

ACOUSTIC MATERIALS

FOR THE BUILDING INDUSTRY

Development and production



ACOUSTIC &
INSULATION
TECHNIQUES

GREEN COMPANY



HEADQUARTER
BARCELONA, SPAIN



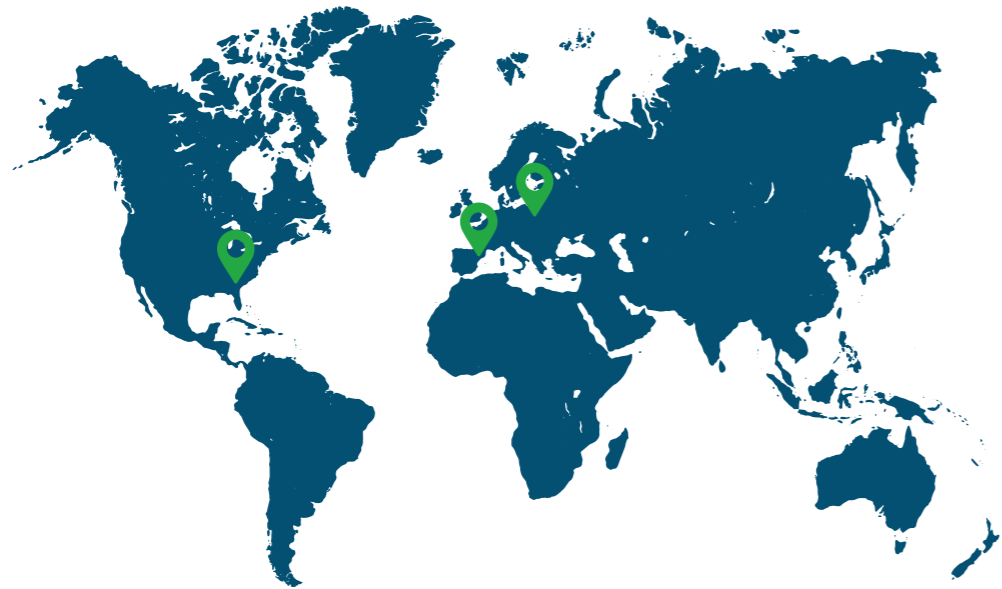
SOSNOWIEC, POLAND



AUGUSTA, UNITED STATES

60 YEARS OF EXPERIENCE ARE OUR GUARANTEE

AIT is a sustainable company that complies with the most advanced environmental standards, and is engaged in the manufacture of materials for sound insulation and vibration control. The solutions offered by AIT are the result of more than 60 years of experience. Thanks to this know-how, continuous research and investment in new technologies and products, our engineers develop innovative solutions with increasingly sophisticated and effective materials.



WHAT DO WE DO?



AIT BUILDING manufactures and develops materials for acoustic treatment in the form of monolaminates, bilaminates and trilaminates which, when incorporated into construction systems or onto surfaces, provide considerably greater sound reduction.



ADVANTAGES OF OUR PRODUCTS



Our primary sheet is
100% recyclable

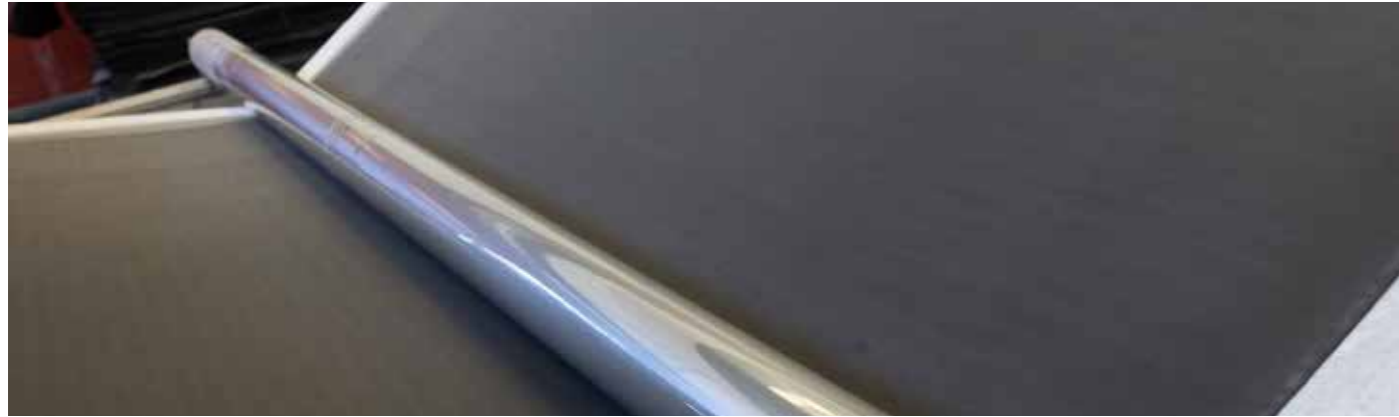


LAMIX (AIT)
Easy Handling



Our sheets are of high quality,
with no need for surface protection.
Sheets with rigid fabrics limit
elastic properties.

OUR MATERIALS



The acoustic materials developed and manufactured by AIT have been tested in official and independent external laboratories for their performance, which is essential data for the calculation of solutions by specialists, if required by regulations. Furthermore, the added value of AIT resides in the fact that the materials are subjected to exhaustive quality controls due to their direct link to the automotive industry. Our heavy synthetic sheet is 100% free of asphalt derivatives and is characterized by:

- Odour emission control
- Oil migration control
- No shrinking
- No hardening in the cold
- No softening in the heat
- High mechanical tensile strength
- Long lasting
- Heavy sheet from recycling and 100% recyclable

The proof of all this is the absence of any kind of surface protection, because it needs neither film nor fabric. The absence of such an additive in the product does not alter the acoustic behaviour of its formulation, such as elongation at break and other factors, which avoids the destabilisation of its properties caused by the additive.

The right choice of system and the inclusion of these materials in the initial phase of the project avoid potential sound problems in a new building or renovation, where once the work has been completed, rectification would involve unanticipated costly investment that very often would no longer be affordable. Investment in product quality and projects that are carried out properly always pays off in the long term and, in that regard, you can always count on us.

AIT materials are only available from specialist soundproofing centres.

AIT INDUSTRY



We develop acoustic insulation materials according to project requirements for use in mass production processes in the industrial sector.

Equipment with motors, compressors or fans are clearly noise emitting sources and usually transmit vibrations and airborne noise through their metal parts.

Likewise, for applications where an increase in sound insulation is required, such as in the interiors of acoustic doors or machine acoustic barriers, prefabricated

systems, sinks, shutter boxes, metal covers, modular systems or decoupling in structural systems, etc., our product is also used.

Our material prevents the resonant effect of surfaces, minimises airborne noise by providing mass and de-solidifies connection points, minimising solid-borne noise propagation.

MATERIALS FOR THE INDUSTRIAL SECTOR

FORMULATION HLC301



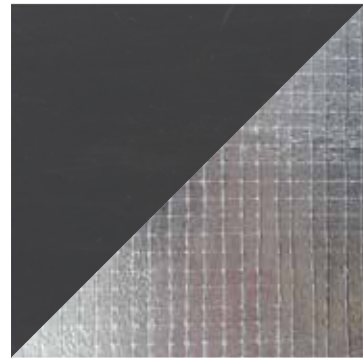
HLC301



LAMIX IGN
FIRE REACTION UL94-V2



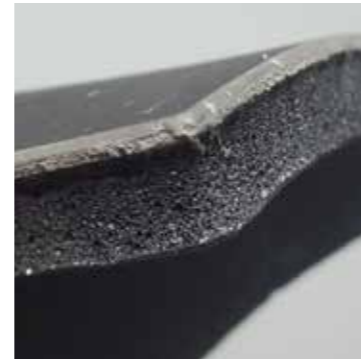
HLC301 ADHESIVE



HLC301 + ALU



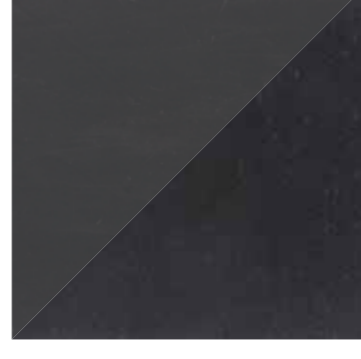
HLC301 2CARAS ADHESIVE



HLC301 + FOAM 9mm



HLC301 + NON WOVEN



HLC301 + POLYAMIDE

HLC301

100% pure high-quality formulation



Types of HLC301

CODE	REFERENCE	SIZES
PA06547	HLC301 3.5 KG	5000x1000 mm
PA07864	HLC301 3.5 KG ADH	2000X1000 mm
PA07941	HLC301 3.5 KG 2C ADH	2000X1000 mm
PA07831	HLC301 3.5 KG PA/PE	2500x1300 mm
PA08034	HLC301 5 KG	5000x1000 mm
PA07631	HLC301 5 KG	2000X1000 mm
PA06668	HLC301 5 KG ALU	2000x1000 mm
PA07834	HLC301 5 KG ADH	2000X1000 mm
PA07835	HLC301 5 KG 2C ADH	2000x1000 mm
PA08033	HLC301 5 FOAM 9mm	2000x1000 mm
PA07929	HLC301 10 KG	2000X1000 mm
PA07754	HLC301 10 KG ADH	1300X1000 mm
PA07460	HLC301 10 KG ALU ADH	2000X1200 mm
PA07591	HLC301 10 KG ALU FLIS60G	2000X1200 mm
PA07911	HLC301 10 KG PA/PE	1200x1000 mm

KG	weight Kg/m ²
ADH	one-sided adhesive
2C ADH	two-sided adhesive
PA/PE	One side with polyamide/polyethylene film
ALU	Aluminium protection
FLIS60G	One side with 60 gr/m ² non-woven fabric (Vlieseline)

AIT BUILDING



EVOLUTION

The global awareness for a world with a higher quality of life, as well as increasingly demanding global regulations, leaves no option for every party involved in a building process (specifiers, manufacturers, engineers and architects, distributors, installers, construction companies, promoters and final customers) other than to move towards a vision of quality and sustainable materials, more technical construction systems, which are better developed and longer lasting. Therefore, this requires a commitment to professionalism and good practices in both the present and the future, while acting in compliance with laws and procedures which are increasingly adapted to the real world.

PROCEDURE

The acoustic testing by manufacturers of materials and systems that were previously considered valid for completing a building are not permitted by current legislation. The reason for this is that acoustic testing in external laboratories only considers the direct route to which the test materials or systems are subjected. The building site is where the direct data is obtained, but also the indirect data from all possible sources of noise: impacts, embedded pipes and structural transmissions, among other factors.

ACTION

This is where acoustic engineering and specialist acoustic technicians come into their own and inevitably grow in importance. By using the appropriate calculation tools and working closely with manufacturers such as AIT, they guarantee acoustic results in accordance with current regulations, whether in new buildings, in commencing new operations or when carrying out professional renovation work.

In these circumstances, a manufacturer cannot act on its own and guarantee standards in a building project. Venturing into this area could have consequences for the builder and responsible parties and lead to completely unnecessary post-building procedures.















AIT PRODUCTS

- 1 PR 3.5
- 2 Lamix
- 3 Parquemix 202
- 4 PR 3.5/10

OTHER MATERIALS

- 5 Plasterboard
- 6 Absorbent fibre
- 7 Reinforced mortar
- 8 Floating parquet

COMPARISON BETWEEN ACOUSTIC SHEETS

	BITUMEN	SYNTHETIC
PHOTO	 With PE/PA film	 Without film
RAW MATERIAL	 Raw Asphalt	 Polymers Mineral loads
SECTOR	 Waterproofing Exterior Roofing	 Acoustics Automotive Industry
ADHESIVE VERSION	 Bitumen adhesive	 Transfer adhesive
DURABILITY	 Degrades over time	 Long lasting
ODOUR	 Can produce hydrocarbon-like odour	 Low odour emission
HEAT	 Becomes sticky, oil migration	 Non-sticky, no migration
COLD	 Hardens, can crack	 Does not crack

MATERIALS FOR ACOUSTIC INSULATION

AIRBORNE NOISE



LAMIX



LAMIX IGN
EUROCLASS Bs 1d2



LAMIX ADH



LAMIX ALU



PR 3,5

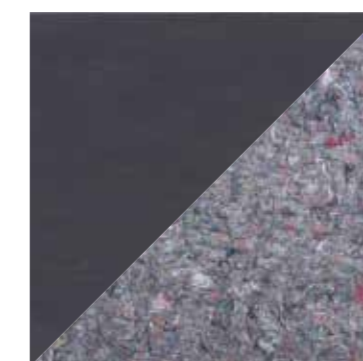


PR 3,5 ALU

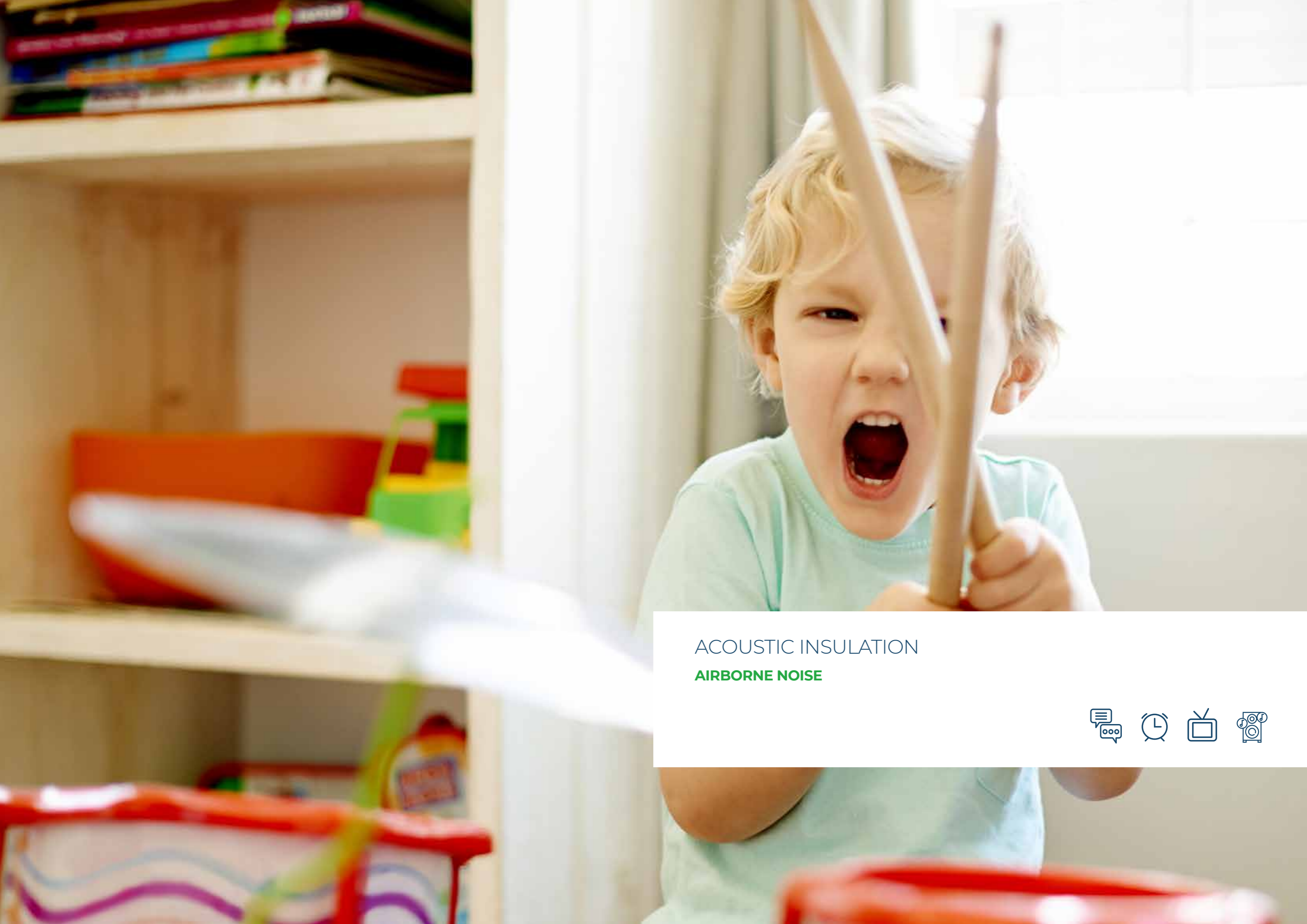
IMPACT NOISE



PARQUEMIX 202
Lw 22dB



PR 3,5/10
Lw 30dB



ACOUSTIC INSULATION

AIRBORNE NOISE



LAMIX

High-density synthetic membrane that increases the levels of acoustic attenuation on thin surfaces.
Suitable for use between plasterboard, metal sheet, wood, plastic and as decouplers.



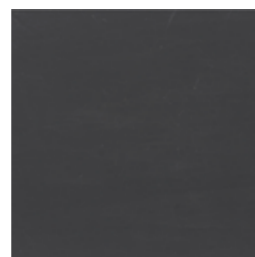
Types of LAMIX



LAMIX



LAMIX ADH

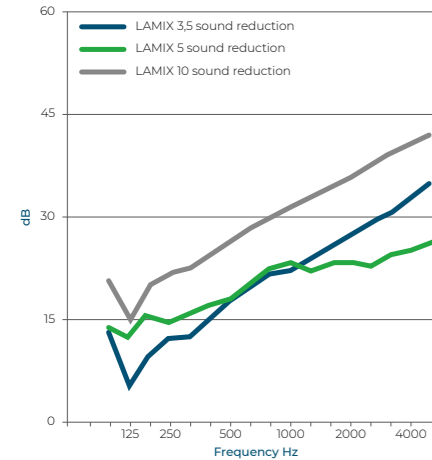


LAMIX IGN



LAMIX ALU

SOUND REDUCTION INDEX

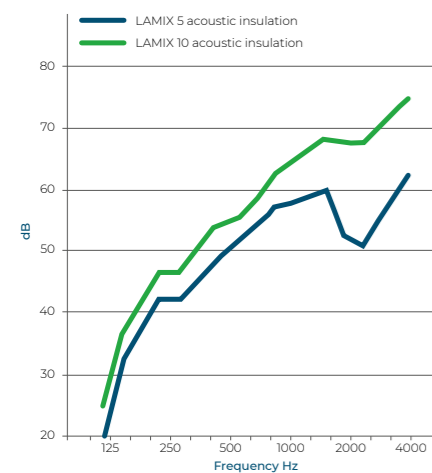


Characteristics

REFERENCE	WEIGHT	THICKNESS
LAMIX 3,5	3,5 Kgs/m ²	1,85 mm
LAMIX 5	5,0 Kgs/m ²	2,60 mm
LAMIX 10	10 Kgs/m ²	5,50 mm

CODE	REFERENCE	PACKAGING	PALLET
PA01563	LAMIX 3,5	Rolls 5000 x 1000 mm	70 rolls (350 m ²)
PA07412	LAMIX 3,5 ADH	Sheets 1000 x 1400 mm	200 sheets (280 m ²)
PA07773	LAMIX 3,5 IGN	Sheets 1000 x 1200 mm	200 sheets (240 m ²)
PA07559	LAMIX 3,5 ALU	Reel 100 ml x 1450 mm	1 reel (145 m ²)
PA00008	LAMIX 5	Rolls 5000 x 1000 mm	50 rolls (250 m ²)
PA07410	LAMIX 5	Sheets 1000 x 1000 mm	100 sheets (100 m ²)
PA07409	LAMIX 5 ADH	Sheets 1000 x 1400 mm	140 sheets (196 m ²)
PA07774	LAMIX 5 IGN	Sheets 1000 x 1200 mm	150 sheets (180 m ²)
PA04568	LAMIX 5 ALU	Reel 250 ml x 1000 mm	1 reel (250 m ²)
PA07413	LAMIX 10	Sheets 1000 x 1400 mm	70 sheets (98 m ²)
PA07414	LAMIX 10 ADH	Sheets 1000 x 1400 mm	70 sheets (98 m ²)
PA07775	LAMIX 10 IGN	Sheets 1000 x 1200 mm	75 sheets (90 m ²)

ACOUSTIC INSULATION



PR 3,5

Two layers composed of a high-density synthetic membrane of 3.5 Kg/m² laminated with 18mm thick textile fibre mat.
Suitable for covering pipes, building walls, slabs and floors.



Types of PR 3.5



PR 3,5

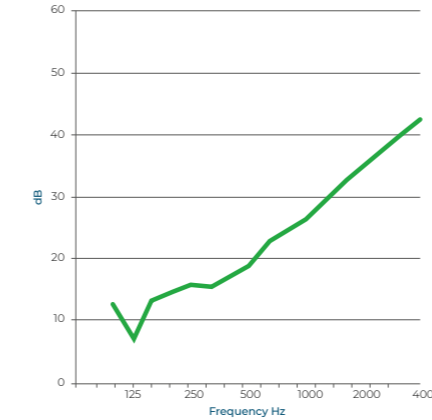


PR 3,5 ADH



PR 3,5 ALU ADH

SOUND REDUCTION INDEX

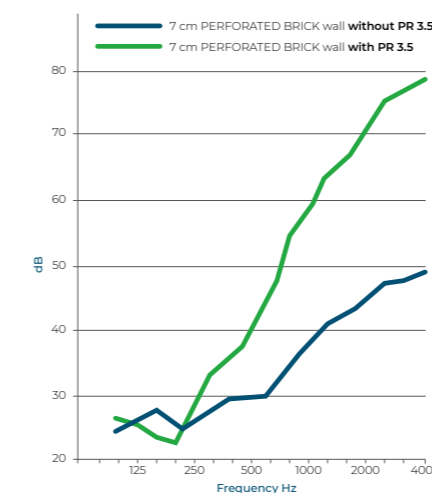


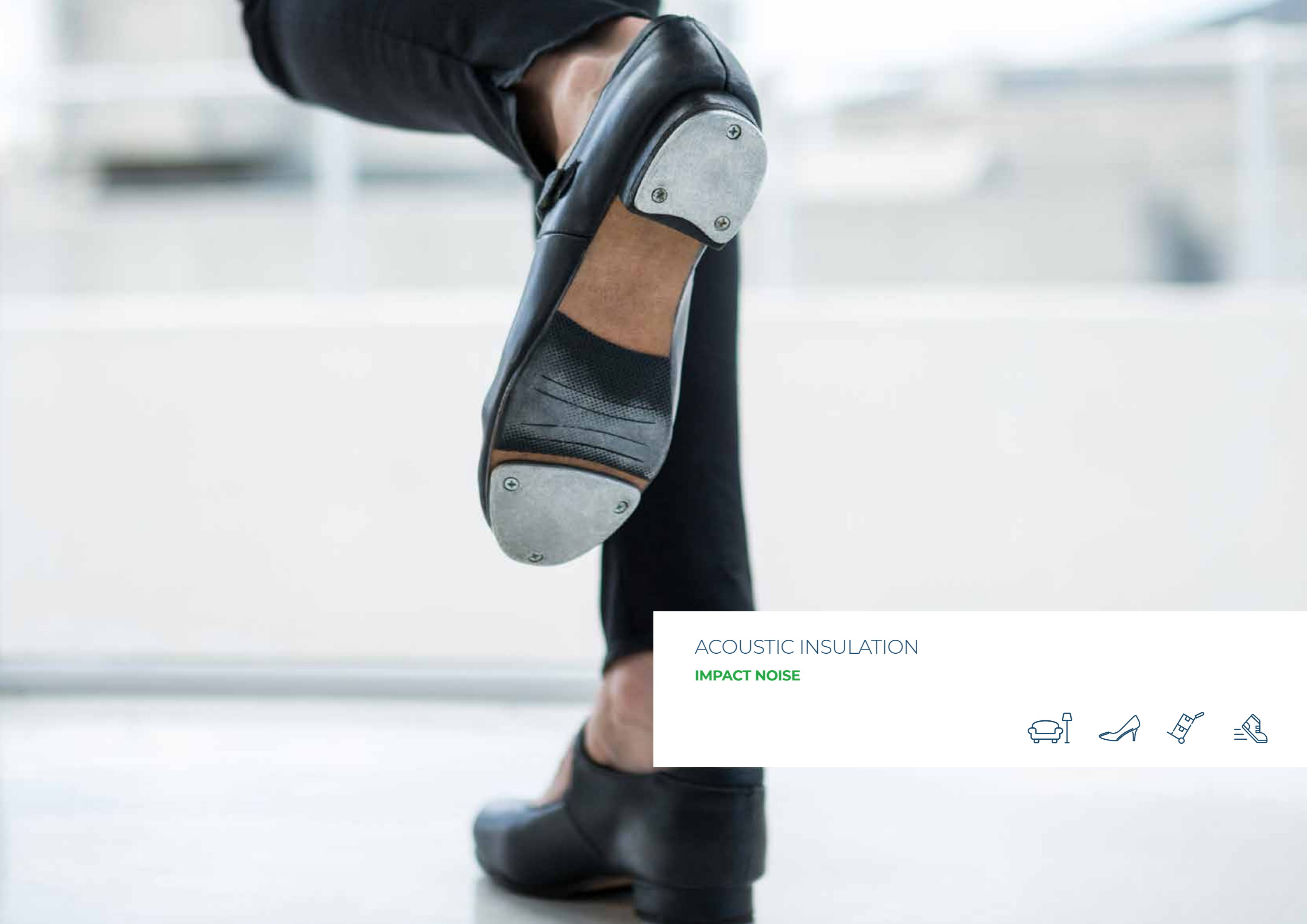
Characteristics

REFERENCE	WEIGHT	THICKNESS
PR 3,5	4,8 Kgs/m ²	18 mm +/- 3mm
PR 3,5 ALU	5,0 Kgs/m ²	18 mm +/- 3mm

CODE	REFERENCE	PACKAGING	PALLET
PA00002	PR 3,5	Rolls 5000 x 1000 mm	16 rolls (80 m ²)
PA07675	PR 3,5 ALU	Rolls 5000 x 1000 mm	16 rolls (80 m ²)

ACOUSTIC INSULATION





ACOUSTIC INSULATION

IMPACT NOISE

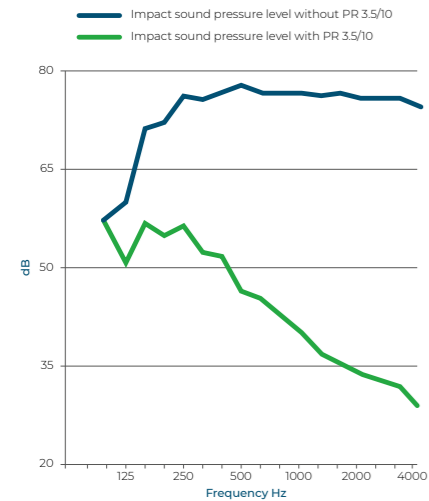


PR 3,5/10

Two layers composed of a high-density synthetic membrane of 3.5 Kg/m² laminated with 10mm thick textile fibre mat. Ideal in areas for public use and trolleys, under slabs/mortar.



Lw: 30 dB
 IMPROVEMENT OF ACOUSTIC INSULATION AGAINST IMPACT NOISE



Characteristics

REFERENCE	WEIGHT	THICKNESS
PR 3,5/10	4,0 Kgs/m ²	10 mm +/- 3mm

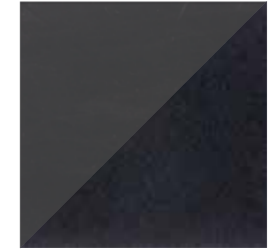
CODE	REFERENCE	PACKAGING	PALLET
PA07581	PR 3,5/10	Rolls 5000 x 1000 mm	25 rolls (125 m ²)

Installation examples

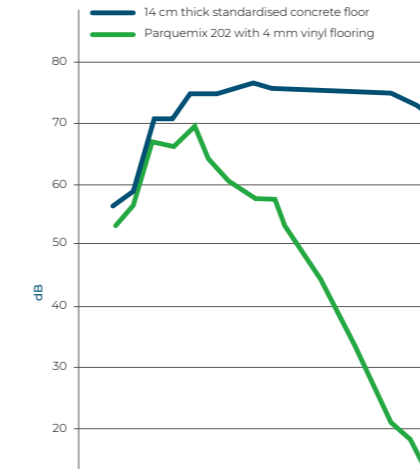


PARQUEMIX 202

Two layers composed of a high-density synthetic membrane of 2 Kg/m² laminated with 2mm thick non-woven fibre mat. Suitable for the attenuation of impact noise under lamination. Ideal in homes, for noise from chairs, shoes, tables and light objects falling.



Lw: 22 dB
 IMPROVEMENT AGAINST IMPACT NOISE



Characteristics

CODE	REFERENCE	PACKAGING	PALLET
PA07720	PARQUEMIX 202	Rolls 900 X 8000 mm	30 rolls 240ml (216 m ²)

Installation examples





ACOUSTIC &
INSULATION
TECHNIQUES