



Jeevan
Ecotex
Sustainable Weaves

EcoCell

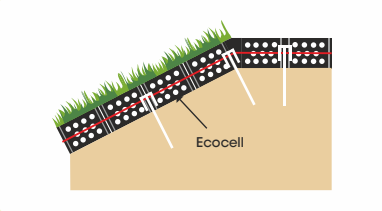
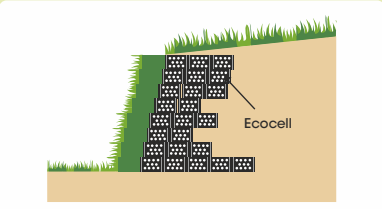
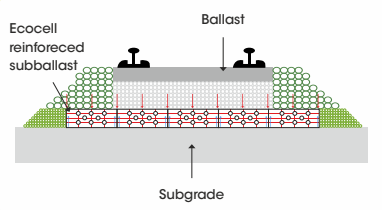
Geocell is a light, strong three-dimensional honeycomblike expandable cellular structure made from ultrasonically-welded High Density Polyethylene (HDPE) strips. Geocell sections are fastened together, placed directly on the subsoil surface, propped open and filled with compact non-cohesive soils, sands or recycled materials which are confined within the cellular walls.

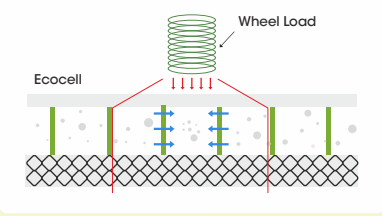
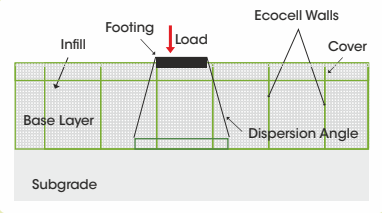
Geocells significantly improve the bearing capacity of soft soils and is being used extensively in ground improvement. Geocell is user friendly as it is lightweight and supplied flat in panel form which can be expanded onsite to create the honeycomb structure for infilling. It has proved to be an innovative soil stabilization and road reinforcement technology for civil engineering and infrastructure.



Applications

Geocell is often recommended for conditions having ground water close to the surface. Geocells have been used for

Types of Application	Required EcoCell Functions
 <p data-bbox="584 1391 724 1458">Earth Retention</p>	<p data-bbox="979 1406 1318 1440">Protection, Stabilization</p>
 <p data-bbox="568 1644 762 1783">Steep Slope Surface, mountainous areas</p>	<p data-bbox="979 1697 1318 1731">Protection, Stabilization</p>
 <p data-bbox="568 1984 762 2051">Railway Embankment</p>	<p data-bbox="880 1984 1417 2018">Load support capacity improvement</p>

Types of Application	Required EcoCell Functions
 <p data-bbox="571 286 756 353">Road construction</p>	<p data-bbox="948 302 1350 331">Stabilization, Reinforcement</p>
 <p data-bbox="563 544 767 663">Load Platform Weak sub grade soils</p>	<p data-bbox="924 589 1374 618">Static & dynamic load support</p>

Functions

From construction to agriculture and the development of infrastructure, the use of geocells have proven to reduce the strain on natural resources to a great extent. Today, Geocells are being widely used all over the world as they provide soil stabilization and reinforcement.



Stabilization

Geocells reduce lateral movement of soil particles while vertically loading on the contained infill which increases stability in weak or unsteady soil, especially on the slopes.



Reinforcement

Geocells improve load distribution and reinforce the weak sub-grade or subsoil and help to strengthen the soil surface and give the structure a longer life.



Protection

Geocells have high elastic stiffness and tensile strength. It provides a protective mattress effect with weight distribution, leading to less rutting in the surface materials above.

Benefits



Durability

- ✔ Longer-term lifespan – Geocells have 10 times more creep resistance (permanent deformation)
- ✔ Higher strength – Geocells have much higher tensile strength – 24 kn/m and higher
- ✔ Higher elastic modulus – They are 2-5 times higher dimensionally stable under loading
- ✔ Higher-stiffness – Geocells hold the soil adding stiffness to soil infill, layer, pavement



Environment Friendly

- ✔ Geocells can be filled with anything local, from soil to gravel without needing transportation from elsewhere, thus lowering carbon footprints and saving money too.
- ✔ They have higher environmental durability as they are 3-5x more resistant to oxidation and UV degradation.



Cost Saving

Geocells do not need costly filling materials and are as effective with local infill materials. Projects are thus completed faster with local, readily available materials, saving time and money.

About Us

Jeevan Ecotex is a leading manufacturer of technical textile with state-of-the-art manufacturing facilities at multiple locations. It is an **ISO 9001: 2015 certified company**, providing customised solutions.

Why Jeevan Ecotex

We are uniquely placed as the only major nonwoven player with in-house R&D capabilities and multiple manufacturing units in Maharashtra, India. Other advantages are

- ✔ Strong brand association with reputed clients
- ✔ Continuous online monitoring of production
- ✔ Products customized as per requirements
- ✔ Cost-effective environment-friendly manufacturing
- ✔ Fast turnaround times

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