



TECHNICAL DATA

ArmaPET™ Eco50

ArmaPET Eco combines insulation and structural integrity, ensuring energy and emission efficiency for decades of use.

- // Secured lifetime insulation performance
- // Prevents degradation by moisture, rodents and insects
- // Robust material allows fast and easy handling
- // 100% recycled material supports industry environmental and sustainability directives

www.armacell-core-foams.com



 **armacell**[®]
ArmaPET™

ARMAPET ECO50

Armacell is following the growing demand for high-performance insulating materials, and offers to the construction market a foam core that combines structural integrity and **thermal insulation** with process versatility and design flexibility, as well as outstanding **sustainability**.

ArmaPET Eco50 offers a highly eco-efficient solution for superior structural insulation of building envelopes, roofs, floors and internal partitions, in new building construction and renovation of older buildings. It is convincing due to its economy and environmental characteristics that are vital for innovative and sustainable construction.

PRIMARY BENEFITS

// Long-term stability of insulation properties and low thermal conductivity secure lifetime insulation performance

// High water resistance guaranties stable thermal conductivity even after many years of operation

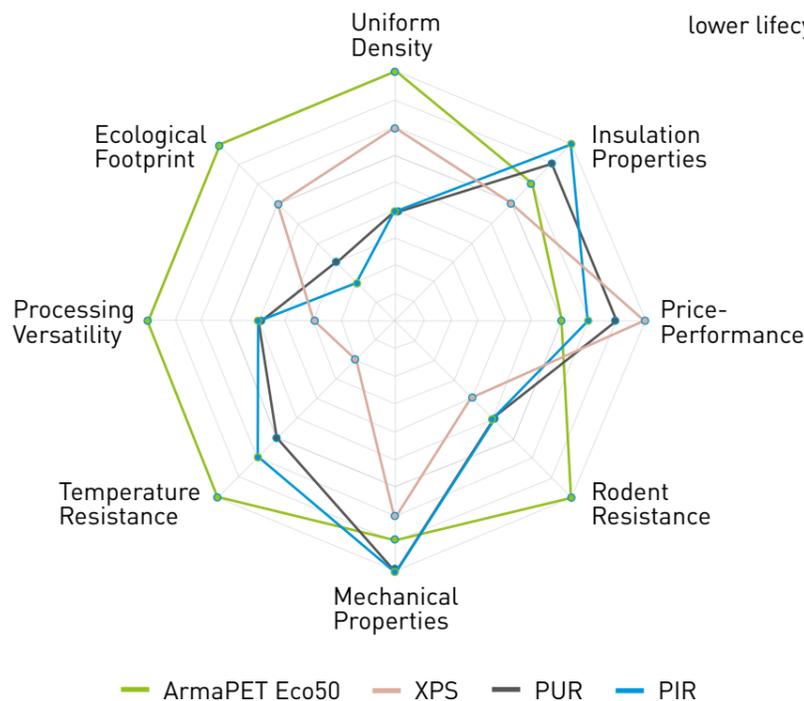
// Closed-cell structure minimises moisture penetration to avoid mildew and rot, and ensures long-term corrosion protection and minimal maintenance requirements

// Easy to use due to low weight and full compatibility with most production methods (e.g. adhesive bonding and plastering) and all common 2-component or hot-melt adhesives

// Solvent stability provides resistance to most acids, salts and fuels

// Thermoformability and weldability allow for the most challenging contemporary architectural designs

ArmaPET Eco50 makes it possible to create buildings that are more energy efficient, durable, faster to build, with a lower lifecycle cost and reduced environmental impact.



λ -value
0.026

Technical Data

(Preliminary)

Density	EN 1602	kg/m ³	48 +/- 10
Compressive Stress	EN 826	KPa	168 ¹⁾
Compressive Stress after freeze-thaw (wet)	EN 12091 EN 826	KPa	149 ¹⁾
Compressive Stress after freeze-thaw (dry)	EN 12091 EN 826	KPa	152 ¹⁾
Tensile Strength perpendicular to the faces	EN 1607	KPa	482
Bending Strength	EN 12089 method B	KPa	780
Water Vapour Transmission	EN 12086	μ	2400
Water Absorption 24h partial immersion	EN 1609 method A	kg/m ²	0.2
Water Absorption long-term, total immersion	EN 12087 method 2A	vol%	2,6
Coefficient of Linear Thermal Expansion	ASTM E228 - 17	°C ⁻¹	50·10 ⁻⁶
Dimensional Stability 70°C / 90% RH	EN 1604	%	L = -0.4 W = 0.4 T = 2.8
Service Temperature		°C	-40 to 150°C
Reaction to fire	EN 13501-1 EN 11925-2	Class	E B2

ArmaPET Eco50

¹⁾ at 10% of relative deformation

Thermal Conductivity EN 12667

0.030 (at 10°C)
W/(m·K) 0.028 (at 20°C)
0.026 (at 40°C)

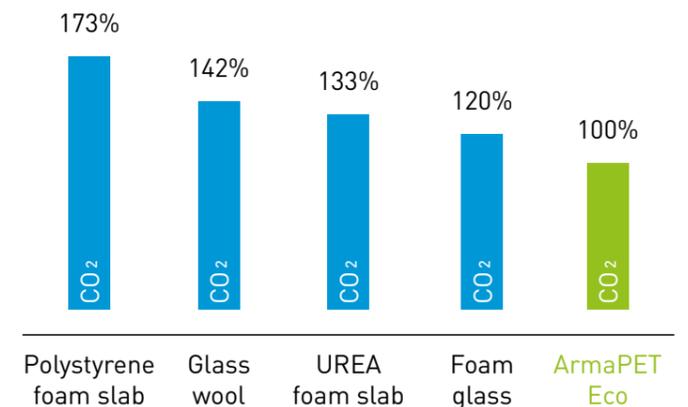
Board Dimension (at room temperature)

Length (mm)	Width (mm)	Thickness (mm)
≤ 3000	1000	20/25/50 ¹⁾
-7/+20	+/- 10	+/- 0.7

¹⁾ Thicknesses of 51-200 mm are available on special request.

ECO-FRIENDLY

As well as fulfilling energy and structural requirements, ArmaPET Eco50 strongly contributes to advanced sustainable construction. Thanks to Armacell's patented rPET technology, ArmaPET Eco50 is based on 100% recycled PET and is manufactured according to an energy and resource-optimized production process: 100% re-use of material loss and no use of ozone-depleting HFC or CFC blowing agents. Like all our PET foam products, ArmaPET Eco50 is fully recyclable at its end-of-life.



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ABOUT ARMACELL

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 3,000 employees and 23 production plants in 15 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.

For more company information, please visit:
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