

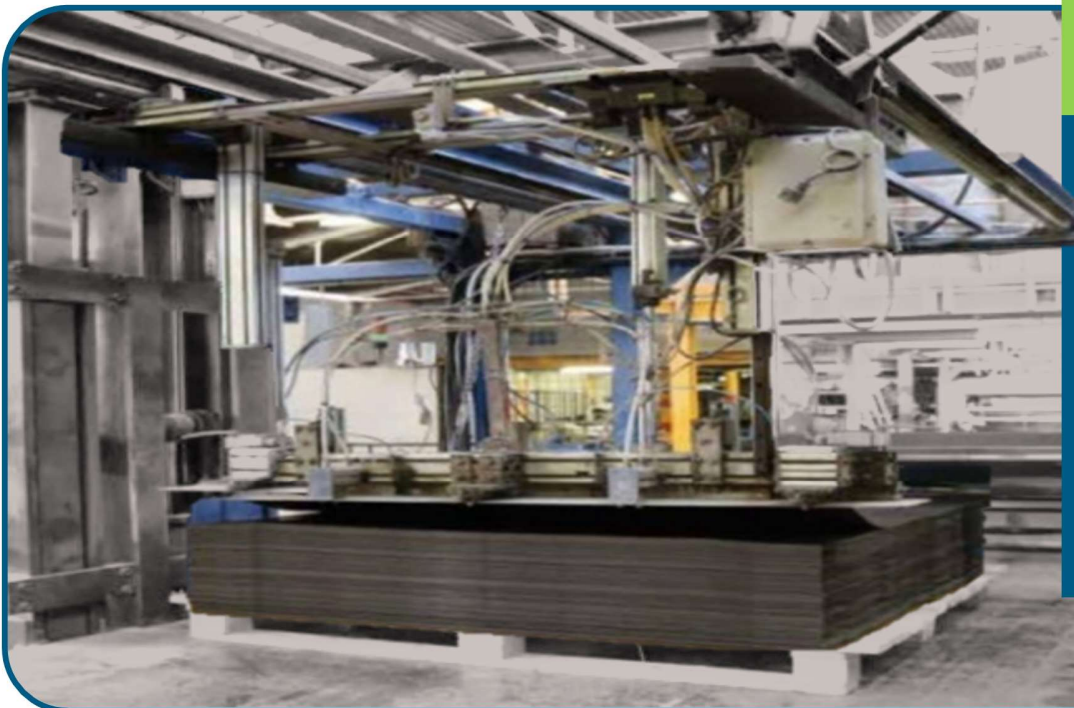
**AIT**

**BUILDING**

# ACOUSTIC MATERIALS

for the **BUILDING SECTOR**

DEVELOPMENT & MANUFACTURE



Centro para el Desarrollo Tecnológico Industrial



Unión Europea

Fondo Europeo de Desarrollo Regional  
"Una manera de hacer Europa"

**AIT BUILDING**

Is a brand of



ACOUSTIC & INSULATION TECHNIQUES

[www.acousticsit.es](http://www.acousticsit.es)

# AITGROUP



**HEADQUARTERS**  
BARCELONA – SPAIN



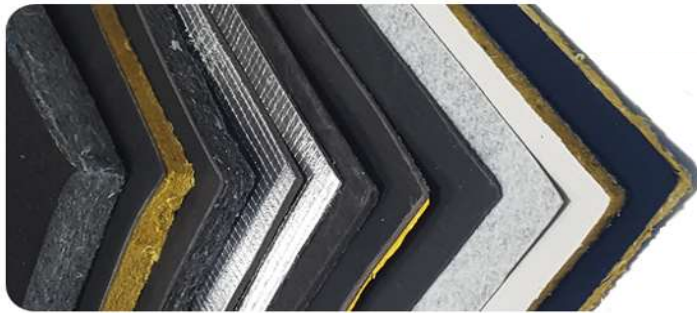
SOSNOWIEC – POLAND



AUGUSTA - USA

# WHAT DO WE DO?

AIT BUILDING develops and manufactures materials and Laminates for acoustic control. When incorporated into construction systems or placed on surfaces, they provide considerably better noise control.



# ADVANTAGES OF OUR MATERIALS

EASY HANDLING

LAMIX (AIT)

OTHERS



Our core materials are 100% recyclable:








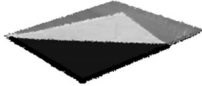








Our materials undergo strict quality controls and are made without asphalt, requiring no protective covering as there is no oil migration, odour or shrinkage.

External coverings restrict elastic properties

# COMPARISON BETWEEN ACOUSTIC SHEETS

## BITUMEN *Versus* SYNTHETIC

	BITUMEN		SYNTHETIC	
PHOTO				
	With film		Without film	
RAW MATERIAL				
	Asphalt	Crude oil	Polymers	Mineral Fillers
SECTOR FOR WHICH IT WAS CREATED				
	Waterproofing	External covers	Acoustics Industry	Automotive Industry
ADHESIVE VERSION				
	Bitumen Adhesive		Transfer Adhesive	
DURABILITY				
	Degrades over time		Long life	
	✗		✓	
	Can produce hydrocarbon-like odour		Very low odor emission	
	✗		✓	
	Becomes sticky, oil migration		Non-sticky, no migration	
	✗		✓	
	Hardens, can crack		Does not crack	

# MATERIAL GUIDE

## ACOUSTIC INSULATION

### *air borne noise*

**LAMIX**



**LAMIX IGN**

EUROCLASS Bs1d2



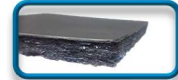
**LAMIX ADH**



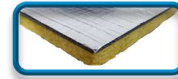
**LAMIX ALU**



**PR 3,5**



**PR 3,5 ALU**



### *impact noise*

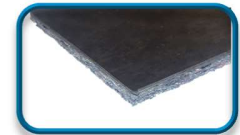
**PARQUEMIX 202**

Lw 22dB



**PR 3,5/10**

Lw 30dB



## ACOUSTIC ABSORPTION

### *air chamber*

**POROMIX**

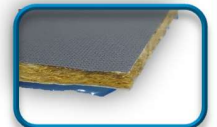


**AIRMIX**



### *wall covering*

**ECOMIX REVERB**



**ECOMIX DELUXE**



# ACOUSTIC INSULATION

## LAMIX

High-density synthetic membrane that increases acoustic attenuation levels on thin surfaces.

Suitable between plasterboards, metal sheet, wood panels and disconnection parts to minimize structural noise transmission.



### LAMIX TYPES



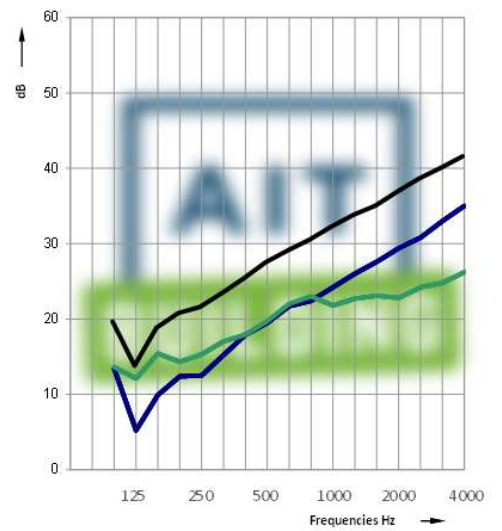
CHARACTERISTICS		
Reference	Weight	Thickness
LAMIX 3,5	3.5 Kg/m <sup>2</sup>	1.85 mm
LAMIX 5	5.0 Kg/m <sup>2</sup>	2.60 mm
LAMIX 10	10 Kg/m <sup>2</sup>	5.00 mm

CODE	REFERENCE	SIZE	PALLET
PA01563	LAMIX 3,5	Rolls 5000 x 1000 mm	70 rolls ( 350 m <sup>2</sup> )
PA07412	LAMIX 3,5 ADH	Sheets 1000 x 1400 mm	200 sheets ( 280 m <sup>2</sup> )
PA07773	LAMIX 3,5 IGN	Sheets 1000 x 1200 mm	200 sheets ( 240 m <sup>2</sup> )
PA07559	LAMIX 3,5 ALU	Jumbo-rl 100mx1450 mm	1 jumbo rll ( 145 m <sup>2</sup> )
PA00008	LAMIX 5	Rolls 5000 x 1000 mm	50 rolls ( 250 m <sup>2</sup> )
PA07410	LAMIX 5	Sheets 1000 x 1000 mm	100 sheets ( 100 m <sup>2</sup> )
PA07409	LAMIX 5 ADH	Sheets 1000 x 1400 mm	140 sheets ( 196 m <sup>2</sup> )
PA07774	LAMIX 5 IGN	Sheets 1000 x 1200 mm	150 sheets ( 180 m <sup>2</sup> )
PA04568	LAMIX 5 ALU	Jumbo-rl 250ml x1000 mm	1 jumbo-rll ( 250 m <sup>2</sup> )
PA07413	LAMIX 10	Sheets 1000 x 1400 mm	70 sheets ( 98 m <sup>2</sup> )
PA07414	LAMIX 10 ADH	Sheets 1000 x 1400 mm	70 sheets ( 98 m <sup>2</sup> )
PA07775	LAMIX 10 IGN	Sheets 1000 x 1200 mm	75 sheets ( 90 m <sup>2</sup> )

### SOUND REDUCTION INDEX R'<sub>w</sub>

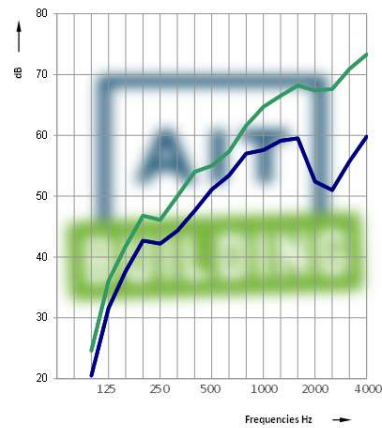
UNE-EN ISO 140-3

- LAMIX 3,5 Sound reduction R<sub>w</sub> = 23 dB
- LAMIX 5 Sound reduction R<sub>w</sub> = 22 dB
- LAMIX 10 Sound reduction R<sub>w</sub> = 32 dB



### ACOUSTIC INSULATION

- Partition with 2 Plasterboard in each side without LAMIX 5
- Partition with 2 Plasterboard in each side with LAMIX 5



# ACOUSTIC INSULATION

## PR 3,5

High-density synthetic membrane laminated with 18-mm thick textile fiber agglomerated with thermosetting resin.

For covering pipes, brick walls, ceiling slabs and reducing impact noise..

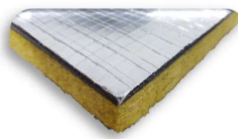


### PR 3,5 TYPES

PR 3,5



PR 3,5 ALU



PR 3,5/10



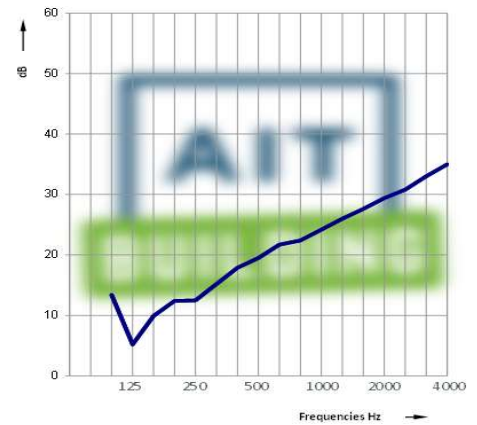
### CHARACTERISTICS

Reference	Weight	Thickness
PR 3,5	4.8 Kg/m <sup>2</sup>	18 mm +/- 3mm
PR 3,5 ALU	5.0 Kg/m <sup>2</sup>	18 mm +/- 3mm
PR 3,5/10	4.0 Kg/m <sup>2</sup>	10 mm +/- 3mm

### SOUND REDUCTION INDEX

R'  
UNE-EN ISO 1140-3

PR 3,5 Sound reduction Rw = 25 dB

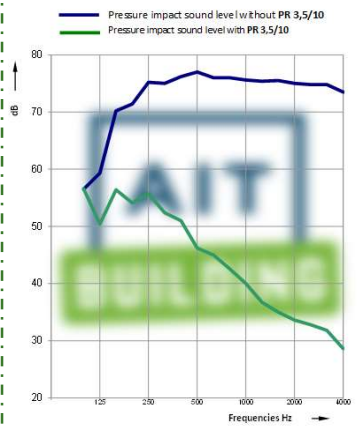


### THERMAL CONDUCTIVITY

TEXTIL FIBER	0,034	$\lambda = (w / M K)$
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### ACOUSTIC INSULATION FROM IMPACT NOISE

UNE-EN ISO 10140-3:2011  
UNE-EN ISO 10140-1:2016 (Anexo H)

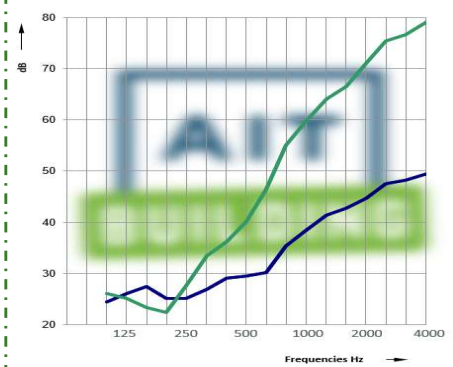


Global reduction of noise pressure level from impact noise  $\Delta L_w$ : 30 dB



### ACOUSTIC INSULATION

7 cm BRICK WALL without PR3,5  
7 cm BRICK WALL with PR3,5



## ACOUSTIC INSULATION

# PARQUEMIX 202

2 Kg/m<sup>2</sup> high-density membrane laminated with non-woven agglomerate (2mm)

For impact noise reduction under Laminates.  
Suitable in homes for furniture and footstep noise and falling light objects.

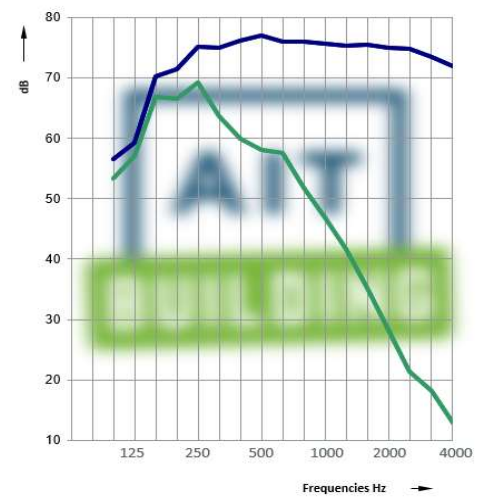


REFERENCE	SIZE	PALLET
<b>PARQUEMIX 202</b>	Rollos 900 X 8000 mm	30 rolls   240ml ( 216 m <sup>2</sup> )

### IMPACT NOISE IMPROVEMENT

UNE-EN ISO 10140-3:2011 (with A1:2015) y UNE-EN ISO 10140-1:2016 (Annex H)

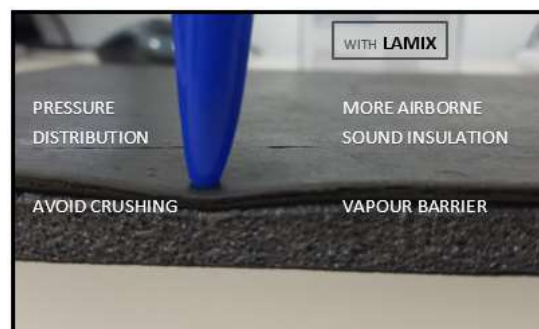
— CONCRETE FLOORING 14 CMS  
— + PARQUEMIX 202 with 4mm laminate



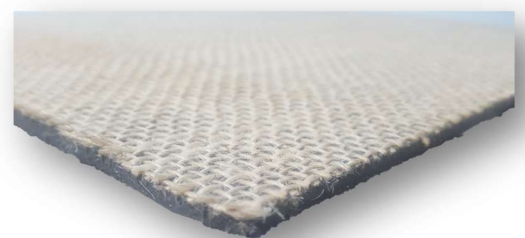
Pressure noise reduction to impact noise Lw **22 dB**



## ANOTHER ANTI IMPACT NOISE SOLUTIONS



## SPECIAL ACOUSTIC PRODUCTS UNDER REQUIREMENTS





## ACOUSTIC ABSORPTION

### POROMIX

Cotton fibres agglomerated with thermosetting resin.

For thermal insulation, acoustic absorption and soundproofing against impact noise.



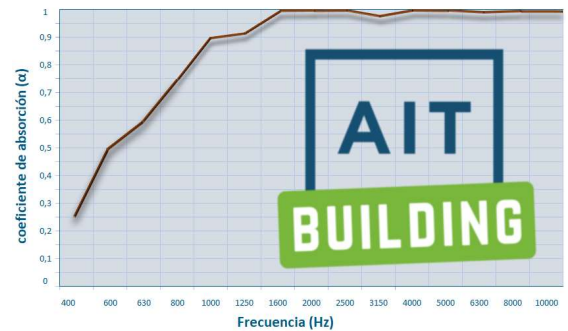
### AIRMIX



REFERENCE	SIZE
<b>POROMIX 18</b>	Rolls 1000 X 50,000 mm

THERMAL CONDUCTIVITY		
TEXTIL FIBER	0,034	$\lambda = (w/ M K)$

**POROMIX 20**  
SIN CÁMARA DE AIRE

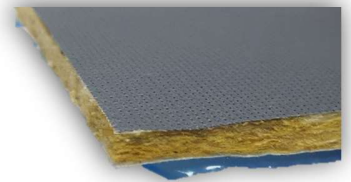


## ACOUSTIC ABSORPTION – wall covering inside rooms

### ECOMIX REVERB

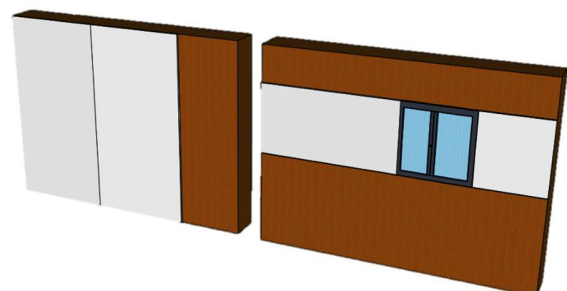
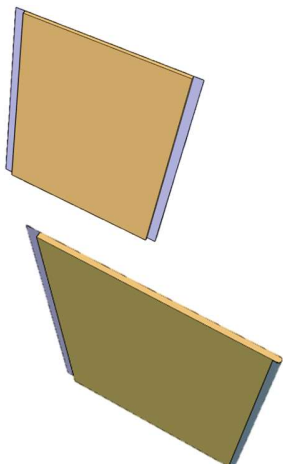
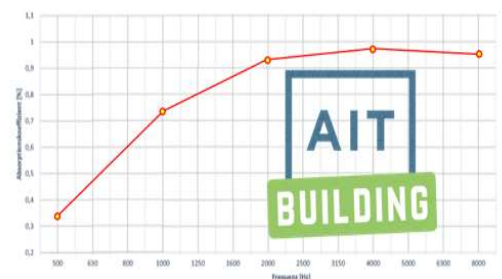
Acoustic absorber composed of cotton agglomerated with thermosetting resin, aesthetic fabric finish and adhesive underside for easy laying.

Placed directly on the wall for reducing reverberation inside rooms and spaces with high human voice levels. Shops, meeting rooms, offices, restaurants, call centers, indoor fun Parks, hotels, schools, etc.



REFERENCE	SIZE	THICKNESS
<b>ECOMIX REVERB</b>	Rollos 1720 X 12,500 mm	10 mm

Alphakabine; Absortion Planware 1,2m²





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