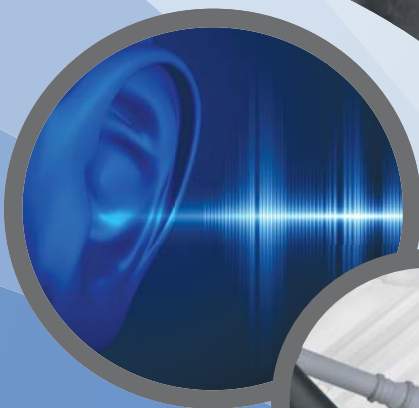



# AEROSOUND

## ACOUSTIC SOLUTIONS



**CLASS 0**

 **Fraunhofer**  
IBP



D.A.R.L.



# AEROSOUND ACOUSTIC SOLUTIONS

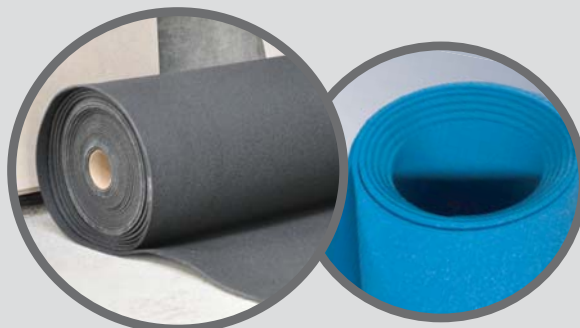
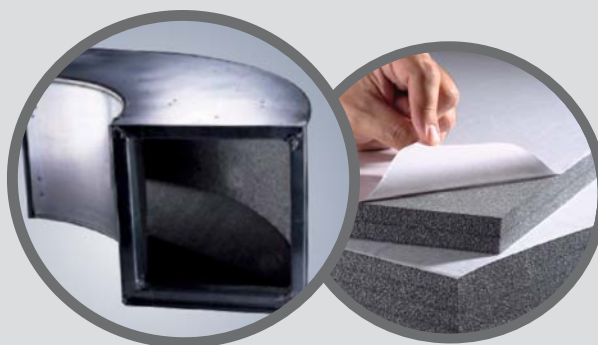
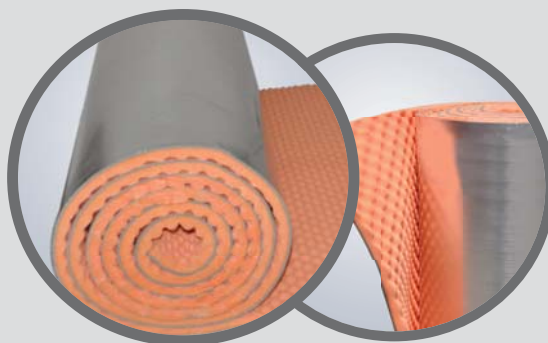
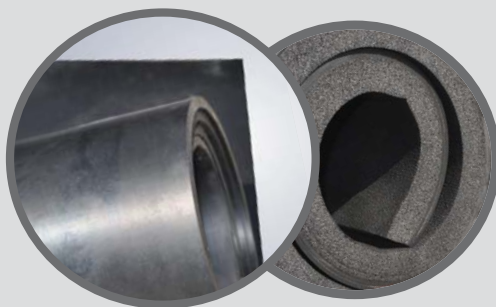


## ACOUSTIC COMFORT



During the construction of home or an office, we focus our attention to the appropriate standard of the building, air conditioning, proper ventilation, orientation towards cardinal points of the compass, sun exposure or the distance from noise sources, such as busy roads. But often we forget about the thing that is imperceptible the acoustic comfort. The sounds of ventilation, sanitation, equipment such as lifts and compressors, and of course the sounds generated by our neighbors or even precipitation all this can cause noise disruption.

Providing adequate acoustic comfort has a substantial impact on our well-being at home, as well as efficiency and concentration at work. The most effective solution is to ensure sound isolation of each room at the stage of construction of the building and use of sound absorptive materials. However, thanks to modern technology, it is possible to increase the acoustic comfort even in projects already completed. For the best results it is worth to entrust this matter to professionals who will select the appropriate materials and install them expertly.





## **AeroSound HD - Noise Barrier**

Aerosound HD is a solid flexible rubber 4.5 – 5 kg/m<sup>2</sup> weight and 3mm thickness rendering high performance as a sound barrier, as the product itself or along with other Aerofoam products. The flexible & tough structure resist sound waves reducing noise transmission. Aerosound HD is produced and supplied considering large number of applications and market requirements.

The Aerosound HD is ideal to use in hotels and manufacturing facilities. It can reduce road noise and noise coming from compressors and generators. Does not contain fibers, asbestos, heavy metals or bitumic components.

*Thickness (3mm,  $\pm 1$ mm Tolerance) + Size (1x1m), (1x2m)*

## **AeroSound SL+ - Acoustic Lagging**

Semi-open cell elastomeric foam covered with solid high mass rubber. Both layers are integrated during production process. Product is designed to reduce sound propagation coming from various sources. Product can be an excellent sound barrier as it is, or as an additional layer on existing partition. Can be used as a single product or in combination with other Aerofoam products. Moreover Aerosound SL+ can be used when thermal and acoustic insulation are required at the same time.

*Thickness (8,13,20, 25\*mm) + Size (1x1m,1x2m)*

*\*25mm thickness are available upon request.*

## **AeroSound SLM - Acoustic Lagging**

Convuluted PU foam bonded to a flexible MLV-mass loaded vinyl acoustic barrier with pure aluminium foil.

**Examples of applications:** covering waste water or drainage pipes, garbage pipes, walls and kind of partition, ventilation fan covering, compressors units covering, engine compartments, air duct sound insulation (outside).

*Thickness (25mm) + Size (1.35 x 2.5 / 5m)*

## **AeroSound LX, LN - Acoustic Duct Liner**

Aerosound LX Acoustic Liner is a flexible cross-linked semi open cell polyolefin foam with or without pressure sensitive adhesive on one side. Aerosound Duct Liner is designed to reduce the sound pressure level inside air ducts, but it can be successfully used in operating cabins, silencers, decompression boxes and all kind of casing. Aerosound acoustic duct liner is free of harmful irritants making it safe to handle and install. Aerosound Acoustic duct liner is an inherently fire resist-ant and high temperature foam with excellent sound absorption properties.

Aerosound LN Acoustic Liner is flexible elastomeric foam, Aerosound LN has a semi open cell structure which is suitable for thermal insulation and sound absorption, mainly inside the ducts. Due to the high chemical and biological resistance, product has a long technical life.

*Thickness (15mm, 25mm) + Size (1,2x20m & 1.2 x 2.4m)*

*\*Both products are available as Self-Adhesive.*

*\*Other thickness are available upon request.*

## **AeroSound SF - Acoustic Underlay**

Aerosound SF (silent floor) is a flexible cross linked closed cell polyolefin foam with good quality, medium density underlay for all floating floor applications.

Aerosound SF is designed to reduce impact of sound in floating floor systems. Designed for use in both commercial and residential buildings, such as apartments, hotels, hospitals, schools and universities to reduce the sound transmission level to below floors. Usual application is to separate concrete base floor from final screed or screed from final finishing. Used in corners (between wall and floor) for this same reason.

*Thickness (3,5,8,10mm) + Size (1,2x20m)*

*\*Other thickness upon request.*



# TECHNICAL DATA

## AeroSound SL+ - sheet (8,13,20, 25mm) - Acoustic Lagging

Property	Value/ Assestment	Tested acc. to:
Color	Black	
Available size	1mx1m or 1mx2m ( $\pm 2.5\%$ tolerance)	
Thickness	8,13,20,25mm ( $\pm 1.5\text{mm}$ tolerance)	
Density of elastomeric foam	45-65 kg/m <sup>3</sup>	
Density of solid rubber	1560-2000kg/m <sup>3</sup>	
Weight	8mm (5.27kg/m <sup>2</sup> -5.32kg/m <sup>2</sup> ) 13mm (5.45kg/m <sup>2</sup> -5.75kg/m <sup>2</sup> ) 20mm (6.00kg/m <sup>2</sup> -6.2kg/m <sup>2</sup> ) 25mm (6.12kg/m <sup>2</sup> -6.3kg/m <sup>2</sup> )	
Sound Reduction Index <b>R<sub>w</sub></b>	(C;Ctr) = 25 dB (-1;-4)dB	EN ISO 140-3, ASTM E413 & ASTM E90
Sound Transmission Class ( <b>STC</b> )	25 dB	ASTM E90, ASTM E413
Sound Reduction (waste water system)	12-17 dB	as per EN ISO 14366
Thermal conductivity of foam core	0.034 W/mK at 23°C	as per ASTM C518 standard

## AeroSound SLM - sheet 25mm - Acoustic Lagging

Property	Value/ Assestment	Tested acc. to:
Available size	1.35m x 2.5m / 5m ( $\pm 2.5\%$ tolerance)	
Thickness / Weight	25mm ( $\pm 2\text{mm}$ tolerance) / 5 kg /m <sup>2</sup> $\pm 5\%$	
Sound Transmission Class ( <b>STC</b> )	26 dB	ASTM E90, ASTM E413
Sound Reduction Index <b>R<sub>w</sub></b>	(C;Ctr) = 26 dB (-1;-4)dB	EN ISO 140-3, ASTM E413, ASTM E90
Sound Reduction (waste water system)	12-14 dB	as per EN ISO 14366
Thermal Conductivity	0.042 W/mK at 23°C	as per ASTM C518 standard
Total VOC emission rate	<0.5 mg/m <sup>2</sup> /hr	as per ASTM D5116
Operating temperature range (°C)	-40°C to +100°C	Continuous

## AeroSound LX, LN (15,25mm) - Acoustic Duct Liner

Property	Value/ Assestment		Tested acc. to:																				
	AS LX - XLPE Based	AS LN - NBR Based																					
Color	Grey (other colors on request)	Black																					
Available size	1,2mx20m (±20mm tolerance)																						
Thickness	15,25mm (-1mm+1.5mm tolerance)																						
Density of foam	30kg/m³ (±10% tolerance)	60kg/m³ (±10% tolerance)																					
1sq. m weight	15mm (0.34kg/m²-0.41kg/m²) 25mm (0.56kg/m²-0.69kg/m²)	15mm (0.81kg/m²-0.99kg/m²) 25mm (1.35kg/m²-1.65kg/m²)																					
Noise reduction coefficient α	<table><tr><td colspan="2">AeroSound LX</td></tr><tr><td>Thickness</td><td>NRC</td></tr><tr><td>15mm</td><td>0.20</td></tr><tr><td>25mm</td><td>0.35</td></tr><tr><td>40mm</td><td>0.40</td></tr></table>	AeroSound LX		Thickness	NRC	15mm	0.20	25mm	0.35	40mm	0.40	<table><tr><td colspan="2">AeroSound LN</td></tr><tr><td>Thickness</td><td>NRC</td></tr><tr><td>15mm</td><td>0.35-0.45</td></tr><tr><td>25mm</td><td>0.40-0.50</td></tr><tr><td>40mm</td><td>0.50-0.60</td></tr></table>	AeroSound LN		Thickness	NRC	15mm	0.35-0.45	25mm	0.40-0.50	40mm	0.50-0.60	As per ISO 354
AeroSound LX																							
Thickness	NRC																						
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40mm	0.50-0.60																						
Fire resistance	Class O (FSI: 15 & SDI: 25)	Class O (FSI: 25 & SDI: 30)	as per BS 476 Part 6 & 7 and ASTM E84																				
Maximum air velocity	25.4 m/s (5000fpm)																						
VOC level	<4µg/m2/hr		(as per ASTM D5116)																				
Antifungal	Yes		as per ASTM G21																				

## AeroSound SF - sheet (3,5,8,10mm) Acoustic Underlay

Property	Value/ Assestment				Tested acc. to:
Color	Blue & Grey (other colors on request)				
Available size	1,2mx20m (±20mm tolerance)				
Available thickness	3,5,8,10mm (-1mm+1.5mm tolerance)				
Density of foam	25 kg/m³ (±10% tolerance)				
Max. load	400kg/m²				
Water asorption	0.05 [Kg/m²]				BS EN 12087:1997
Impact sound reduction improvement Δ L	3mm	5mm	8mm	10mm	ASTM E 1007 ISO 140-7
	15dB	19dB	21dB	24dB	

**Disclaimer:** This information on Hira Industries products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.

UAE/15/1017-VER AS-0.2

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