ACECompo[™] GC



Elevating Roadway Sustainability with ACECompo™ GC Geocomposites

ACECompo[™] is the trademark representing ACE Geosynthetics' comprehensive range of geocomposite products. Central to the GC series is a triad of rigorously designed elements: a high-tenacity polyester grid, a lightweight nonwoven geotextile, and a bitumen coating. The high-tenacity polyester grid boasts outstanding strength, modulus, and resistance to diverse conditions. This equips ACECompo[™] GC with exceptional reinforcement capacities, greatly enhancing its durability, especially during installation processes. In tandem with the polyester grid, the nonwoven geotextiles maximize the liquid asphalt retention, optimizing overall performance. The bitumen coating, recognized for its stellar bonding attributes, melds perfectly with asphalt surfaces. Together, these components harmonize, crafting a product that not only intensifies the bond with asphalt but also extends the longevity of pavements. This intricate blend results in a marked decrease in reflective cracking, particularly from repetitive traffic pressures. Thus, ACECompo[™] GC stands as a paragon of both efficiency and economic value, charting new horizons for top-tier road rehabilitation methodologies.

Product Properties	Test Method	Units	GC 50-II	GC 100-II
Mechanical Index Properties	,		CV	
Material			Polyester Geogrid + Polyester Thermally Bonded Nonwoven Geotextile Coated with Bitumen	
Mesh Size, -10%	Measured	mm	40 × 40	40×40
Tensile Strength-MD, -10%	ASTM D6637	kN/m	50	100
Tensile Strength-CD, -10%	ASTM D6637	kN/m	50	100
Tensile Elongation-MD	ASTM D6637	%	≤16	≤16
Tensile Elongation-CD	ASTM D6637	%	≤16	≤16
Dimensional Characteristics				
Length	- 9	9 m	50	50
Width		m	2 ~ 5.3	2 ~ 5.3
		-		

Advancing Roadway Durability and Quality with ACECompo[™] GC Geocomposites

Note:

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



APPLICATION

ACECompo[™] GC Can be Applied for the Following Engineering Purposes in Reinforcement:

Roadway and Railway Construction:

- Asphalt Layer Reinforcement
- Crack Prevention in Pavements

- Enhanced Road Rehabilitation
- Combatting Temperature-induced Rifting



Optimizing Pavement Longevity with Comprehensive Advantages

ACECompo™ GC is a key player in Asphalt Layer Reinforcement, providing a robust shield against the cyclic load from ongoing traffic and the effects of temperature variation. By effectively reducing reflective cracks and mitigating transverse rifting behavior caused by temperature changes, ACECompo™ GC ensures consistent road quality and enhances safety for all users. The high-tenacity polyester grid intrinsic to ACECompo[™] GC particularly helps to amplify the road reinforcement effect, making pavements more resilient to both traffic strain and climatic shifts. Longer-lasting pavements offer numerous benefits. Primarily, they reduce the frequency and costs of pavement repairs. These repairs often come with significant expenses, increased carbon emissions, and potential traffic disruptions, leading to traffic jams, longer travel times, and driver frustration. Moreover, the environmental concerns of regular repairs, in terms of both materials used and emissions produced, are worth noting. With ACECompo™ GC's efficient installation technique, the asphalt is ready for immediate use once it's laid down, ensuring minimal delays. In essence, ACECompo™ GC not only delivers exceptional technical performance but also brings broader benefits for the community, marking it as an outstanding choice for sustainable road enhancement.

Why Choose ACECompo[™] GC?

Features:

- High Strength and Good Long-term Behavior
- Adjustable Mish Size of Grid to Fit in Soil Particle Size
- Strong Bond to Asphalt Layers
- Simple and Rapid Installation

Benefits:

- Prolongs Pavement Lifespan
- Reduces Repair and Maintenance Costs
- Minimizes Traffic Disruptions
- Enhances Road Safety Standards