ACECompo™ PETB

ACE Geosynthetics

Strengthen and Prolong Infrastructure with ACECompo™ PETB Series: Multifaceted Geocomposite Solution

ACECompo™ is the trademark representing ACE Geosynthetics' comprehensive range of geocomposite products. The PETB series is distinguished by its integration of either unilateral or bilateral polyester yarns seamlessly woven into a foundation of polypropylene or polyester needle-punched nonwoven geotextile. These polyester yarns, boasting exceptional tensile strengths — peaking at 200 kN/m in uniaxial direction or 100kN/m in biaxial directions — serve as the primary agents of reinforcement. Complementing them, the nonwoven geotextiles excel in ensuring efficient separation, meticulous filtration, and optimized drainage. For infrastructures like high-loaded roadways or railways that demand durability and resilience, ACECompo™ PETB emerges as a robust reinforcement solution. It not only amplifies their service longevity but also aids in minimizing the course material requisites, ensuring cost efficiency. Beyond just reinforcing longevity, it significantly uplifts the structural integrity, notably in reinforcing asphalt or concrete pavements. Thus, for top-tier geocomposite solutions, ACECompo™ PETB is the prime choice.

ACECompo™ PETB: Multifunctional Durability for Safer, Longer-Lasting Roads

Product Properties	Test Method	Units	PETB 50-I	PETB 100-I	PETB 50-II	PETB 100-II
Mechanical Index Properties						
Material			Polyester Yarns + Polyester Needle Punched Nonwoven Geotextile			
Tensile Strength-MD, -10%	ISO 10319	kN/m	50	100	50	100
Tensile Strength-CD, -10%	ISO 10319	kN/m	50	100	14	14
Tensile Elongation-MD, +2(value)	ISO 10319	%	10	10	10	10
Hydraulic Property						
AOS, +30%	ISO 12956	mm	0.095	0.095	0.095	0.095
Water Flow Rate (50mm head), -30%	ISO 11058	l/m²s	55	55	55	55
Water Permeability Normal to the Plane 20kPa, -30%	ISO 12958	10^{-7}/m²s	20	20	20	20
Dimensional Characteristics						
Length		m	100	100	100	100
Width		m	2 ~ 5.3	2 ~ 5.3	2 ~ 5.3	2 ~ 5.3

Note:

1. ACE Geosynthetics reserves the right to modify or update any content on this specification sheet without any further notice.



APPLICATION

ACECompo™ PETB Can be Applied to the Following Engineering Purposes for Reinforcement, Separation, and Filtration:

Roadway and Railway Construction:

- Base Reinforcement
- Pavement Improvement
- Subgrade Stabilization

Prioritizing Sustainability, Efficiency, and Versatility with ACECompo™ PETB

ACECompo™ PETB is a forward-thinking approach in geosynthetic applications, balancing durability, eco-friendliness, and adaptability. Its potent blend of high-tensile polyester yarns and a non-woven geotextile not only offers superior structural advantages, such as separation, filtration, and asphalt absorption, but also echoes a broader commitment to sustainability. By extending maintenance intervals, ACECompo™ PETB delivers clear cost and time savings. What's more, the reduced need for regular repairs minimizes the environmental impact, curbing carbon emissions from frequent construction activities. This eco-friendly approach reinforces our broader dedication to reducing our carbon footprint and promoting sustainable infrastructure. Furthermore, with its dual offering of uniaxial and biaxial strength variants, ACECompo™ PETB can be precisely tailored to meet specific project demands, further optimizing resource use. This product doesn't just answer today's engineering challenges; it also paves the way for a more sustainable tomorrow, ensuring both economic efficiency and environmental stewardship.

Why Choose ACECompo™ PETB?

Features:

- Exceptional Strength and Tensile Modulus
- Optimal Soil-geotextile Interaction for Liquid Flow While Preserving Soil
- Superior Asphalt Absorption Ensuring Robust Asphalt Bonding
- Simple and Rapid Installation

Benefits:

- Sustainable with Minimized Environmental Impact
- Economical, Reducing Repair and Maintenance Expenses
- Enhanced Structural Durability for Extended Lifespan
- Flexibility in Application with Varied Strength Options