AIEOU

UNICORN PRIVATE LIMITED

A COMPLETE HOUSE OF GEOSYNTHETICS

Manufacturer, Supplier & Exporter of All Types

• Woven & Non-Woven Geotextiles • Geobags • Geotubes • Geocomposite/ Salt Barrier • Geostraps • Geocell
• Dimple/ Protection Boards • Drain Boards • Grass Pavers • Draincells • Fiberglass Mesh • HDPE/ LDPE Sheet
• Separation Membrane • Canal Lining • Coir Fiber Blanket/ Coir Mat • Jute Geotextile • Gunny Bags • Artificial Grass
• Filter Cloth • Canvas

ABOUT US

At AIEOU Unicorn pvt ltd, we are passionate about protecting structures from water damage through innovative and reliable waterproofing solutions. With expertise in advanced materials and cutting-edge techniques, we speczlize in delivering high-performance waterproofing systems that ensure long-term durability and structural integrity. Our commitment to quality, precision, and customer satisfaction drives us to provide tailored solutions that address unique challenges across diverse verticals.

OUR PRODUCTS

- Geotextile - Polyester & Polypropylene (Woven and Non – Woven)
- Geocomposite (VTGC FINDRAIN)
- Geo Strap (VT GEOSTRAP)
- Geocell (VT GEOCELL)
- Coir Mat
- Jute Geotextiles (VT JGT)
- LDPE / HDPE Plastic Sheets / Separation Membrane / Pond liner / Canal Liner
- Dimple Boards / Protection Board
- Drain Boards
- Draincells / Roof Garden Cells
- Grass Pavers
- Geo Bag
- PP Rope Gabion
- Geo Tube
- Fiberglass Mesh
- Artificial Grass
- EPDM Sheet
- Dowel Bar Cap
- Filter Clothe
- Filter Bag

Industry	Waterproofing	Landscape	Highway	Tunnel	Railway	Irrigation & Water Resources Dept./ Dam
Product	Fibre Glass Mesh,Spun bond cloth, Nonwoven Geotextile, Dimple Board, Protection Boar, HDPE Sheet	Drain Cell, Grass Paver, Geotextiles Drainage Board	Geotextiles,Geo-Composite, Paraweb Separation Membrane, Geocell, Coirmat, Jute, Geotextile, Dowel Bar Cap	Geotextiles, Dimple Board, Protection Board/ Drain Board	Geotextiles, Paraweb, Geocell, Coirmat, Jute Geotextiles	Geobag, Geotube, PP Rope Gabion, Nylone Crate, EC Bag
Usage	Reinforcement Protection & Drainage	Drainage Filtration & Paving	Drainage for RE wall & Bonding of Panel Separation on PQC, Slope Protection & Erosion Control	Drainage Protection of Waterproofing and structure	Drainage slope Protection & Erosion Control	River Bank Protection/ Erosion Control

SOME OF OUR PRESTIGIOUS CLIENTS

SOWPARNIKA
Delivering Happiness

EVERFINE
BUILDCON LLP

WOVEN GEOTEXZTILE

Woven Geotextiles are made from weaving high tenacity PP & Polyester and multifilament yarn. We are manufacturing Polypropylene Woven Geotextiles with tensile strength extending up to 300 kN/m and Polyester Woven Geotextiles with tensile strength expanding up to 900 kN/m.

Width

We can manufacture Geotextiles up to 5 mtr in width. Geotextile Bags & Geotextiles Tubes are made from the above Woven Geotextile as per one's needs and specifications.

NON-WOVEN GEOTEXZTILE

Non - Woven Geotextiles is made by needle punch, thermal or chemical bonding. Fibers are carded and needles punched & then bonded thermally to form nonwoven fabrics. The process involves manufacturing of nonwoven fabric from polyester or PP fibres. We can manufacture from 15 GSM up-to 1500 GSM. The Non Woven Geotextile fabric maintains a uniform settlement of the subgrade and hence improves the subgrade strength and improves longevity of the system.

Width

We can manufacture Non - Woven Geotextile up to 6 meters in width. We also manufacture Geo Bags made from this Non-Woven Geotextiles as per our costumer's needs and specifications.

APPLICATION AREA OF GEOTEXTILE

GEOTEXTILE FOR RAILWAY

GEOTEXTILE FOR TUNNEL

GEOTEXTILE FOR SLOPE AREA

GEOCOMPOSITE (VTGC FINDRAIN/ SALT BARRIER)

Geocomposite is a generic name used to define a Geosynthetic Product consisting of a combination of two or more Geosynthetic materials. The application areas of Geocomposites are numerous and growing steadily. VTGC FINDRAIN is a Geonet – Geotextile, drainage composite for planar drainage manufactured by HDPE Geonet and thermal bonded PP Nonwoven Geotextiles bonded of the geonet. It is durable in both the harsh construction installation phase and aggressive soil pH ranges from 2 - 13. It is used to give excellent lateral transitivity for the transmission of water or other fluids within the plane of the drain. Application include but are not limited to sheet interceptor drain behind reinforced wall and reinforced steep slopes, land fill leachate transmission and collection, and use with multiple layered water proofing and roof deck drain system.

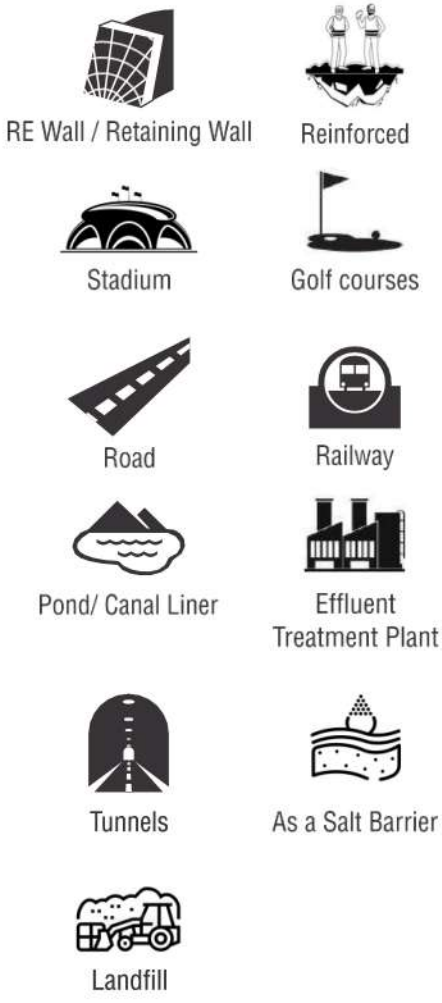
We manufacture both 2D & 3D planner Geocomposites ranging thickness from 4mm to 10mm.

Advantages of Geocomposite

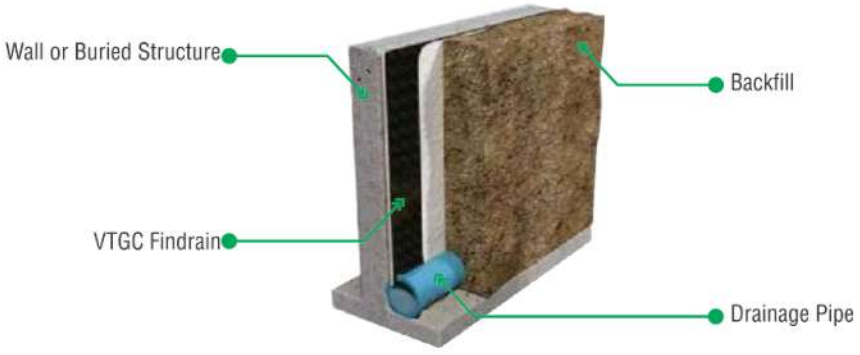
Geotextile layer at the base acts as filter. The drainage net will do the function of draining off the water with geotextile layer acting as a filter which will not allow clogging to occur. High level of consistency in quality is maintained. Construction is simple as it is very easy to lay the Geocomposite because of control quality. A much thicker drainage layer can be replaced with a thin layer of Geocomposite performing equal or better required drainage function. Geocomposite is a better and consistent option for faster economical construction. We are supplying to almost all highway and road construction company and have also got the approval of NHAI consultants.

Size : Geo Composite (VT FINDRAIN) available in roll form of width - 2.1mtr and length – 50mtr.

Application Area of Geocomposite



Applying Method of Geo Composite (VTGC Findrain)



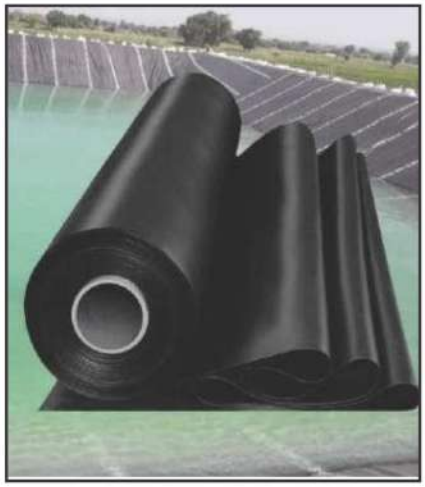
Installation of Geocomposite

HDPE/ LDPE PLASTIC SHEET, POND CANAL LINER, SEPARATION MEMBRANE, HDPE/ LDPE MEMBRANE

We manufacture, supply and install Geomembrane. We have an extensive range of products, which are most widely used in civil and agricultural fields, irrigation water and solid waste management, fluid conveyance and containment, ash ponds, soil protection and stabilization, landfills clousers, ponds and reservoirs, irrigation canals, separation membranes for road and waste treatment plants, we can manufacture width up to 10 meters, between 40-2000 micron.

Separation Membranes

For roads and highways - 125 micron virgin transparent LDPE Sheet for road PQC construction (as separation purpose). We can supply them with up to 10 meters as per customer requirements.



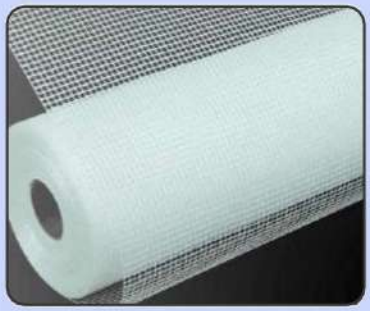
CANAL LINING

We make HDPE Sheet in Black and White used as canal lining. We can manufacture up-to 10 meters in width as per customer requirements.

POND LINER

Our Pond Liners are made of superior quality HDPE material and have long life. The Pond Liners which we provide are renowned for their easy installation. HDPE liner from 500 to 3000 micron is being used as pond liner.

FIBERGLASS MESH



Fibreglass mesh is manufactured by weaving fibre glass yarn. It has excellent properties like high strength alkali resistance, water resistance, thermal resistance rot and mildew resistance, temperature resistance, flexibility, softness and resistance to aging. It helps in reducing the wear and tear of roofs. It is a high heat and chemical resistance material and therefore provides a good insulator and stops the heat from the roof making the top floor cooler. It is very light in weight making it easy to handle. It is very cheap in rates giving the economic value to the customers. It has a good resistance to almost all the adverse climatic conditions.

Application Area of Fiberglass Mesh

It is used for water proofing on roof in almost all types of structures i.e. buildings of residence, industrial or commercial, hospitals, multiplexes, schools, colleges, metro stations etc

DOWEL BAR CAP

A range of dowel bar debonding caps manufactured from rigid PVC tube with polyethylene foam fixed into one end to act as compression Filler, which allows for expansion of dowel bars in construction joints. It is used for Road construction PQC joint and many more places. We have all sizes up to 36mm.

Application Area of EPDM Sheet

Waterproofing of pond, industrial commercial residential stadiums arenas exhibition halls, and swimming pools.

EPDM SHEET

EPDM Sheets are available in four thicknesses – 1, 1.2, 1.5 and 2 mm with a texture finish on Both Sides (BSR). Standard Width is 1.2 mtrs & Standard Length is 20 mtrs. Custom sizes available upon request.

FILTER CLOTH

The company has achieved a wide recognition in manufacturing different types of Filter Clothes on automatic German Dornier looms from Cotton, Polyester, Polyamide, PP, Nylon, Fiberglass, In Spun, Multifilament and Monofilament Fabrics In All the weaves i.e. Plain, Twill, Drill, Satin, Oxford, Crawford ...etc. We can weave up to 144" widths ranging from 200 GSM to 1500 GSM quality. Different types of processes on filter fabric are also performed, i.e. Processed, Silicon Treatment and Anti-Static. It is used in vanaspati industry and refineries cement industry thermal power plants.

FILTER BAG

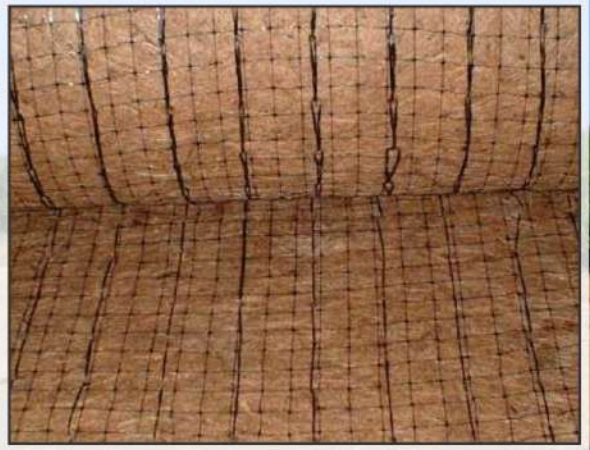
We manufacture all types of filter bags i.e. PP, Polyamide, Polyester, Fibreglass, Nomex, PPS in Non-Woven and Woven for the effiuent treatment plant, bag houses, filter presses, sugar industry, mines, coolant, paints, varnishes etc.

COIR FIBRE BLANKET (COIR MAT) & WOVEN COIR GEOTEXTILE

Coir needle punched Geotextile (Non Woven Fabric) & Woven Coir Geotextile are made out of 100% Coir Fibre. The fabric is composed of Coir fibre randomly needle punched to the desired degree of compaction. Coir Blankets consist of 100 % untreated coir stitched on one or two sides with Polypropylene (PP) or Jute netting in between PP or Jute/ Cotton thread is used for the stitching. Soil coverage is 100 %.

Durability

Approx. 3 - 5 years depending on temperatures, moisture, soil conditions, pH etc. We manufacture Coir Mat 300 GSM to 1200 GSM.



JUTE GEOTEXTILE & ENVIRONMENTAL JUTE GEOTEXTILE

Jute geotextiles have been found useful for control of surface soil erosion, construction of embankment on weak soil as well as strengthening road pavement and surface for separation drainage and temporary reinforcement. As a filter it can be used for revetment of river and canal bank. Durability of the geotextiles is enhanced with the help of proper chemical treatment. After degradation it becomes part of the soil and so there is no chance of pollution out of it. It has been observed that the materials performed the geotechnical functions at a less cost.

We manufacture Jute Geotextile as per RDSO Specification (JGT Type I, JGT Type II & JGT Type III).

Advantages of Coir Fibre Blanket (Coir Mat) & Jute Geotextile

- High Moisture Absorbing Capacity, Flexibility & Abundant in Nature
- Low in Cost When Compared to Synthetic Geotextiles
- Good Drainage Properties
- The Most Important - It is Bio-Degradable
- Promote Vegetarian Growth

Applications Area of Coir Fibre Blanket (Coir Mat) & Jute Geotextile

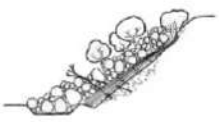
Erosion Control

Soil Erosion Control

Landscaping

Re-Vegetation

River Embankments



Stream Bank Stabilization

GEOCELL

Geocells are widely used in construction for erosion control, soil stabilization on flat ground and steep slopes, channel protection & structural reinforcement for load support and earth retention. Geocells are geosynthetic made with ultrasonically welded High Density Polyethylene (HDPE) strips or Novel Polymeric Alloy (NPA) – and expanded on-site to form a honeycomb-like structure – and fill with sand, soil, rock, gravel or concrete.

APPLICATION AREA OF GEOCELL

- Railway Track
- in Construction of Erosion Control
- Warehouse
- Soil Stabilization on Flat Ground Steep Slope
- Channel Hydraulic Structures Protection
- Multi-Layered Earth Retaining Multi-Layered Water Gravity Retaining
- Container Depot/ Yard
- Reservoir
- Landfill Area

Advantages of Geocell

- Geocell provide effective ground improvement for weak soil foundation.
- By using Geocell, base / sub-base thickness can be reduced for paved & unpaved roads.
- Geocell allow economic usage of Valuable
- Natural Resource including aggregates, sand etc., hence providing Cost Effective Solution for the geo technical related issues such as ground improvement, erosion control, channel lining etc
- Economical Solution to the environment as can be Easily Transported as flat stripes & slow down carbon footprint by minimizing logistics.
- Easy to install in any kind of weather condition.
- Also, they do not entail skilled masons.
- Use of Geocell promotes Green Solution on steep slopes.
- Geocell can be used as reinforcement for reinforced soil slopes.
- Geocell used with filled up soil can be vegetated for architectural appearance or left as lean concrete.

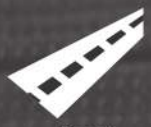
VT GEOSTRAP

VT Geostrap stripes are planar structures consisting of a core of high tenacity polyester yarn tendons encased in a polymer sheath. The stripes are suitable for reinforcement application in combination with concrete wall facing. They are amongst the most tried and tested Geostrap in the world offering 120 year design life and high performance. The incredibly tough polymer sheath is resistant to physical, chemical and biological conditions found in reinforced soil structures.

We are manufacturing VT GeoStrap stripes in different Tensile Strength from 20 kN to 100 kN.

APPLICATION AREA OF GEOSTRAP

RE Wall / Retaining Wall / Reinforced



Road

Area Stabilization & Backfill

Highway

Airports

Railway Track

Laying of Geostrap

Features

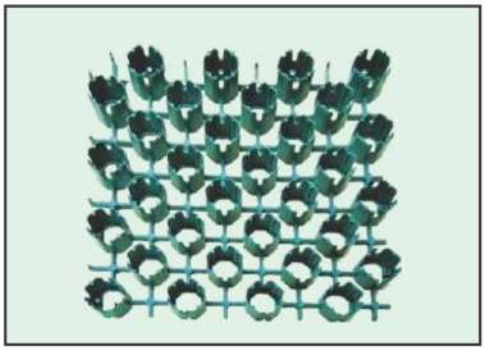
- Standard Tensile strength up to 100 kN or as per end user's requirement.
- Tough, durable polymer sheath & high modules
- Low creep characteristics
- Highly resistant to chemical, micro-organism, UV radiation and mechanical damage

Advantages

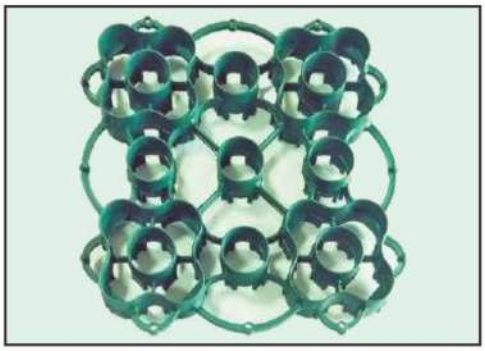
- Strip system is not erected to all soil slopes.
- There light weight is very advantageous for transportation and easy installation.
- This system is flexible against design change in accordance with job site condition.
- Easy to install

GRASS PAVER

Grass Pavers are environmentally friendly. They are made from UV stabilised, 100% recycled polypropylene. Grass Pavers are chemically inert and non-toxic. They allow the drainage of storm water back into the underground soil.



This helps keep your property hydrated and reduces runoff into local sewer systems. Grass Pavers provide simple answers to the complicated problems associated with supplying functional areas, while maintaining green space and dealing with storm water management compliance. The porosity of the pavers eliminates the need for retention ponds, drainage systems and other expensive means of dealing with runoff always associated with solid paving. Grass Pavers provides the strength of pavement with the natural beauty of grass while simultaneously eliminating soil compaction, reducing reflective heat and allowing for all weather accessibility at a very cost effective price.



Technical Parameter

GRASS PAVER			
Product Code	**VTGP35 (F)**	**VTGP35**	**VTGP40**
Material	100% Hi-Impact Polypropylene	100% Hi-Impact Polypropylene	100% Hi-Impact Polypropylene
Dimansion (mm)	**330x330x35**	**500x500x35**	**500x500x40**
Compressive Strength/ m²	Above 120 tons	Above 180 tons	Above 180 tons
weight/ m²	**2.8 kgs**	**3.0 kgs**	**4.0 kgs**

Application Area of Grass Pavers

DIMPLE/ PROTECTION BOARD

Dimple Board is manufactured from High Density Polyethylene (HDPE). It is light weight, flexible, strong, durable, non-toxic and comes with different dimple heights. It is impermeable to water and water vapour. It is used for protecting the water proofing membrane in basement walls & tunnels. dimple board also known as protection board.

- It is used on the retaining wall to protect the waterproofing against mechanical damage that may occur during backfilling and then from chemicals in the ground.
- It is recommended to use the product in order to protect the waterproofing and thermal insulation systems applied at curtain wall insulation of the buildings.
- The air between the bubbles enables the curtain wall to breathe and hence provides air circulation and can be used as curtain wall insulation.

Application Area of Dimple / Protection Boards for water proofing

Basement

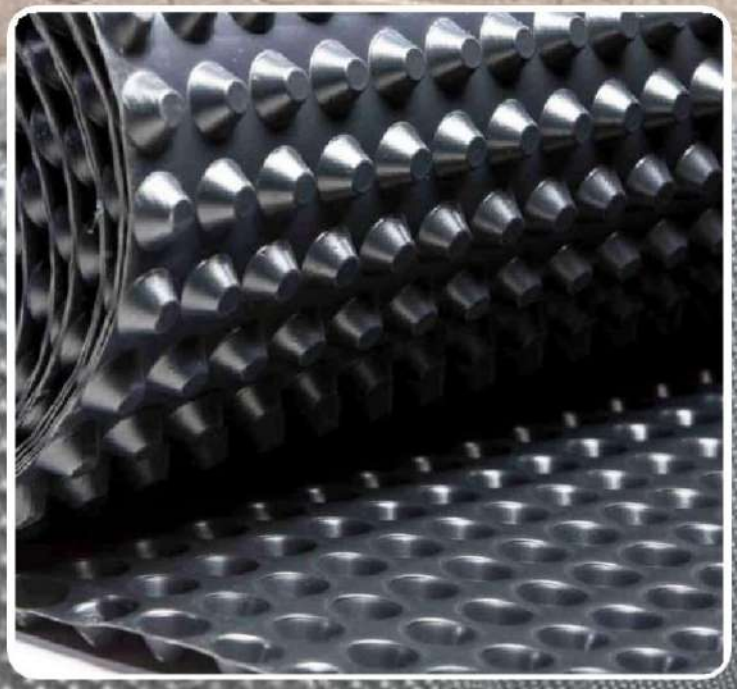
Retaining Wall

Tunnels

Metro

Advantages

- Dimple Boards provides low cost alternative and faster application to waterproofing protection.
- The dimple design creates an air gap between the foundation wall and damp soil keeping moisture away from touching the wall.
- The air between the bubbles provides better drainage.
- The number of bubble provides the equal distribution of load allows the reduction of point load.
- It is very economical and faster method for protecting & Drainage the water landscaping & waterproofing areas.
- Installation process is very easy as it can be kept on different type of areas.



We manufacture Dimple / Protection Board Height of – 08, 10,13, 20, 25 & 30 mm

- Dimple Board 08
- Dimple Board 10
- Dimple Board 13
- Dimple Board 20 mm
- Dimple Board 25 mm
- Dimple Board 30 mm

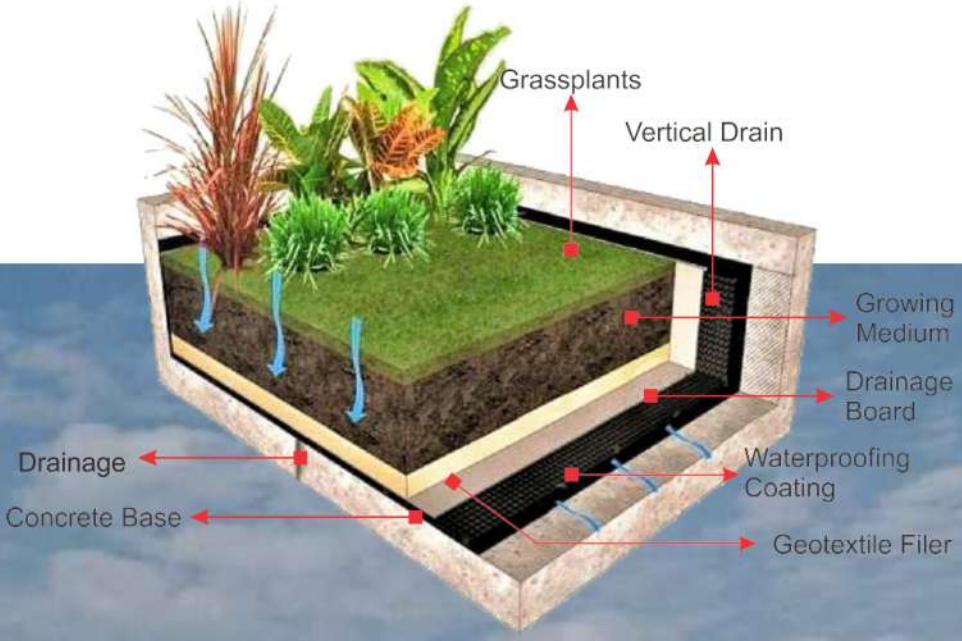
DRAIN/ DRAINAGE BOARDS

Drain Board is a nodular HDPE Sheet where Geotextiles are thermally bonded on either side of the nodular sheet. They are specially designed to be used in Planter Boxes, Roof Gardens due to their excellent design Flexibility.

Application Area of Drain / Drainage Boards

- Football Ground & Sports Fields
- Planters & Podiums
- Terrace Gardens
- Landscapes Decks & Agri-Horti Application

Installation of Drain/ Drainage Board in Planter, Roof, Terrace Garden



Drain / Drainage Boards for Football & Other Sports Ground

Advantages

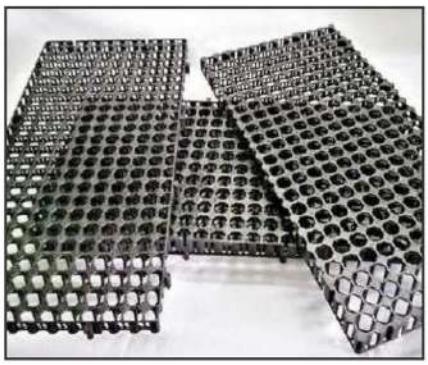
- Drain Boards provides low cost alternative and faster installation to waterproofing protection.
- The dimple design creates an air gap between the foundation wall and damp soil keeping moisture away from touching the wall.
- The air between the bubbles provides breathing of wall.
- The number of bubble provides the equal distribution of load allows the reduction of point load.
- It is very economical and faster method for protecting the waterproofing membrane in basement walls.
- Installation process is very easy as it can be laid on different types of areas.

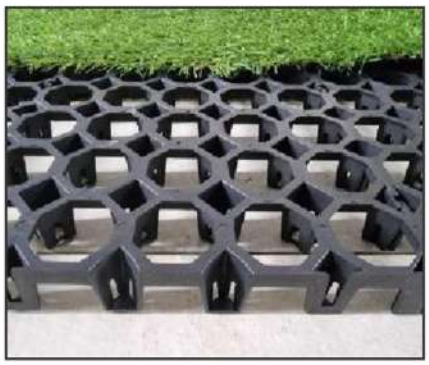
Features of Drain/ Drainage Boards

- Drain Boards are made up of High Density Polyethylene (HDPE) & Geotextile which is made of PP Fibres.
- Standard Heights of 08, 10, 13, 20, 25 & 30 mm with Compressive Strength from 150 kN to 1500 kN.
- High Compressive Strength Boards.
- Tough, Durable & Strength able modules
- Easy to Install
- Highly resistant to chemical, micro-organism, UV radiation and mechanical damage

DRAINCELL - FLEXODRAIN & DRAINOMAT

Flexodrain and Drainomat are lightweight, high strength, high impact polypropylene modular drainage cell which are especially designed for sub-surface drainage and waterproofing membrane protection. Draincells offer architects and developers extensive design fixibility and have a wide range of applications in the landscape, building and construction industries. These Draincells are easy to install by interlocking them horizontally and vertically. Drain cell also act as a protection layer over waterproofing membrane, and also creates a thermal insulation barrier. The open surface design and high internal void volume enables the rapid capture and transport of high water volumes.





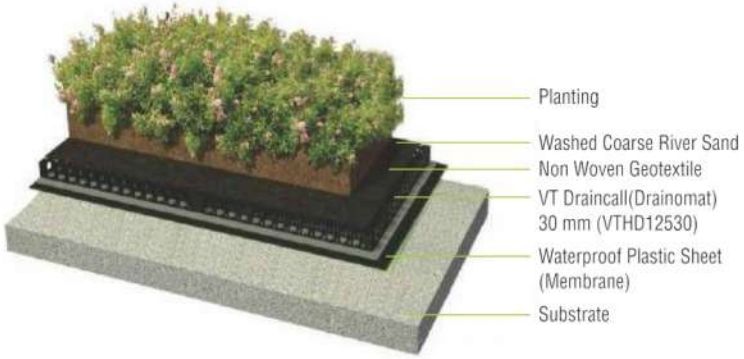
Technical Parameter

FLEXODRAIN		
Product Code	VTFD13	VTFD20
Material	Hi-Impact Polypropylene	Hi-Impact Polypropylene
Dimansion (mm)	500x250x13 610x410x13	500x250x20
Compressive Strength/ m²	80 Tons Tested	80 Tons Tested
weight/ m²	1.2 kgs	1.5 kgs

DRAINOMAT (DRAINCELL)		
Product Code	VTHD12520	VTHD12530
Material	Hi-Impact Polypropylene	Hi-Impact Polypropylene
Dimansion (mm)	500x250x20 500x500x20 610x410x20	500x250x30 500x500x30
Compressive Strength/ m²	Above 100 Tons Tested	Above 140 Tons Tested
weight/ m²	2.0 kgs	2.8 kgs

APPLICATION AREA OF GEOSTRAP

Planter | Roof/ Terrace Garden | Other Green Area



GEOBAG & PP ROPE GABION

Geo Bags are sand filled high strength geotextile bags available in the various sizes and are used in Riverbank, Beach Protection and offshore Breakwater. We make woven as well as non-woven Geo Bags of PP, PET Fiber & Yarn. Woven Geo Bags are made up of High Tenacity Multifilament yarn. Non-Woven Geo Bags are made up of PP & PET Fibers. We make Geo Bags of Different Sizes & Various Weights of Geo Textiles as per Customer Specifications & needs.
We have a Monthly Production of 30,00,000 (Thirty Lacs) pieces of Geo Bags of Type A (i.e. size - 1.03mtr x 0.7mtr.) for Assam, (1.00 mtr x 0.7 mtr) for Bihar and 50,000 (Fifty Thousand) pieces of PP Rope Gabions. We supply Non-Woven Geo Bags in Assam, Bihar, Woven Geo Bags in Uttar Pradesh and other states. Some of the Regular Qualities are 300, 400 & 600 GSM of PP / PET NonWoven Geotextiles and 200 GSM of Woven PP Geo Textile for Uttar Pradesh. We can make Geo Bags of any size and of any quality. We also manufacture Mega Geo Bag & Composite Geobag Type B (2.0mtr x 1.5mtr).

Application Area of Geo Bags & PP Rope Gabions

Advantages

- Durable • Easy to install • Highly Flexible • Cost Effective
- River Sand as fill material – hence better method for places with less stone availability

VT Geo Bags & gabions are best solution for fighting against the River Flood and Hydraulic Erosion. VT Geo Bags had become very popular as an alternative to conventional hard structures.

GEOTUBES

VT Geo Tubes are large containment systems in tubular forms made from high strength PP / PET Woven Geotextile. Geotextile Tubes are filled by the hydraulic pumping of local soil into the prefabricated Geotextile Tube. This leads to a flexible, monolithic and continuous structure that is highly resistant to water currents. Sand is widely used as the soil in-?ll material because of its low compressibility but other hydraulically pumped soil types can be used.

VT Geo Tubes are made up of Geotextiles that has ?ne pore sizes so that water can easily exit and soil will remain infill in Geo Tube during the hydraulic filling stage. The Geotextile has high tensile strength to enable it to resist the tensile stresses occurring during hydraulic filling and maintain its structure shape. Regular sizes are made in length of 5, 10, 15, 20 & 30mtr and Dia 2.29mtr and 3.0mtr. We can make any size as per customer's requirement/ specification.

Application Area of Geo Tube & Geo Mattresses

River Bank Protection | Shoreline protection | Construction of Dyke to Reclaim Land, Breakwater | Breakdown, Jetties, Land dyke | Breakwater, Jetties, Land reclamation dyke | River Sand as Fill material – hence better method for places with less stone availability | Dewatering of Sand and Silt | Reclaiming Land Rebuilding Beaches

Advantages of Geo Tube & Geo Mattresses

• Durable • Easy to install • Highly Flexible • Cost Effective

We Also Manufacture Geo Mattresses

APPLICATION AREA

AIEOU UNICORN PVT LTD

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