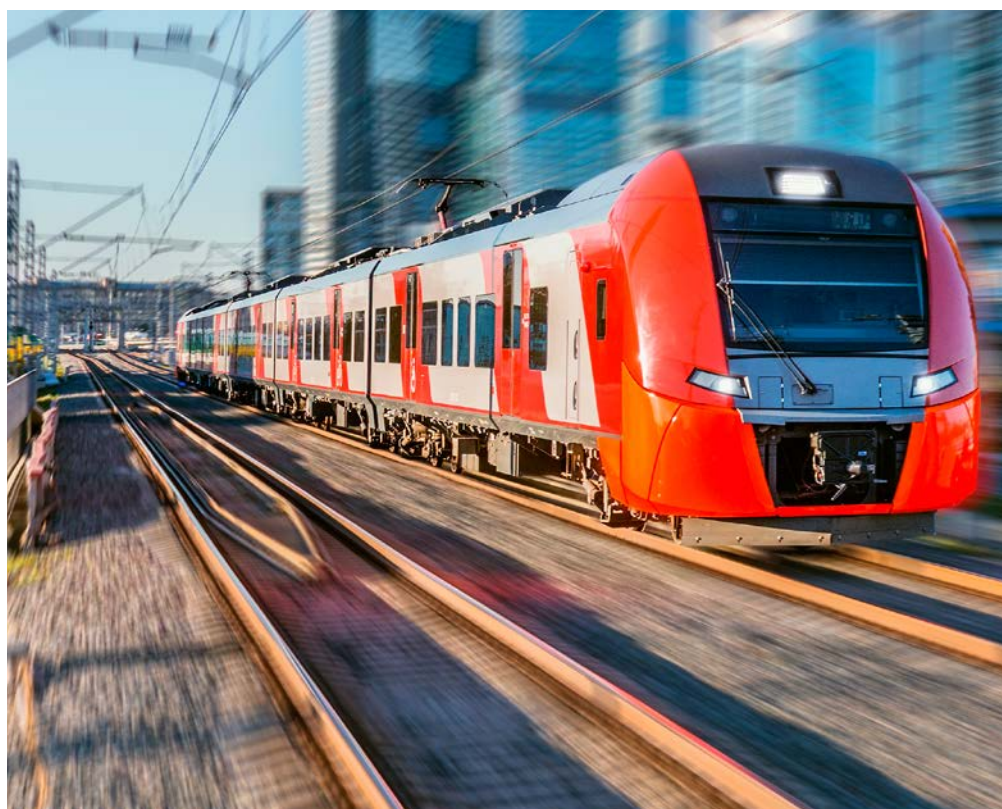


INSULATION  
JUST GOT BETTER

# ArmaGel™ Rail

Double-side laminated flexible  
aerogel insulation blanket

- // Approved in accordance with EN45545 HL3
- // Reduced space requirements to achieve exceptional thermal insulation properties in hot and cold climates
- // Improved sound absorption properties



 **armacell**<sup>®</sup>  
ArmaGel™

TECHNICAL DATA – ARMAGEL RAIL

Brief description	ArmaGel Rail is a flexible aerogel insulation blanket suitable for applications with operating temperatures between to -180 °C (-292 °F) and +110 °C (+230 °F)
Material type	Aerogel insulation blanket with double-side aluminium foil
Colour	Grey
Special features	ArmaGel Rail is intended for use as an efficient thermal insulation to maintain comfortable ambient temperatures inside the train in all conditions.The product is suitable for use in multi-layer applications with other products.
Product range	Sheets in rolls, 5, 10, 15 and 20 mm (0.20, 0.39, 0.59, 0.79 in) thickness and width of 1.5 m (59.00 in). For further details, please refer to the product range tables at the end of this document.
Applications	ArmaGel Rail can be used in Walls, Ceilings, Floor and Door applications for efficient thermal insulation at very low thickness.
Installation	Please consult our Technical Services for further information and support.

Property	Value/Assessment										Standard/Test method
Temperature range <sup>*1</sup>											
Service temperature	Max. service temperature		+110 °C			+230 °F					Tested according to ASTM C411
	Min. service temperature		-180 °C			-292 °F					
Thermal conductivity											
Thermal conductivity <sup>*1</sup> (metric units)	Øm	+24	+38	+93	+149	+204	+260	+316	+371	[°C]	Tested according to ASTM C177
	λd ≤	0.021	0.022	0.023	0.025	0.029	0.032	0.036	0.043	[W/(m·K)]	
Thermal conductivity <sup>*1</sup> (imperial units)	Øm	+75	+100	+200	+300	+400	+500	+600	+700	[°F]	
	λd ≤	0.14	0.15	0.16	0.18	0.20	0.22	0.25	0.30	[Btu·in/(h·ft²·°F)]	
Temperature resistance											
Water absorption	Maximum 8%										Tested according to ASTM C1763
Fire performance & approvals											
	Set of requirements R1:			HL3			Tested according to EN45545. Test report No. 2020-1142-2				
	Set of requirements R7:			HL3							
	Set of requirements R17:			HL3							
Density											
Density	160 to 240 kg/m³			10 to 15 lb/ft³			Tested according to ASTM C303				
Other technical features											
Health aspects	Neutral										
Hydrophobic	Yes										
Water vapour sorption	≤ 5% by weight										Tested according to ASTM C1104
Fungal resistance	No growth										Tested according to ASTM C1338
Storage	Material shall be stored indoors, in clean and dry conditions, away from direct sunlight.										
Shelf (storage) life <sup>*2</sup>	Max. 3 years										

1. For temperatures below or above those published please contact Technical Services to request the corresponding technical information.  
2. 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.





## Sheets

		Metric sizes				Imperial sizes			
		Nominal thickness	Width	Length	Content per roll	Nominal thickness	Width	Length	Content per roll
		[mm]	[m]	[m]	[sqm]	[in]	[in]	[ft]	[sq ft]
Jumbo Rolls	AGR-10-00/150P	10	1.50	40.00	60.00	0.39	59.00	131.24	645.848
Tolerances According to ASTM C1728	Thickness tolerances	10 mm (0.39 in) nominal thickness				10.0 -12.5 mm			
	Width tolerances					± 3%			
	Length tolerances					± 5%			

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 or contract. By ordering/receiving product you accept the **Armacell General Terms and Conditions of Sale** applicable in the region. Please request a copy if you have not received these.

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## ABOUT ARMACELL

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As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic 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 3,135 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

