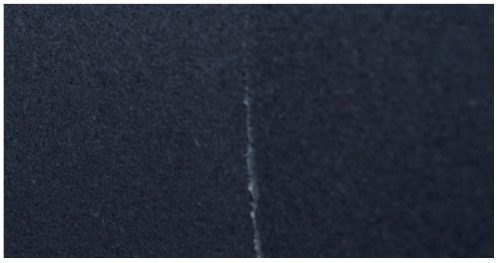
INSTALL IT. ENJOY QUIETNESS.

ArmaSound
RD240

Optimal performance at lower thickness

// Excellent sound absorption behaviour
// Highly hydrophobic, open-cell structure designed to resist water ingress
// Air-flow resistivity and complex pore geometry for maximum acoustic benefit
// Easy application and low maintenance
// Designed for use in demanding environments

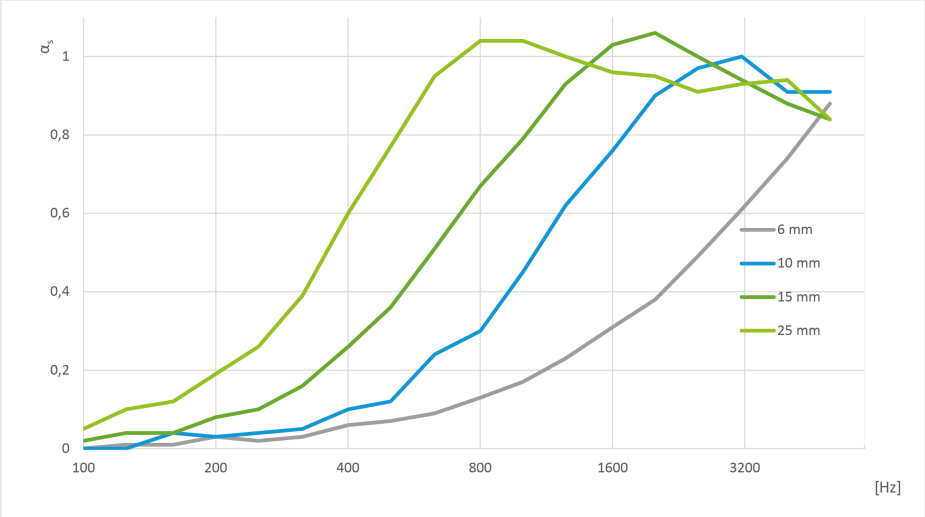


armacell®
ArmaSound®

TECHNICAL DATA - ARMASOUND RD240

Brief description	Highly flexible, hydrophobic, open-cell acoustic insulation material with complex pore geometry.
Material type	Elastomeric foam based NBR/PVC synthetic rubber.
Product colour range	Black
Special features	Excellent sound absorption performance.
Product range	Sheets, 10, 15, 20, and 25mm thickness / width 500 and 1000 mm / length 1000 and 2000 mm.
Applications	In general applications ArmaSound RD240 is used as acoustic insulation material with excellent sound absorption performance in a variety of different applications, e.g. fan-coil units, duct linings, cabinet linings, chiller systems, enclosures, pipelines. In industrial applications ArmaSound RD240 is used as an important component of ArmaSound Industrial Systems to provide acoustic insulation on industrial pipework and vessels ensuring reduction of sound transmission. Further industrial application area is sound absorption performance of enclosures.
Installation	Please refer to the ArmaSound Industrial Systems application manual before installation. Please contact Technical Services.
Remarks	Certificate of Fire Approval by Lloyd's Register (Class 1, BS 476 part 7).

Property	Value / Assessment				Standard / Test method
Temperature range					
Service temperature	Min. °C	Min. °F	Max. °C	Max. °F	EN 14706, EN 14707, EN 14304
	-20	-4	85	185	
Thermal conductivity					
Declared thermal conductivity	θm		0 °C (32 °F)		EN 12667
	λd ⩽ [W/(m·K)]		0.062		
	k ⩽ [Btu-in/(h-ft²-°F)]		0.430		
Fire Performance and Approvals					
Surface spread of flame	Class 1				BS 476 Part 7
Surface burning characteristics	< 25 flame spread index				ASTM E84
Fire performance					
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames.				
Resistance to water					
Water absorption[1]	⩽ 10% by volume after 24 hours				AGI Q 136
Physical attributes					
Density	220 to 360 kg/m³ 13.7 to 25.5 lb/ft³				ISO 845, ASTM D1622
Mechanical properties					
Tensile strength	(MD) 70 to 190 kPa 10.2 to 27.6 psi				ISO 1798[2]
Elongation	50 to 90 %				ISO 1798[2]
Tear strength	0.4 to 1.4 kN/m 2.3 to 8.0 lbf/in				ISO 34-1[3]
Acoustic performance					
Weighted sound absorption coefficient, αw[1]	6 mm: 0.15 (H) Class E 10 mm: 0.25 (H) Class E 15 mm: 0.40 (MH) Class D 25 mm: 0.55 (MH) Class C				ISO 354, EN ISO 11654
Noise reduction coefficient[1]	Thickness (mm)	6	10	15	25	ASTM C423
	NRC	0.15	0.40	0.60	0.70	

Property	Value / Assessment					Standard / Test method
Octave band sound absorption coefficient, α[1]	Thickness	6mm	10mm	15mm	25mm	ISO 354, EN ISO 11654
	125 Hz	0.01	0.01	0.03	0.09	
	250 Hz	0.03	0.04	0.11	0.28	
	500 Hz	0.07	0.15	0.38	0.77	
	1000 Hz	0.18	0.46	0.80	1.03	
	2000 Hz	0.39	0.87	1.03	0.94	
	4000 Hz	0.74	0.94	0.89	0.90	
Absorption coefficient graph						
Weather and UV resistance						
Weather resistance	In all industrial applications, except for enclosures and other similar sound absorption applications, the outer layer of the material must be protected with an adequate covering like Arma-Chek R, metal jacketing or preformed UV-cured GRP (Glass-Reinforced Plastic) cladding. For further information please contact Technical Services.					
Health and environment						
Health aspects	Fibre dust free					
Other technical features						
Additional remarks	For environmental conditions outside the given range please contact Technical Services.					
Adhesion and sealing	ArmaFlex Adhesive 520 or Adhesive HT625 shall be used for reliable adhesion of joints and seams. In some configurations 19 mm wide stainless steel bands with wing clips (or blind rivets) shall be used for fixing and final securing.					
Application conditions[4]	Application temperature: +5 °C to +35 °C (+41 °F to +95 °F) Maximum relative humidity: 80%					
Shelf life[5]	Max. 3 years					
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.					

[1] Based on single test results. Can be used for information / reference only.

[2] Type 1 sample.

[3] Minimum value in Machine Direction (MD) and in Cross Direction (CD). Method B, procedure (b), angle test piece with a nick.

[4] Application temperature (temperature of installation) refers to the ambient temperature during application and the surface temperature of the substrate to which the product is installed.

[5] Shelf life (maximum storage time) is limited to ensure that only currently manufactured products are installed on projects. This limitation is restricted solely to storage of the product and does not affect the lifetime of product after it has been installed.

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ABOUT ARMACELL

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,300 employees and 25 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.

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For more information, please visit:
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