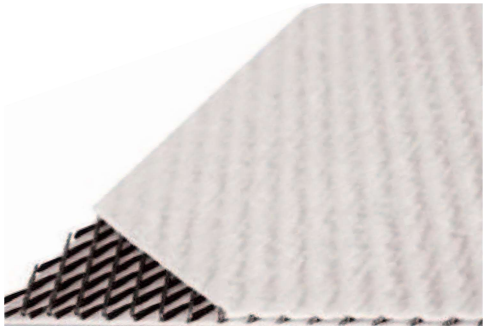
MARUTI GEO COMPOSITE

Geonets are synthetic drainage materials manufactured from the highest quality high-density polyethylene (HDPE). They are designed to transmit fluids and gasses uniformly under many field conditions.

Geocomposites consist of a geonet heat bonded with a non-woven geotextile, and are designed to provide drainage filtration to keep silt and soil particles from clogging the flow or to increase the friction characteristics.



(A) MARUTI GEOCOMPOSITES

- Are tough enough to withstand installation and intended use.
- Retain stability and resist deformation under loading.
- Resist chemicals.

(B) FILTERS

- Pore size suits soil to prevent the ingress of fines.
- Ongoing performance without blocking.

Maruti Geocomposite satisfies the above criteria to stand the test of time. Our products have been used in building and construction projects across the world for several years.

(C) BENEFITS OF USING MARUTI GEOCOMPOSITES

- Easy to handle and lightweight.
- Lower installation and material costs.
- Cost-effective alternative to traditional materials.
- Easy and quick installation.
- High-volume flow paths for liquids and gases.

TYPICAL APPLICATIONS OF MARUTI GEOCOMPOSITES

- Highways: Vertical drains that intercept lateral ground water flow. Modern fin drains reduce backfill quantities, installation time and excavation. Increased slope stability from in-slope drainage.
- Bridge abutments and retaining walls: Avoid backfill saturation and reduce pore water pressure.
- Engineered landfills: Meet requirements of high compressive strength and long-term chemical resistance.
- Tunnels: Ground-water-seepage interception between rock face and the tunnel lining.

Buried structures: Horizontal and vertical drains for culverts, basements, underground parking ramps, resevoirs, and more.

(D) Durability

This product is predicted to be durable for more than 25 years in soils with a pH in the range 2 to 14 and with a temperature of greater than 25°C.

(E) Chemical Resistance

Polypropylene and polyethylene are unaffected by the chemicals which normally exist in soils.

(F) Biological Resistance

Polypropylene and polyethylene are not nutrients for micro-organisms and do not provide nourishment for animals & insects.

(G) UV Exposure

Maruti Geosynthetics products are delivered to site in polyethylene wrapping to protect it against the effects of ultra-violet radiation. It is recommended that the products remain wrapped until their installation. Once unwrapped, the products should be completely covered with fill within 14 days to avoid exposure to UV radiation.

Versions of most products can be manufactured with enhanced UV performance by incorporating stabilizers. These versions carry the suffix UV. The remaining properties are identical to the corresponding standard grade.

Adequate precautions should always be taken to protect all products from UV radiation to achieve the stated durability.

Product Data Sheet

Composition: Drainage core with a filter bonded to both sides. The composite acts as a permeable, capillary break within soils to prevent salt migration.

Upper filter: T2000UV white manufactured from fibers with polypropylene core (70%)/ polyethylene sheath (30%)

Core: Extruded polyethylene (PE) net

Lower filter: T2000UV brown manufactured from hydrophobically enhanced fibers with polypropylene core (70%)/polyethylene sheath (30%)

Hydraulic Properties - Composite (Mean values)

In-plane Water Flow	EN ISO 12958	20kPa	0.55 l/m.s
hydraulic gradient = 1.0 , hard/hard	EN ISO 12958	200kPa	0.45 l/m.s

Mechanical Properties - Composite (Mean values)

Tensile Strength	EN ISO 10319	MD	kN/m	22
Tensile Strength	EN ISO 10319	CD	kN/m	16
CBR Puncture Resistance	EN ISO 12236	MD	N	3000

Physical Properties - Composite (Typical values)

Mass per Unit Area	EN ISO 9864	g/m2	710
Thickness (2kPa)	EN ISO 9863-1	mm	4.5
Roll Width	-	m	2.0
Roll Length	-	m	25
Roll Weight	-	kg	35.5