

AEROFOAM[®]



Thermal Insulation & Acoustic Solution
for Railway & Automotive Industry

FOAM SOLUTIONS FOR RAILWAYS & AUTOMOTIVE INDUSTRY

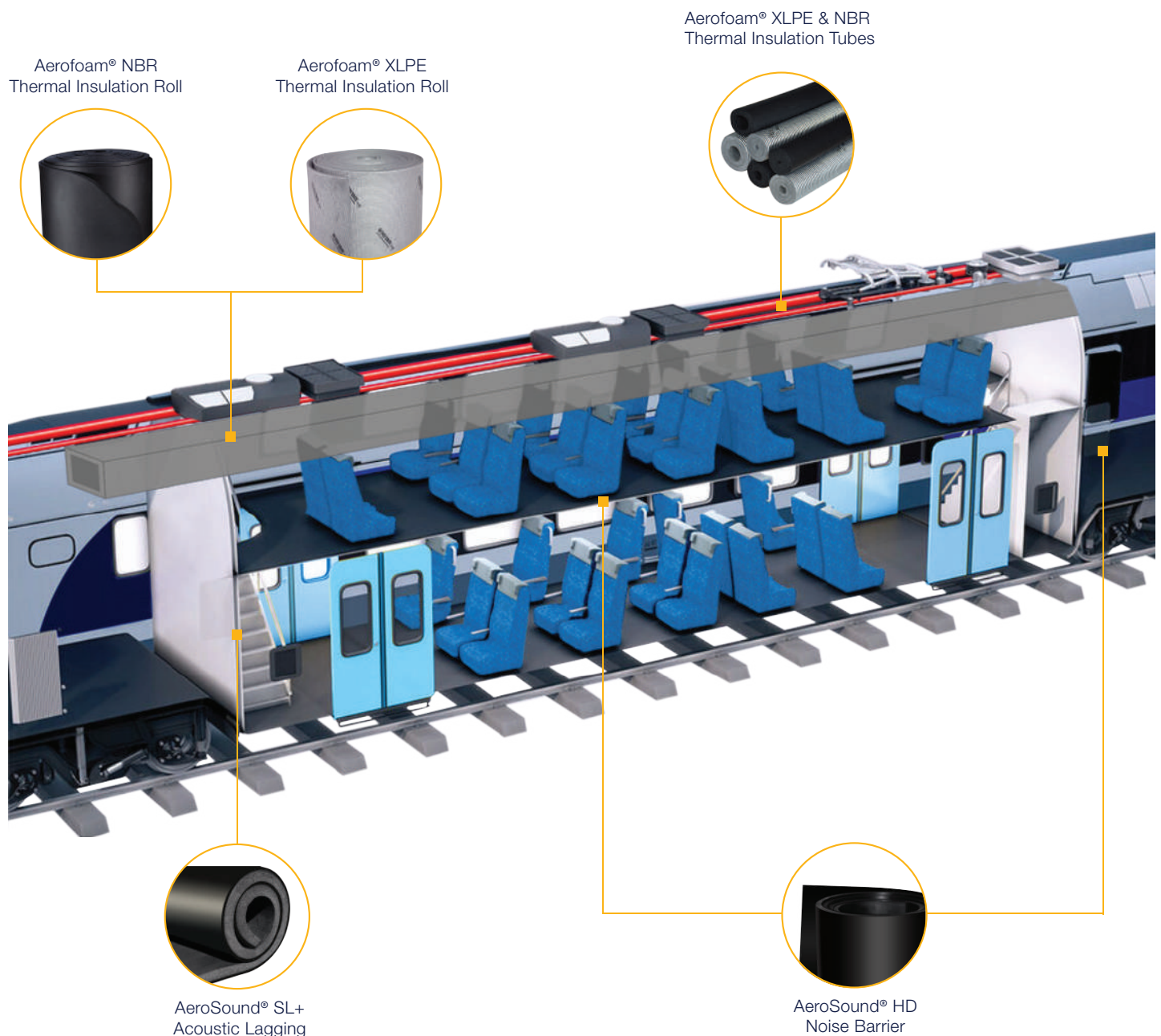
In the railway and automotive industry, lowering the weight of an average vehicle is a challenge. Aerofoam® can supply the foam that lowers the overall weight of the vehicle and helps in reducing fuel consumption. Moreover, it is chemically neutral, which helps in preventing corrosion and stays hygienic. Aerofoam® automotive foams can be used in different applications like acoustic and thermal insulation, and in some cases as water seal. It also complies with the fire safety regulations for railway and automotive industries which assures the highest safety of passengers in case of fire.

AeroSound® can be useful as a provider of customized solutions to improve acoustic comfort in trains and other types of mass transportation. It is often used with equipment as thermal and acoustic solution for compressors, fans, engines, pumps, and AC units.

Technical foams can be custom made and are available in different structures, colors, densities and mechanical features. Therefore it is suitable as the best solution for mass transportation, special utility, medical, military, off-road vehicles and many more.

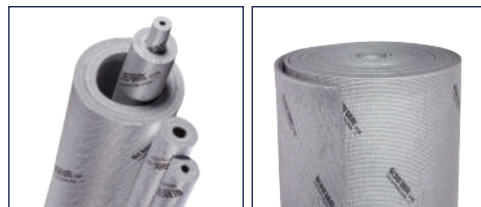
APPLICATIONS

-  AC Ducts
-  AC Pipes
-  Ventilation
-  Heating
-  Lavatory
-  Floor
-  Doors
-  Structure (walls and roof)
-  Power Pack



AEROFOAM® XLPE POLYOLEFIN THERMAL INSULATION FOAM

Aerofoam® XLPE Rolls, Sheets and Tubular shapes are made of cross-linked closed cell polyolefin thermal insulation foam with factory applied aluminum foil for mechanical protection designed to control condensation and energy losses in cooling and heating systems.



FEATURES

- Hygienic foam
- Long technical life
- Energy loss control & stable thermal performance
- Excellent water vapor transmission properties
- Low water absorption
- Low & stable thermal conductivity
- Ease of installation with less accessories & manpower compared to traditional systems

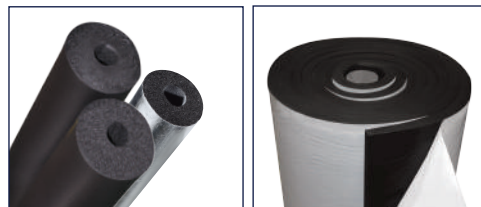
TECHNICAL DATA

Property	Value / Assessment	Tested acc. to:
Temperature range Max. line temperature Min. line temperature <small>Please consult our technical team for applications with temperatures below -40 °C.</small>	105 °C (80 °C with PSA*) -80 °C (-30 °C with PSA*)	DIN EN 14706 ASTM C411
Density	25 kg/m ³ (±3 kg/m ³)	IS 7888
Thermal conductivity	0.034 W/m·k at 23 °C	ASTM C518
Water vapor transmission rate	0.0094 g/hr.m ²	ASTM E96
Water absorption	0.00002 kg/m ²	JIS K 6767:1976
Fire & smoke characteristic		
Lateral spread	Complies (EN 45545-2 R1, HL3 RATING)	ISO 5658 Part 2
Smoke density	Complies (EN 45545-2 R1, HL3 RATING)	ISO 5659 Part 2
Smoke toxicity	Complies (EN 45545-2 R1, HL3 RATING)	ISO 5659 Part 2
Heat release rate	Complies (EN 45545-2 R1, HL3 RATING)	ISO 5660 Part 1
Compression set	19.76% (25 mm thickness)	ASTM D3575
Resistance to fungi	Zero Growth	ASTM G21
Resistance to bacteria	Excellent	ISO 22196

*PSA - Pressure Sensitive Adhesive

AEROFOAM® NBR ELASTOMERIC THERMAL INSULATION FOAM

Aerofoam® NBR Rolls, Sheets and Tubes are made of flexible closed cell elastomeric thermal insulation foam designed to control condensation and energy losses in cooling and heating systems. Plain rolls are available with self-adhesive coating.



FEATURES

- Hygienic foam
- Long technical life
- Energy loss control & stable thermal performance
- Excellent water vapor transmission properties
- Low water absorption
- Low & stable thermal conductivity
- Ease of installation with less accessories & manpower compared to traditional systems
- Antifungal & antibacterial
- Low smoke & toxic emission
- High water vapor diffusion resistance

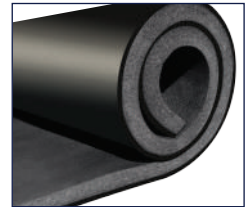
TECHNICAL DATA

Property	Value / Assessment	Tested acc. to:
Temperature range Max. line temperature Min. line temperature <small>Please consult our technical team for applications with temperatures below -40 °C.</small>	105 °C (80 °C with PSA*) -80 °C (-30 °C with PSA*)	ASTM C534
Thermal conductivity	0.034 W/m·k at 24 °C	ASTM C518
Water vapor transmission rate	1.56E-09 g/m ² .s.Pa	ASTM E96
Water absorption	0.1 % by volume	ASTM C209
Flammability & smoke toxicity	Passed	IMO MSC 307(88)
Compression set	24.2 % (13 mm) 20.6 % (32 mm)	ASTM D 3574
Resistance to fungi	Zero growth	ASTM G21
Resistance to bacteria	Excellent	ISO 22196

*PSA - Pressure Sensitive Adhesive

AEROSOUND® SL+ - ACOUSTIC LAGGING

AeroSound® SL+ is a semi open cell flexible elastomeric foam with solid high mass rubber. Both layers are integrated during the production process. The product is designed to reduce sound propagation coming from various sources. It can be an excellent sound barrier as it is or as an additional layer on existing partition. AeroSound® SL+ 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.



TECHNICAL DATA

Properties	Value / Assessment	Tested acc. to:
Color	Black	
Available size	1 m x 1 m or 1 m x 2 m (W: ±20 mm, L: ±50 mm tolerance)	
Thickness	8, 13, 20, 25 mm (±1.5 mm tolerance)	
Reaction to fire	Class 0	BS 476 part 6 & part 7
Density of elastomeric foam	45-65 kg/m³	
Density of solid rubber	1560-2000 kg/m³	
Weight	08 mm (5.27 kg/m²-5.32 kg/m²) 13 mm (5.45 kg/m²-5.75 kg/m²) 20 mm (6.00 kg/m²-6.2 kg/m²) 25 mm (6.12 kg/m²-6.3 kg/m²)	
Sound Reduction Index R_w	(C; Ctr) = 30 dB (-1; -4) dB (13 mm)	EN ISO 10140-2
Sound Transmission Class (STC)	30 dB	ASTM E90, ASTM E413
Sound reduction (wastewater system)	12-17 dB	EN ISO 14366

AEROSOUND® HD - NOISE BARRIER

AeroSound® HD is a solid flexible rubber 4.5 - 5 kg/m² in weight and 3 mm in thickness rendering high performance as a sound barrier by itself or along with other Aerofoam® products. The flexible and tough structure resists sound waves reducing noise transmission. AeroSound® HD is produced and supplied considering large number of applications and market requirements.









It can reduce road noise and noise coming from compressors and generators. It does not contain fiber, asbestos, heavy metals or bitumic components.

TECHNICAL DATA

Properties	Value / Assessment
Color	Black
Available size	1 m x 1 m or 1 m x 2 m (±2% tolerance)
Thickness	3 mm (-0.5 mm, +1 mm tolerance)
Weight	4.5 - 5 kg/m²
Density	1800 - 2100 kg/m³

AEROSOUND® FEATURES:

-  Long technical life
-  Clean & hygienic products
-  Excellent thermal properties
-  Excellent acoustic properties
-  Environment friendly products
-  Sound barrier & sound absorber

AEROFOAM® TAPES



Aerofoam® Tape
NBR Foam



Aerofoam® Tape
XLPE Foam

Disclaimer: This information on Hira Technologies 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.

Hira Technologies Private Limited

Plot I-02 (Part -II) Khed City Zone - DTA Kanhersar, Khed,
Pune - 410 505.

☎ 91 - 2135634400

✉ enquiry@rhira.com 🌐 aerofoam.co.in