trowel, spreading evenly across the floor area
- Bond the SOUNDMASS® Underlay directly to the subfloor in a **brick bond pattern**.
- Tape all joints with SOUNDMASS® High Contact Tape.
- Fill any perimeter gaps with an acoustic sealant.
- Over the underlay, install either: A 6mm ply or MDF board, or Jumpax Heat-Pak panels.



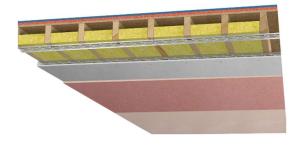
Once the additional layer is in place, your wood or laminate flooring can be installed on top.

SOUNDMASS® Underlay with an acoustic ceiling - Part E Compliant Floor/Ceiling Systems

SOUNDMASS® Underlay is used as part of a floor and ceiling system designed to meet and exceed the requirements of Building Regulation Part E for sound insulation.

The system build-up includes:

- SOUNDMASS® Underlay over existing 22mm timber floorboards
- Existing timber joists
- 100mm Rockwool RWA45 acoustic insulation between joists
- 5007 deep resilient bars at 300mm centres
- One layer of 15mm Soundbloc plasterboard
- One layer of 15mm Fireline plasterboard
- Skim plaster finish









Technical Information

Features	Test Method	SOUNDMASS®	Foam XLPE
Flammability	ISO 3795 – Horizontal burning behaviour Tested as a composite product with SOUNDMASS® or foam surface facing down to flame.	Self-extinguishing	≤10mm/min burn rate
Flammability	UL94 HB - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances Tested as a composite product with SOUNDMASS® or foam surface facing down to flame.	Pass	Pass
Colour		Light Blue	Orange
Shore Hardness A	ISO 868	77	10
Density	ISO 845 (kg/m³)	1900	30
Utilisation temperature	SOUNDMASS® 106 underlay can remain in a fixed position at a temperature up to 80°C at which point the product will start to soften. At this temperature it can operate without failure or significant wear over time.	-30°C to +80°C	
Odour		Low Odour	Odour less
Odour intensity	VDA 270 C1 (SOUNDMASS® only)	≤3	-
Foam Thermal Conductivity	TS EN 12667		0.0372 W/mK
R-value (Thermal Resistance)	Calculated		0.161 m ² K/W
U-value (Thermal Transmittance)	Calculated		6.21 W/m ² K
Tog Value	Calculated		1.61 Tog

Thermal insulation within SOUNDMASS® 106 is primarily delivered by the closed-cell foam layer. While the heavy acoustic barrier is critical for sound attenuation, its relatively high thermal conductivity limits its insulating contribution. As a result, the overall thermal resistance of the composite is modest but measurable, driven mainly by the foam's performance.

Emissions / VOC / Air quality

SOUNDMASS®

- Eurofins Indoor Air Comfort GOLD
- Complies with: BREEAM® Int. & NOR (Exemplary), LEED v4.1 (outside U.S.), French VOC & CMR, Italian CAM, Belgian, ABG/AgBB
- VDA 277 / 278 (VOC/FOG automotive)
- Nissan Engineering Standard M0402, Method #2

Foam

- Bureau Veritas tested to PSA D40 5535-E and PV3341.
- All target VOC compounds below detection thresholds. Suitable for automotive and indoor low-emission use.

^{*}Important Note: SOUNDMASS® 106 is not suitable for use over underfloor heating systems. Its thermal insulation properties may inhibit effective heat transfer.







Manufacturing and Quality Assurance

SOUNDMASS® 106 is manufactured in the UK by Niko Coatings Ltd, the leading producer of heavy layer acoustic materials in the UK. All production takes place under certified management systems to ensure quality, safety, and environmental responsibility.

- ISO 9001 Quality Management: Ensures consistent product quality through rigorous process control and continuous improvement.
- ISO 14001 Environmental Management: Certifies reduced environmental impact through energy efficiency, emissions control, and sustainable resource use.
- ISO 45001 Occupational Health & Safety: Demonstrates commitment to worker safety and proactive risk management across manufacturing operations.

Niko Coatings Ltd has been awarded an EcoVadis Gold Rating, recognising top-tier performance in sustainability, environmental impact, labour standards, ethics, and sustainable procurement. This places the company in the top 5% of evaluated businesses globally.

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The information contained in this data sheet is believed to be correct at the date of publication. Every effort has been taken in the preparation of this data sheet to ensure the accuracy of representations contained herein.

Goods manufactured by the company are made to our approved standards, but no warranty or guarantee is given as to their suitability for any particular purpose or application, and no liability is accepted for any loss or damage arising directly or indirectly from the use of the Company's products irrespective of any information given to us as to intended use of such products.













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