ACE Geosynthetics

ACETex® ES-Series woven geotextiles

for Base Reinforcement and Subgrade Stabilization

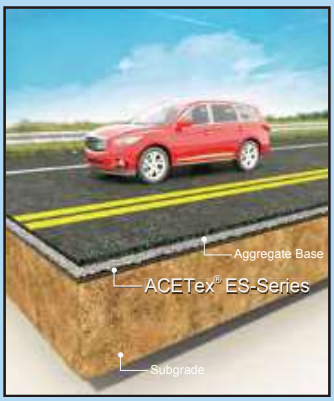
ACETex® ES-Series woven geotextiles, fabricated with self-developed high tenacity polypropylene yarns and well-designed texture, perform exceptionally well in separation, filtration, and reinforcement functions altogether to enhance the safety, reliability and serviceability of paved and unpaved roadways.

With high tensile strength (biaxial tensile strengths up to 200 kN/m) and modulus of the geotextiles, which provide structural stability and distribute load uniformly at low elongation to increase the load-carrying capacity of the system, the ACETex® ES-Series are commonly placed between road base and subgrade . Furthermore, by increasing permeability with appropriate pore sizes, ACETex® ES-Series achieve separation and filtration simultaneously to stabilize the structure of the roadway system in the long term. Moreover, ACETex® ES-Series are available in various tensile strengths and hydraulic properties to meet diverse project engineering needs.

APPLICATIONS

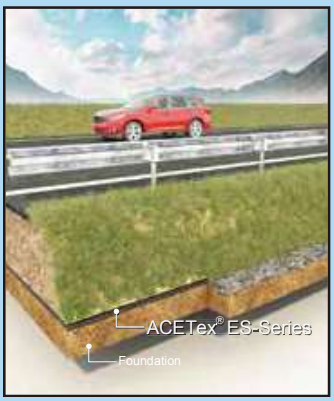
Roadway / Railway

- Subgrade Stabilization
- Base Reinforcement



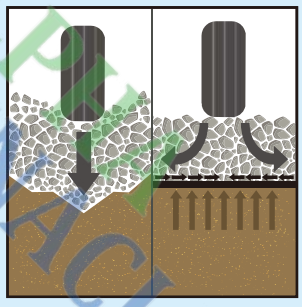
Embankment

- Soft Foundation Stabilization



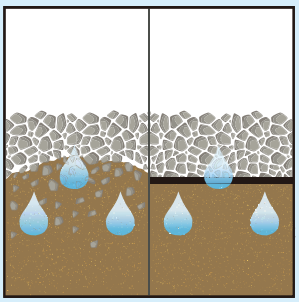
BENEFITS from the Integrated FUNCTIONS of the Product

Reinforcement



- Increase bearing capacity
- Add membrane support
- Provide lateral restraint

Separation & Filtration

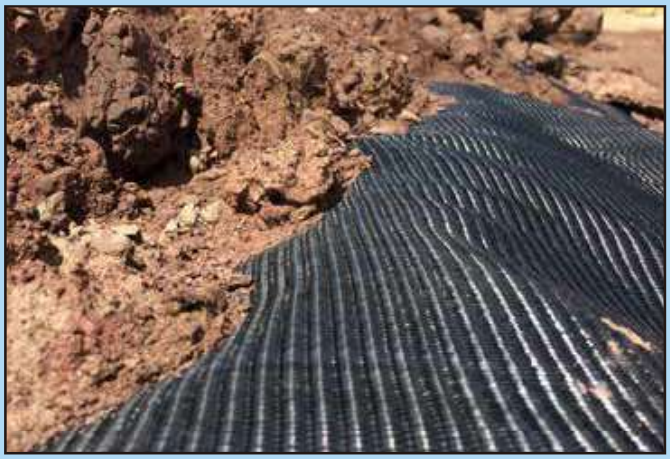


- Prevent mixture of base course and subgrade materials
- Retain fine particles
- Mitigate waterbed effect

Safety	Economical	Applicability
Reduce rutting	Extend road service life	Use in heavy rainfall/ high water table areas
Reduce inhomogeneous settlement	Reduce required base course materials	Use with some difficult soils
Improve trafficability	Lower maintenance costs	Allow permeable pavement systems

ACETex® ES-Series woven geotextiles
for Base Reinforcement and Subgrade Stabilization

ACE Geosynthetics is dedicated to developing and manufacturing geotextiles, and providing wide technical service in the realm of geotechnical engineering for decades. The experience and expertise accumulated in these activities are the key factors to make ACETex® ES Series successful products, which are well-functional, reliable, and durable with high cost-effectiveness.



Mechanical Index Properties	SI Unit	ES420	ES510	ES520	ES710	ES720	ES815	Test
Tensile strength at 2% strain-MD	kN/m	9	10	10	10	7	10	ASTM D4595
Tensile strength at 2% strain-CD	kN/m	10	10	20	20	30	25	ASTM D4595
Tensile strength at 5% strain-MD	kN/m	24	25	30	35	21	25	ASTM D4595
Tensile strength at 5% strain-CD	kN/m	30	25	40	45	70	65	ASTM D4595
Mechanical Performance Properties								
UV Resistance -Retained Strength(500 hr)	%	90	90	90	90	90	90	ASTM D4355
Hydraulic Properties								
Permittivity (50mm head)	1/sec	1	0.4	1	0.4	1	0.4	ASTM D4491
Apparent Opening Size(O_{95})	mm	0.425	0.425	0.425	0.425	0.425	0.425	ASTM D4751

Note.
The values given are indicative and correspond to an average results obtained in our laboratories and testing institutes.
The right is reserved to make changes without notice.

Disclaimer:
This document is provided solely for general information,
and shall not be construed as engineering advice, or part of the contract with
any customer not withstanding anything to the contrary in the contract.
We hereby disclaim any liability in connection with any use of the information herein.

ACE Geosynthetics
Email: sales@geoace.com
Tel: +886 4 2659 5926
Fax: +886 4 2659 5935

Accurate, Collaborative, Efficient