# ArmaSound<sup>®</sup> RD 240



### HIGH PERFORMANCE ACOUSTIC INSULATION FOR A QUIETER ENVIRONMENT

- Optimal performance at lower thickness
- Excellent sound absorption behaviour
- Combined acoustic and thermal properties
- 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



## RANGE

#### SHEET

Sheet, Self-adhesive sheet

#### RECOMMENDED PRODUCTS





For a complete installation

ArmaFlex 520 adhesive

ArmaFlex RS850 adhesive



## TECHNICAL DATA

ArmaSound RD 240 is a highly-flexible, hydrophobic, open-cell acoustic insulation material with complex pore geometry.

Material type	Elastomeric foam based on synthetic rubber.
Colour	Black
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.
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.
Special features	Excellent sound absorption performance.

Property	Value/Assessment	Standards & Remarks							
Temerature Range									
Max service temperature	+85°C								
Min service temperature	-20°C								
Thermal Conductivity									
	λ ≤ 0.062 W/(m·K) at 0°C	Tested acc. to EN 12667 (Equivalent methods ASTM C177 and C518)							
Fire Performance									
Reaction to fire	Euroclass E	D4225							
International standards	Class 1	ES6591 Tested acc. to BS 476 Part 7 Approved by Lloyds							
	<25 Flame Spread Index*1	Tested acc. to ASTM E84							
Practical Fire Behaviour	Self-extinguishing, does not drip, does not spread flames								
Density									
	220 to 360 kg/m <sup>3</sup>	Tested acc. to ISO 845, ASTM D1622							
Mechanical properties									
Tear strength	0.4 to 1.4 kN/m	Tested acc. to ISO 34-1*3							
Tensile strength	70 to 190 kPa 10.2 to 27.6 psi	Tested acc.to ISO 1798							
Elongation	50 to 90 %	Tested acc. 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 acc. to AGI Q 136							
Application & handling conditions*4	Ambient temperature: Max. relative humidity: +5 °C to +35 °C 80%								
Sealing and adhesion	Use ArmaFlex 520 or HT625 adhesive for reliable adhesion of joints and seams. In some configurations 19mm wide stainless steel bands with wing clips (or blind rivets) can be used for fixing and final securing.								
Storage & Shelf life*5	3 years	Store indoors, in dry conditions, away from direct sunlight.							

Property	Value/Assessment							Test & Special Remarks
Acoustic Performance								
Acoustic insertion loss	When used as par to C and Shell DE	Tested according to ISO 3741 (equivalent method ASTM E1222) Classified according to ISO 15665						
	Octave band sound absorption coefficients, as:							Tested according to ISO 354. Rated according to EN ISO 11654
	Thickness (mm)		Frequency (Hz)					
	Thickness (mm)	125	250	500	1000	2000	4000	
	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	
Sound absorption (typical values)*2	(a) 1.00 0.80 0.60 0.40 0.20 0.00 8 100	6mm	10mr	1000 n -0- 15r	nm -~ 2	5mm		Tested according to ISO 354. Rated according to EN ISO 11654
	Thickness (mm)			6	10	15	25	
absorption coefficients, a <sub>w</sub> :	a <sub>w</sub>			0.15 (H)	0.25 (H)	0.40 (H)	0.55 (H)	Tested according to ISO 354
	Class			E	E	D	с	Rated according to EN ISO 11654
Noise reduction coefficients (NRC):	NRC			0.15	0.40	0.60	0.70	Calculated according to ASTM C423-01

\*1. Based on single test results which are not monitored in regular frequency. Can be used for information / reference only.

\*2. The octave band and 1/3rd octave band sound absorption coefficients shown in the table and chart respectively, are provided as examples which are based on single test results. The values presented can be used for information / reference only.

\*3. Angle test piece with a nick.

\*4. For environmental conditions outside the given range please contact our Customer Service Centre.

\*5. 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.

All data and technical information are based on results achieved under typical application conditions. Recipients of this information should, in their own interest and responsibility, clarify with us in due time whether or not the data and information apply to the intended application area. For temperatures below -40 °C please contact our Customer Service Centre to request the corresponding technical information. Armacell takes every precaution to ensure the accuracy of the data provided in this document and all statements, technical information and recommendations contained within are believed to be correct. However, Armacell cannot guarantee that the data is 100% accurate. Furthermore, minor deviations in colour, quality and dimensions are unavoidable and in most cases do not influence the performance of the product. Armacell expressly disclaims any and all liability in relation to any results obtained or arising from any use of the product or reliance on such information. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the goods described or the information provided herein. All the statements and technical information within this document should be read in conjunction with the customer's own specification. It is the responsibility of the recipient to inform all involved parties about the content of these documents. The described and recommended methods should be strictly followed. If there is a requirement to deviate from our recommendations, please contact us in advance to discuss possible suitable alternatives. Armacell will not be liable for any claim resulting from a failure to observe our specification or any other agreed solutions and from non-observance of the customer's specification.