ArmaSound® 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

APPROVED
TYPE APPROVAL SCHEME

SHEET

Sheet, Self-adhesive sheet

RECOMMENDED PRODUCTS

For a complete installation

ArmaFlex 520 adhesive

ArmaFlex RS850 adhesive

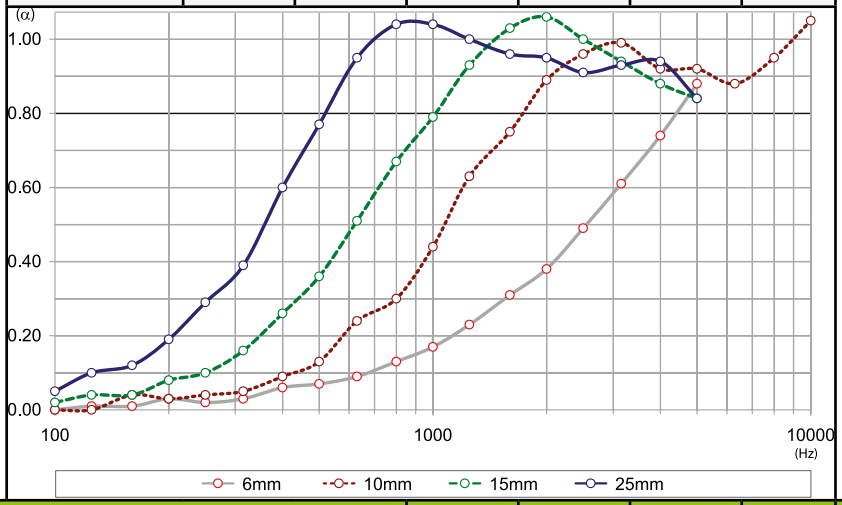
ArmaFlex Cleaner

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	Tested acc. to EN 14706 and EN 14304
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^3	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.

<table>
<tr><th>Property</th><th>Value/Assessment</th><th>Test & Special Remarks</th></tr>
<tr><td colspan="3">Acoustic Performance</td></tr>
<tr><td>Acoustic insertion loss</td><td>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</td><td>Tested according to ISO 3741 (equivalent method ASTM E1222) Classified according to ISO 15665</td></tr>
<tr><td rowspan="3">Sound absorption (typical values)*2</td><td>Octave band sound absorption coefficients, αs:</td><td>Tested according to ISO 354.
Rated according to EN ISO 11654</td></tr>
<tr><td>
<table>
<tr><th rowspan="2">Thickness (mm)</th><th colspan="6">Frequency (Hz)</th></tr>
<tr><th>125</th><th>250</th><th>500</th><th>1000</th><th>2000</th><th>4000</th></tr>
<tr><td>6</td><td>0.01</td><td>0.03</td><td>0.07</td><td>0.18</td><td>0.39</td><td>0.74</td></tr>
<tr><td>10</td><td>0.01</td><td>0.04</td><td>0.15</td><td>0.46</td><td>0.87</td><td>0.94</td></tr>
<tr><td>15</td><td>0.03</td><td>0.11</td><td>0.38</td><td>0.80</td><td>1.03</td><td>0.89</td></tr>
<tr><td>25</td><td>0.09</td><td>0.28</td><td>0.77</td><td>1.03</td><td>0.94</td><td>0.90</td></tr>
</table>


</td><td>Tested according to ISO 354.
Rated according to EN ISO 11654</td></tr>
<tr><td colspan="2">
<table>
<tr><th>Thickness (mm)</th><th>6</th><th>10</th><th>15</th><th>25</th></tr>
<tr><td>absorption coefficients, α_w:</td><td>α_w</td><td>0.15 (H)</td><td>0.25 (H)</td><td>0.40 (H)</td><td>0.55 (H)</td></tr>
<tr><td></td><td>Class</td><td>E</td><td>E</td><td>D</td><td>C</td></tr>
<tr><td>Noise reduction coefficients (NRC):</td><td>NRC</td><td>0.15</td><td>0.40</td><td>0.60</td><td>0.70</td></tr>
</table>
</td><td>Tested according to ISO 354
Rated according to EN ISO 11654

Calculated according to ASTM C423-01</td></tr>
</table>

*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.