

CONFORMITY OF PRODUCT

TME GeoTech Geonet Composite



Purpose of Usage

TME GeoTech Geonet Composite is primarily used in drainage and filtration systems within civil and environmental engineering projects. It is widely applied in landfill drainage systems, retaining walls, tunnels, green roofs, road and railway infrastructure, and foundation drainage. The product efficiently collects and transmits fluids and gases, making it ideal for leachate collection and groundwater control applications.

Application Locations

TME GeoTech Geonet Composite consists of a high-density polyethylene (HDPE) geonet core bonded with one or two layers of nonwoven geotextile. The geonet core provides excellent in-plane drainage capacity, while the geotextile layers act as filters to prevent soil intrusion. It offers high compressive strength, maintaining flow capacity even under heavy loads. The composite is resistant to chemicals, biological degradation, and environmental stress, ensuring long-term durability.

Item	Drainage network core	Units	Value			
1	Unit weight	g/m ²	750	1000	1300	1600
2	Thickness OV=20KPa	mm	5.0	6.0	7.0	7.5
3	Hydraulic conductivity	m/s	$K \times 10^{-4}$	$K \times 10^{-4}$	$K \times 10^{-3}$	$K \times 10^{-3}$
4	Elongation	%	<50	<50	<50	<50
5	Tensile strength (core network)	kN/m	8	10	12	14
6	Geotextile	g/m ²	Heavier grades of geotextiles can be bonded on request.			

Product Features

The main advantage of TME GeoTech Geonet Composite is its superior drainage performance combined with filtration capability in a single product. It reduces the need for traditional granular drainage layers, lowering construction costs and installation time. The lightweight structure allows easy handling and installation, while its high flow capacity ensures efficient performance even under pressure. Additionally, it enhances system reliability and extends the lifespan of drainage applications.