

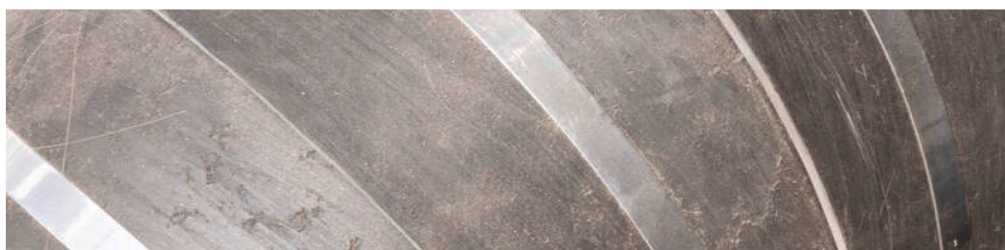


INSTALL IT. ENJOY QUIETNESS.

# ArmaSound Barrier E

High performance noise barrier for  
ArmaSound Industrial Systems

- // Excellent at reducing the transmission of airborne sound
- // Enhances the insertion loss performance of pipe insulation
- // Flexible, easy to install
- // Mean sound reduction index  $R \geq 28$  dB
- // Free of lead, unrefined aromatic oils and bitumen
- // Integral component of ArmaSound Industrial Systems
- // Compliant to ISO 15665 Class C and Shell DEP 31.46.00.31-Gen Class D
- // Satisfies acoustic class B according to NORSOK M-004
- // Sound Transmission Class (STC) from 25 to 31 dB



 **armacell**<sup>®</sup>  
MAKING A DIFFERENCE AROUND THE WORLD

## TECHNICAL DATA - ARMASOUND BARRIER E

Brief description	High performance mass loaded sound barrier for a quieter environment.
Material type	Vinyl sound barrier mat. Thermoplastic polymer compound.
Product colour range	Black
Special features	Does not contain lead, unrefined aromatic oils and bitumen.
Product range	Sheets / rolls in 2, 3 and 4 mm thickness (nominal values). ArmaSound Barrier E is also available with and without a self-adhesive backing on demand.
Applications	Flexible sheet for noise control in industrial applications - designed as an integral component of ArmaSound Industrial Systems.
Installation	Please refer to the ArmaSound Industrial Systems application manual before installation. Please contact Technical Services.

Property	Value / Assessment	Standard / Test method
<b>Temperature range</b>		
Service temperature	Min. °C	Min. °F
	Max. °C	Max. °F
	-20	-4
	65	149
<b>Fire performance</b>		
Practical fire behaviour	Self-extinguishing, burn rate (flame progression) < 100 mm/min.	FMVSS 302
<b>Physical attributes</b>		
Mass per unit area	2mm: 4.8 to 5.50 kg/m <sup>2</sup> [0,98 to 1.13 lb/ft <sup>2</sup> ] 3mm: 7.2 to 8.25 kg/m <sup>2</sup> [1.47 to 1.69 lb/ft <sup>2</sup> ] 4mm: 9.7 to 11.0 kg/m <sup>2</sup> [1.99 to 2.25 lb/ft <sup>2</sup> ]	
<b>Mechanical properties</b>		
Tensile strength	≥ 1.8 MPa (≥ 261 psi)	ISO 37 <sup>1</sup>
Elongation	≥ 25%	ISO 37 <sup>1</sup>
<b>Acoustic performance</b>		
Reduction of structure-borne sound transmission <sup>2</sup>	for 2 mm thickness [5 kg/m <sup>2</sup> ]*1: Mean sound reduction index Rw: ≥ 28 dB. for 3 mm thickness [7.5 kg/m <sup>2</sup> ]*1: Mean sound reduction index Rw: ≥ 30 dB. for 4 mm thickness [10 kg/m <sup>2</sup> ]*1: Mean sound reduction index Rw: ≥ 31 dB.	ISO 10140-2
Sound transmission class, STC <sup>2</sup>	2mm [5 kg/m <sup>2</sup> ): 28 3mm [7.5 kg/m <sup>2</sup> ): 30 dB. 4mm [10 kg/m <sup>2</sup> ): 31	ASTM E 413 <sup>3</sup>
System acoustic insertion loss	When used as part of a system ArmaSound Barrier E complies to ISO 15665 Class C and Shell DEP 31.46.00.31 - Gen Class D.	ISO 3741, ASTM E1222, ISO 15665
<b>Other technical features</b>		
Adhesion and fixing	Adhesive 520 or Adhesive HT625 shall be used for reliable adhesion. 19mm wide stainless steel bands with wing clips (or blind rivets) shall be used for fixing and final securing. 50 mm long x 0.5 mm thick x 19 mm wide - stainless steel "S" clips are also required on vertical piping and vessels.	
Application conditions <sup>4,5</sup>	Application temperature: +5 to +35°C (+41 to 95°F) Max. relative humidity: 80%	
Shelf life <sup>6</sup>	Max. 3 years	
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.	

<sup>1</sup> Type 1 dumb-bell test piece. Maximum specimen thickness according to the test standard is 3mm.

<sup>2</sup> Nominal values.

<sup>3</sup> Based on single test results. Can be used for information / reference only.

<sup>4</sup> Application temperature refers to the ambient temperature during installation and the surface temperature of the substrate (e.g. ArmaClad Arma-Chek R covering) to which the product is installed.

<sup>5</sup> For environmental conditions outside the given range, please contact Technical Services.

<sup>6</sup> 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.

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. This document does not constitute nor is part of a legal offer to sell or to contract.

At Armacell, your trust means everything to us, so we want to let you know your rights and make it easier for you to understand what information we collect and why we collect it. If you would like to find out about our processing of your data, please visit our Data Protection Policy.

Trademarks followed by © or ™ are trademarks of the Armacell Group. © Armacell, 2024. All rights reserved.

TDS | 052024 | en-ID

## 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.

For more information, please visit:  
[www.armacell.com](http://www.armacell.com)

  
MAKING A DIFFERENCE AROUND THE WORLD