

ArmaSound® RD₂₄₀

HIGH PERFORMANCE SOUND
ABSORPTION INSULATION FOR A QUIETER
ENVIRONMENT



- Excellent sound absorption behaviour
- Easy application and low maintenance
- Designed for use in demanding environments
- Compliant to ISO 15665 Classes A to C and Shell DEP 31.46.00.31-Gen Class D
- Satisfies acoustic classes 6, 7 and 8 according to NORSOK R-004
- Highly hydrophobic, open-cell structure designed to resist water ingress
- Optimum density, air-flow resistivity and complex-pore geometry for maximum acoustic benefit

Technical Data - ArmaSound RD240

Brief description	Highly-flexible, hydrophobic, open-cell acoustic insulation material with complex pore geometry.
Material type	Elastomeric foam based on synthetic rubber.
Colour	Black
Special features	Excellent sound absorption performance.
Product range	Sheets, 10, 15, 20, 25, 30, 40 and 50 mm 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 Arma-Sound 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	For industrial applications it is recommended to consult the ArmaSound Industrial Systems Application manual and other relevant Armacell installation instructions and application manuals. Please consult our Customer Service Centre.
Regulation / approval compliance	Lloyds Approval

Property	Value / Assessment	Standard / Test method
Temperature range		
Service temperature	Max. service temperature	+85 °C +185 °F
	Min. service temperature	-20 °C -4 °F

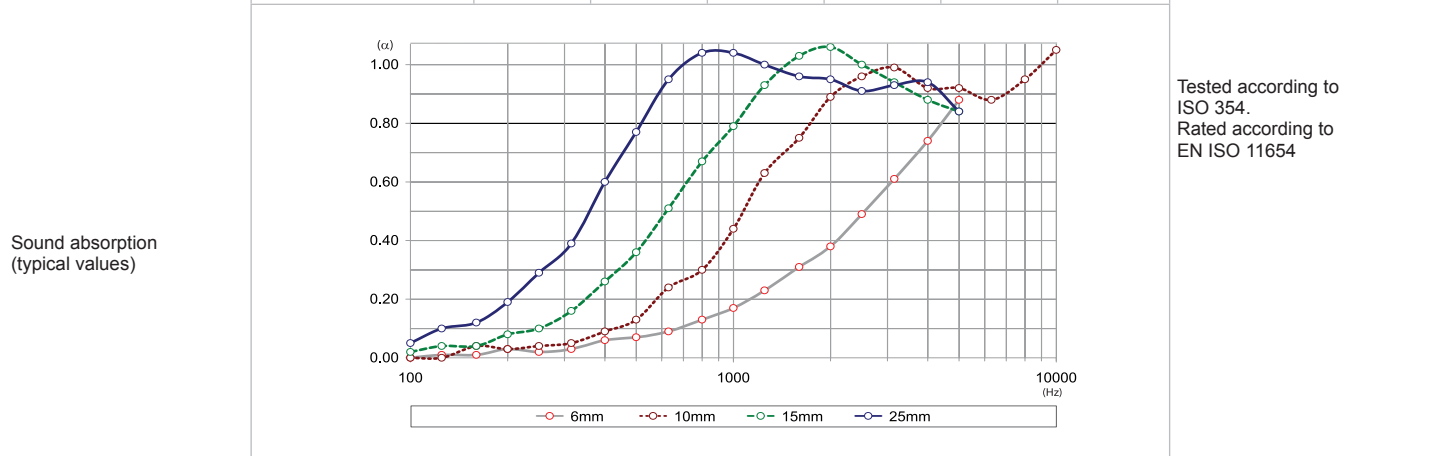
Thermal conductivity		
Thermal conductivity (metric units)	$\lambda \leq 0.062 \text{ W/(m}\cdot\text{K)}$ at 0 °C	Tested according to EN 12667 (Equivalent methods ASTM C177 and C518)
Thermal conductivity (imperial units)	$\lambda \leq 0.430 \text{ Btu}\cdot\text{in}/(\text{h}\cdot\text{ft}^2\cdot\text{°F)}$ at 32 °F	

Fire performance & approvals		
International standards	Class 1	Approved by Lloyds
	< 25 flame spread index*1	
General fire performance	Self extinguishing, does not drip, does not spread flames.	

Density		
Density	220 to 360 kg/m ³	13.7 to 25.5 lb/ft ³

Acoustic performance		
Acoustic insertion loss	When used as part of a system ArmaSound RD 240 complies to ISO 15665 Classes B to C and Shell DEP 31.46.00.31-Gen Class D	Tested according to ISO 3741 (equivalent method ASTM E1222) Classified according to ISO 15665

thickness (mm)	Frequency [Hz]					
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
6	0.01	0.03	0.07	0.18	0.39	0.74
10	0.01	0.04	0.15	0.46	0.87	0.94
15	0.03	0.11	0.38	0.80	1.03	0.89
25	0.09	0.28	0.77	1.03	0.94	0.90



Weighted sound absorption coefficients, α_w :					
thickness (mm)	6	10	15	25	
α_w	0.15 (H)	0.25 (H)	0.40 (MH)	0.55 (MH)	
Class	E	E	D	C	

Noise reduction coefficients (NRC):					
thickness (mm)	6	10	15	25	
NRC	0.15	0.40	0.60	0.70	

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Mechanical properties

Tear strength (MD/CD)	0.4 to 1.4 kN/m		Tested according to ISO 34-1*2
Tensile strength (MD)	70 to 190 kPa	10.2 to 27.6 psi	Tested according to ISO 1798
Elongation (MD)	50 to 90 %		Tested according to ISO 1798

Other technical features

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 consult our Customer Service Centre.		
Health aspects	Fibre dust free		
Water absorption*1	4.4 % by volume		Tested according to AGI Q 136
Application and handling conditions*3	Ambient temperature: Max. relative humidity:	+5 °C to +35 °C 80%	+41 °F to +95 °F
Sealing and adhesion	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.		
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.		
Shelf (storage) life*4	Max. 3 years		

1. Based on single test results which are not monitored in regular frequency. Can be used for information / reference only.
2. Angle test piece with a nick.
3. For environmental conditions outside the given range please contact our Customer Service Centre.
4. Shelf life (maximum storage time) is limited in order to make sure that only currently manufactured products are applied 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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